PROFIL KOMPANIJE

DYNAIR je osnovan 1986. godine. Za nekoliko godina, zahvaljujući razvojnoj politici, posvećenosti i entuzijazmu, nastala je kompletna proizvodna linija ventilatora za svaku primenu u domaćinstvu i industriji, i tako je postepeno zauzeo domaće, ali i inostrano tržište(kako u Evropi tako i van nje).

Od 1993.godine DYNAIR postaje član nemačke MAICO grupe,vodećeg proizvođača u oblasti ventilatora. Ne dugo zatim, pravi dalje korake i uz neophodna ulaganja obezbeđuju usvajanje najnovijih tehnologija.

DYNAIR nudi klijentima više od 40 vrsta proizvoda: aksijalne ventilatore, kupole, centrifugalne ventilatore, izmenjivače toplote, zatvorene ventilatore, u verzijama otpornih na požar i od materijala otpornih na kiseline,verzije pogodne za visoke temperature, sa mogućnošću regulacije broja obrtaja, ali i kompletnu paletu ventilatora za domaćinstva. Svi proizvodi su prikazani u klasičnim,štampanim katalozima,ali i u potpunom digitalnom formatu, gde se pored ilustracija nalaze svi tehnički podaci i adekvatna primena. DYNAIR obezbeđuje garanciju za sve proizvode koji su rezultati stalnih istraživanja i razvoja, upotrebljavajući samo one sastavne delove koji su izrađeni u skladu sa najnovijim, važećim standardima i vrhunskog su kvaliteta, sa posebnim naglaskom na bezbednost. Ustaljeni proces proizvodnje sa testiranjem i kontrolisanjem konstantno osigurava visoko kvalitetne proizvode.

Naši kapaciteti proizvodnje, uz obilne zalihe, kako delimično tako i potpuno gotovih proizvoda, sa tehničkim i komercijalnim savetima obezbeđuju klijentima brzu dostavu i pažnju pre i nakon prodaje.

DYNAIR aderisce ad ANIMA - COAER
Associazione Costruttori Apparecchiature ed Impianti Aeraulici

COMPANY PROFILE

DYNAIR was established in 1986. In a few years, thanks to a policy of development, dedication and enthusiasm, it has built up a complete range of fans suitable for every type of application in civil and industrial premises thereby establishing itself in the home and foreign markets (inside and outside Europe).

Since 1993 Dynair has been part of the German MAICO group, a leader in the field of fan equipment. From this operation, DYNAIR has taken another leap forward, gaining access to advanced technology and making the necessary investment.

DYNAIR offers its customers over 40 product lines: axial fans, towers, centrifugal fans, enclosed fans, heat exchangers, fireproof and anti-acid versions, versions approved for high temperatures, speed controls and a complete range of domestic fans. All these are illustrated in traditional catalogues and in a fully digital version which are complete with technical data and actual applications.

DYNAIR guarantees its customers products which are the result of a constant policy of research and development, using top quality components which meet the relevant standards, with particular attention being paid to safety. Standard working procedures with test and inspection ensure that the quality never varies.

Our production capacity, ample stores for finished and part finished parts and both technical and sales advice ensure for our customers rapid delivery and dedicated before and after sales service.

DYNAIR IS MEMBER OF ANIMA - COAER
Association of Manufactures of Aeraulic Units and Systems

DYNAIR

INDUSTRIJSKI VENTILATORI

ZNACI I OZNAKE : U ČEMU JE RAZLIKA ?
MARKS AND MARKINGS WHAT ARE THE

• Izdavanje znakova je zadatak jednog samostalnog tela koji potvrđuje i konstantno kontroliše proizvodnju kompanije u skladu sa važećim međunarodnim standardima. Ovi standardi potvrđuju da kompanija koristi potpuni sistem kontrole kvaliteta proizvodnje. DYNAIR je stekao pravo na sve sertifikate.

Is a mark issued by an autonomous body which certifies and constantly checks the company processes in accordance with worldwide standards. These standards certify that the company operates a total quality control system. Dynair has obtained the right to use this certificate.

Oznaka označava usaglašenost sa uslovima pomenutih smernica. Oznake su obavezne u proizvodnji ventilatora i omogućavaju promet na Evropskom tržištu. Svrha ove zakonske regulative je da se obezbedi sigurnost potrošača prilikom kupovine u Evropskoj Zajednici. Svi ventilatori iz našeg kataloga poseduju CE oznaku

Is a marking which declares conformity with the requirements of the appropriate directive. This is obligatory for fan manufacturers who wish to operate in the European common market. The purpose of the legislation is to ensure that equipment used by consumers in the European community is safe. All the fans in our catalogue bear the CE marking.

KVALITET : GARANCIJA - OZBILJNOST I POUZDANOST
QUALITY: INTEGRITY AND RELIABILITY GUARANTEE

Prilagođenost Sistema Kvaliteta kompanije UNI EN ISO 9001 standardu je garancija da će zadovoljavati zahteve svojih klijenata. DYNAIR garantuje prilagođavanje Sistema Kvaliteta kompanije svim standardima preko jedne treće nezavisne komisije koja je priznata na nacionalnom i na međunarodnom nivou,CSQ (Potvrda Sistema Kvaliteta). CSQ je deo CISQ-a (Italijanska Potvrda Sistema Kvaliteta) i uključuje većinu sertifikacionih tela za potvrdu Sistema Kvaliteta na nacionalnom tržištu i trenutno potvrđuje 90% svih izdatih sertifikata u Italiji. CISQ komisija je potpisala IQNET međunarodni sporazum (Međunarodna Sertifikaciona Mreža), čiji je glavni cilj obostrano priznavanje izdatih sertifikata.
Do ovog dana postoje 22 člana od velikog broja država, na 4 kontinenta i predstavljaju deo organizacije.

CISQ
CERTIFICAZIONE ITALIANA DEI SISTEMI QUALITÀ AZIENDALI
ITALIAN CERTIFICATION OF COMPANY QUALITY SYSTEMS
CERTIFICATO n. 9130.DYNA
CERTIFICATE n.
DYNAIR INDUSTRIAL VENTILATION S.r.l.
Via N. Tesla, 1 – 25017 LONATO (BS)
UNI EN ISO 9002
Produzione e commercializzazione di macchine per l'aspirazione e la ventilazione
Manufacturing and sale of ventilation blowers
10 Novembre 1998
SINCERT

The compliance of the company Quality System with the UNI EN ISO 9001 standard is a guarantee that it will continue to meet the requirements of its customers. DYNAIR guarantees compliance of the company Quality System with these standards through approval by an independent third party which is recognised at a national and international level: CSQ (Quality System Certification). CSQ is part of CISQ (Italian Quality System Certification) which includes most of the Quality System certification bodies operating in the national market and presently accounts for 90% of the certificates issued in Italy. The CISQ organisation has signed the international IQNET agreement (International Certification Network) the main purpose of which is the mutual recognition of the certificates issued by its members.
As of today, 22 members of as many countries, in four continents, belong to the organisation.

IQNet
THE INTERNATIONAL CERTIFICATION NETWORK
CERTIFICATE
IQNet and its partner
CISQ/IMQ-CSQ
hereby certify that the organization
DYNAIR SRL
VIA CAMPAGNA DI SOPRA - 25017 LONATO (BS) Italy
for the following field of activities
Desing and manufacturing of machines for industrial and civil ventilation
has implemented and maintains a
Quality Management System
which fulfills the requirements of the following standard
ISO 9001:2000
Issued on: 2003 - 06 - 30
Registration Number: IT - 1606
Fabio Roveri
President of IQNet
Giovanni Poti
President of CISQ

ZNACI I OZNAKE / MARKS AND MARKINGS

I N D E K S / I N D E X

FC, FCV, REA, REV	Centrifugalni krovni ventilatori Centrifugal roof fans	SEK. 1
TEA, TAV	Krovni aksijalni ventilatori Axial roof fans	SEK. 2
QC, BASIC, COMPACT, AC	Ventilatori sa ramom za usmeravanje vazduha Plate mounted and ring axial fans	SEK. 3
CC, CCT, CCP	Cevni ventilatori Ducted axial fans	SEK. 4
DIC, AL, F	Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama i centrifugalni ventilatori izrađeni od livenog aluminijuma Small size forward curved blade and radial centrifugal fans in aluminium	SEK. 5
SQ, PR-L, PS-L, PV-L	Centrifugalni ventilatori sa unazad zakrivljenim lopaticama Backward curved blade centrifugal fans for clean air	SEK. 6
LINE METAL, ERM-EX, SS-BOX, AxB	In line – centrifugalni ventilatori In line centrifugal fans	SEK. 7
BOX-D, SLIM-BOX, TW, DA	Box ventilatori na direktan pogon sa dva otvora Direct drive double inlet box fans	SEK. 8
BOX-T, BOX-TL, BOX-CA, DA-T	Centrifugalni box ventilatori i ventilatori sa duplim otvorom na remeni pogon Centrifugal box fans and double inlet belt driven fans	SEK. 9
PR-AC, IC-INOX, FC-AC	Antikorozivni ventilatori Anticorrosive fans	SEK. 10
FCHT, FCVHT, TAVHT, CCHT, SQHT	Ventilatori za odstranjivanje dima Smoke extract fans	SEK. 11
RV	Regulatori brzine obrtaja	SEK. 12
MINI-BOX, REC	Akustično linijski centrifugalni ventilatori i Rekuperator toplote In line acoustic cantrifugal fans and heat recuperator	SEK. 13

LINIJE ZA DOMAĆINSTVA I INDUSTRIJU
DOMESTIC AND COMMERCIAL LINES

Ventilatori DYNAIR serije obuhvataju kućne i industrijsk
ventilatore.
Dynair range of fans also includeds the domestic and
commercial lines.

DYNAIR
INDUSTRIJSKI VENTILATORI

Opis na specijalnoj tehničkoj brošuri
Described in a specific technical leaflet

Centrifugalni krovni ventilatori
Centrifugal roof fans

1

FC&FCV str. 2.1

Centrifugalni krovni ventilatori sa jednom brzinom
Single speed centrifugal roof fans

str. 5.1

FC-2V&FCV-2V

Dvo brzinski centrifugalni krovni ventilatori
Double speed centrifugal roof fans

REA&REV str. 8.1

Centrifugalni krovni ventilatori sa spoljašnjim rotorom
External rotor centrifugal roof fans

INDEKS/INDEX

Krovni centrifugalni ventilatori
CENTRIFUGAL ROOF FANS — SEK. 1

Krovni aksijalni ventilatori
AXIAL ROOF FANS — SEK. 2

Ventilatori sa ramom za usmeravanje vazduha
PLATE MOUNTED AND RING AXIAL FANS — SEK. 3

Cevni ventilatori
DUCTED AXIAL FANS — SEK. 4

Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama i centrifugalni ventilatori izrađeni od livenog aluminijuma
SMALL SIZE FORWARD CURVED BLADE AND RADIAL CENTRIFUGAL FANS IN ALUMINIUM — SEK. 5

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama
BACKWARD CURVED BLADE CENTRIFUGAL FANS FOR CLEAN AIR — SEK. 6

In line – redni centrifugalni ventilatori
IN LINE CENTRIFUGAL FANS — SEK. 7

Box ventilatori na direktan pogon sa dva otvora
DIRECT DRIVE DOUBLE INLET BOX FANS — SEK. 8

Centrifugalni box ventilatori i ventilatori sa duplim otvorom na remeni pogon
CENTRIFUGAL BOX FANS AND DOUBLE INLET BELT DRIVEN FANS — SEK. 9

Antikorozivni ventilatori
ANTICORROSIVE FANS — SEK. 10

Ventilatori za odstranjivanje dima
SMOKE EXTRACT FANS — SEK. 11

Regulatori brzine obrtaja
SPEED REGULATORS — SEK. 12

Akustično linijski centrifugalni ventilatori i Rekuperator toplote
IN LINE ACOUSTIC CENTRIFUGAL FANS AND HEAT RECUPERATOR — SEK. 13

FC&FCV

Centrifugalni krovni ventilatori sa jednom brzinom
Single speed centrifugal roof extractors

SEK. 1

FC

FCV

OSNOVNI PODACI :

FC i FCV ventilatori su namenjeni za ventilaciju stambenih i industrijskih objekata sa direktnim izduvavanjem ili preko cevnih kanala. Jednostavno se ugrađuju i veoma su tihog pogona Pri neprekidnom radu pogodni su za transportovanje čistog ili blago prašnjavog vazduha do 80°C (FC), 60°C (FCV). Motor je izvan protoka vazduha. Strujanje vazduha je horizontalno (FC), vertikalno (FCV). Proizvode se u monofaznoj i trofaznoj verziji sa standardnim ili specijalnim motorom.

KONSTRUKCIJA :

- Osnovni okvir je izrađen od galvanizovanog čeličnog lima.
- Zaštitne rešetke su od čelika.
- Radno kolo sa unazad zakrivljenim lopaticama , velikog deljstva i niskog nivoa buke, izrađen od galvanizovanog čeličnog lima.
- U interesu uspešnog hlađenja motora poklopac je izrađen od techno- polymer- a sa odgovarajućim otvorima.
- Spoljašnji deflektor je izrađen od techno-polymer-a (FCV).
- Monofazni i trofazni asinhroni motori odgovaraju IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC međunarodnim standardima.
- CE kvalifikovan, IP55, motor klase F.

DODATNI DELOVI :

- Leptirasti gravitacioni ventil (TS).
- Prigušivač zvuka (GR).
- Postolje ventilatora (CB).
- Montažno postolje ventilatora (BA).
- Unutrašnja zaštita (RA).
- Spoljašnja priključna kutija.
- Servisni prekidač

NA ZAHTEV :

- Model otporan na varnice(FC-AS i FCV-AS), sa zaštitom od eksplozije (FC-ATEX i FCV-ATEX), trofaznim ili monofaznim motorem po sledećim međunarodnim standardima: IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, IEC79 sa CESI sertifikacijom, CE kvalifikovan, IP55, motor klase F.
- Model sa dvopolnim trofaznim asinhronim motorom dgovara međunarodnim standardima: IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, CE kvalifikovan, IP55, motor klase F.
- Model za visoku temperaturu pogodan za transportovanje vazduha 200 °C ili 400°C /2 sata. Vidi sekciju 11 (FC2V-HT/FCV2V-HT).

GENERAL DESCRIPTION

These fans are designed for direct or ducted ventilation in residential, commercial and industrial buildings, with easy installation and low noise level.
They can exhaust clean or slightly dusty air with max. temperature up to 80°C (FC), 60°C(FCV).
The motor is outside the air flow.
Available for horizontal outlet (FC) or vertical discharge (FCV).

CONSTRUCTION

- Base frame in galvanized steel sheet.
- Protection guard in steel rod protected against atmospheric agents.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level.
- Upper cover in techno-polymer, with suitable slots for proper motor cooling.
- Outer deflector (FCV) in techno-polymer.
- Asynchronous three-phase or single-phase motor according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC,
- CE marked. IP55, class F.

ACCESSORIES

- Backdraught gravity shutter (TS).
- Silencer (GR).
- Counter base to be walled up (CB).
- Support base for corrugated roof coverings (BA).
- Inlet side guard (RA).
- Outer terminal box.
- Service switch.

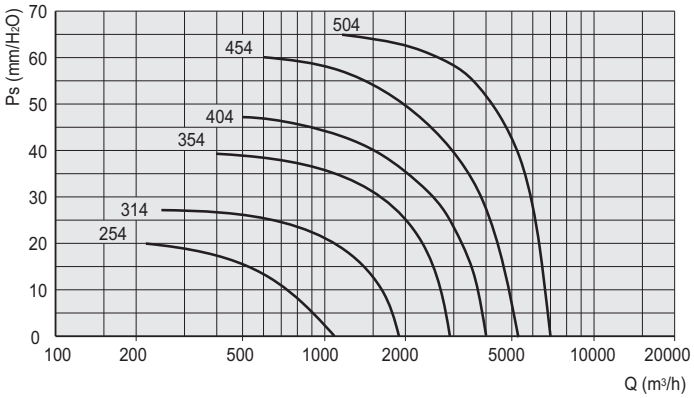
UPON REQUEST

- Spark proof version (FC-AS or FCV-AS) and explosion proof version (FC-ATEX or FCV-ATEX), with three-phase or single-phase motor EEx-d IIB T3 according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC, IEC79 with CESI certificate, CE marked, IP55, class F.
- Versions with asynchronous three-phase two-polarity motor according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC , CE marked , IP55, class F.
- Smoke extract version, OFFICIALLY RATED 200°C or 400°C/2 H. See section 11 (FC2V-HT/FCV2V-HT)

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22Kg/m
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

4 pola/poles

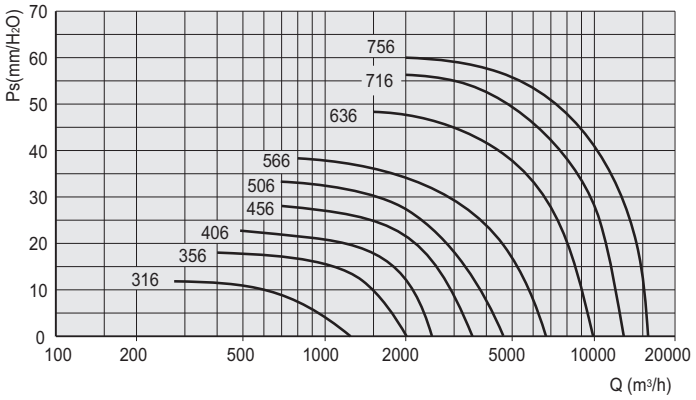
Tip Type	Model Model	U	Pm (kW)	In (A)	IP/CL	Mot. (Gr)	Lp dB(A)
FC	254	M	0,09	0,9	55/F	56	45
FC	254	T	0,09	0,38	55/F	56	45
FC i FCV	314	M	0,12	1,2	55/F	63	51
FC i FCV	314	T	0,12	0,57	55/F	63	51
FC i FCV	354	M	0,25	2,35	55/F	71	56
FC i FCV	354	T	0,25	0,86	55/F	71	56
FC i FCV	404	M	0,55	4,75	55/F	80	61
FC i FCV	404	T	0,55	1,6	55/F	80	61
FC i FCV	454	M	0,75	5,6	55/F	80	65
FC i FCV	454	T	0,75	2,2	55/F	80	65
FC i FCV	504	T	1,1	2,8	55/F	90S	67



SEK. 1

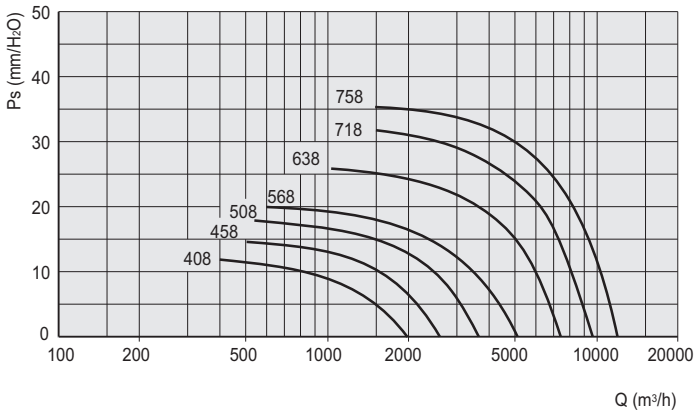
6 pola/poles

Tip Type	Model Model	U	Pm (kW)	In (A)	IP/CL	Mot. (Gr)	Lp dB(A)
FC i FCV	316	M	0,15	1,5	55/F	71	45
FC i FCV	316	T	0,09	0,45	55/F	63	45
FC i FCV	356	M	0,15	1,5	55/F	71	48
FC i FCV	356	T	0,18	0,8	55/F	71	48
FC i FCV	406	M	0,15	1,5	55/F	71	50
FC i FCV	406	T	0,18	0,8	55/F	71	50
FC i FCV	456	T	0,37	1,2	55/F	80	52
FC i FCV	506	T	0,37	1,2	55/F	80	56
FC i FCV	566	T	0,55	1,8	55/F	80	59
FC i FCV	636	T	1,1	3,4	55/F	90L	61
FC i FCV	716	T	1,5	4,3	55/F	100L	65
FC i FCV	756	T	1,8	5	55/F	100L	67

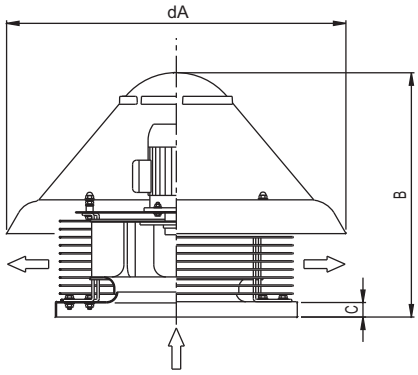


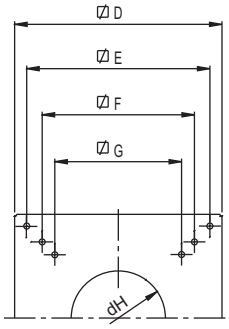
8 pola/poles

Tip Type	Model Model	U	Pm (kW)	In (A)	IP/CL	Mot. (Gr)	Lp dB(A)
FC i FCV	408	T	0,12	0,75	55/F	71	44
FC i FCV	458	T	0,25	1,13	55/F	80	46
FC i FCV	508	T	0,25	1,13	55/F	80	48
FC i FCV	568	T	0,25	1,13	55/F	80	52
FC i FCV	638	T	0,55	2,3	55/F	90L	54
FC i FCV	718	T	0,75	2,6	55/F	100L	57
FC i FCV	758	T	1,1	4	55/F	100L	58



FC

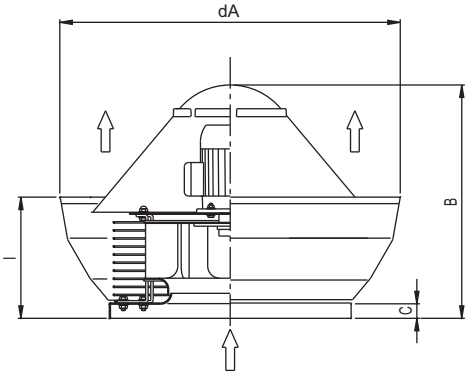


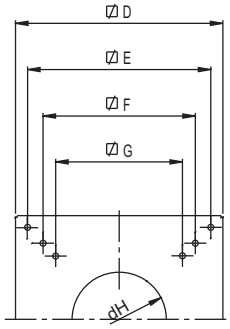


Tip/Type	dA	B	C	D	E	F	G	dH	kg.
FC 25	600	500	38	400	330	/	257	180	14
FC 31	600	510	38	400	360	/	307	220	16
FC 35	750	580	38	500	450	/	380	270	25
FC 40	900	640	38	650	600	530	471	296	30
FC 45	900	650	38	650	600	530	471	296	38
FC 50	1100	750	38	760	710	650	550	320	55
FC 56	1100	750	38	760	710	650	550	370	57
FC 63	1300	850	38	930	870	775	665	430	75
FC 71	1300	880	38	930	870	775	665	480	94
FC 75	1300	880	38	930	870	775	665	480	108

Dimenzije u mm/Dimensions in mm

FCV





Tip/Type	dA	B	C	D	E	F	G	dH	I	kg.
FCV 31	650	510	38	400	360	/	307	220	290	18
FCV 35	800	580	38	500	450	/	380	270	340	27
FCV 40	980	640	38	650	600	530	471	296	400	32
FCV 45	980	650	38	650	600	530	471	296	400	40
FCV 50	1200	750	38	760	710	650	550	320	490	58
FCV 56	1200	750	38	760	710	650	550	370	490	60
FCV 63	1400	850	38	930	870	775	665	430	540	78
FCV 71	1400	880	38	930	870	775	665	480	540	100
FCV 75	1400	880	38	930	870	775	665	480	540	110

Dimenzije u mm/Dimensions in mm

FC-2V&FCV-2V

Dvo brzinski centrifugalni krovni ventilatori
Double speed centrifugal roof extractors

FC - 2V

FCV - 2V

OSNOVNI PODACI :

Glavna osobina FC-2V i FCV-2V ventilatora je trofazni motor opremljen sa zvezda/delta prekidačem koji omogućuje dve brzine rada, tj.postaje ekonomičnije od rešenja sa dvopolnim motorem.
Motor je izvan protoka vazduha, zato su FC-2V i FCV-2V ventilatori pogodni za transportovanje čistog ili blago prašnjavog vazduha do 80°C (FC), 60°C (FCV).
Sve ovo je nemoguće za model sa eksternim rotorom.
Ovi ventilatori su idealni za ugradnju u kuhinje, stambene i industrijske objekte , gde se zahteva veoma tih režim rada i mogućnost performansnih promena.
Dostupno je sa horizontalni izlaznim otvorom (FC), ili sa vertikalnim izvlačenjem(FCV).

KONSTRUKCIJA :

- Osnovni okvir je izrađen od galvanizovanog čeličnog lima.
- Zaštitne rešetke su od čelika.
- Radno kolo sa unazad zakrivljenim lopaticama , velikog deljstva i niskog nivoa buke izrađeno od galvanizovanog čeličnog lima.
- U interesu uspešnog hlađenja motora poklopac je izrađen od tecno- polymer- a sa odgovarajućim otvorima.
- Spoljašnji deflektor je izrađen od techno-polymer-a (FCV).
- Trofazni asinhroni motori su izrađeni po IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC međunarodnim standardima. CE kvalifikovani, IP55, motor klase F. Dve brzine sa zvezda/trougao prekidačem.

DODATNI DELOVI :

- Leptirasti gravitacioni ventil (TS).
- Prigušivač zvuka (GR).
- Ugradno postolje ventilatora (CB).
- Montažno postolje ventilatora (BA).
- Unutrašnja zaštita (RA).
- Spoljašnja priključna kutija.
- Servisni prekidač
- Regulator broja obrtaja.

GENERAL DESCRIPTION

The main characteristic of this series is a three-phase motor which allows the double speed feature by delta/ star switching, being this solution less expensive against a two-polarity motor. Being the motors outside the air flow, the FC-2V and FCV-2V extractors are recommended where the double speed option is coupled with the necessity of exhausting air up to 80°C (FC), 60°C (FCV), in presence of grease, impurity etc. All that is impossible for external rotor motors, of course. Therefore they are ideal for installation in kitchens, commercial and industrial buildings and wherever it is required the possibility of changing the performances and the noise level according to the need. Available with horizontal outlet (FC) or vertical discharge (FCV).

CONSTRUCTION

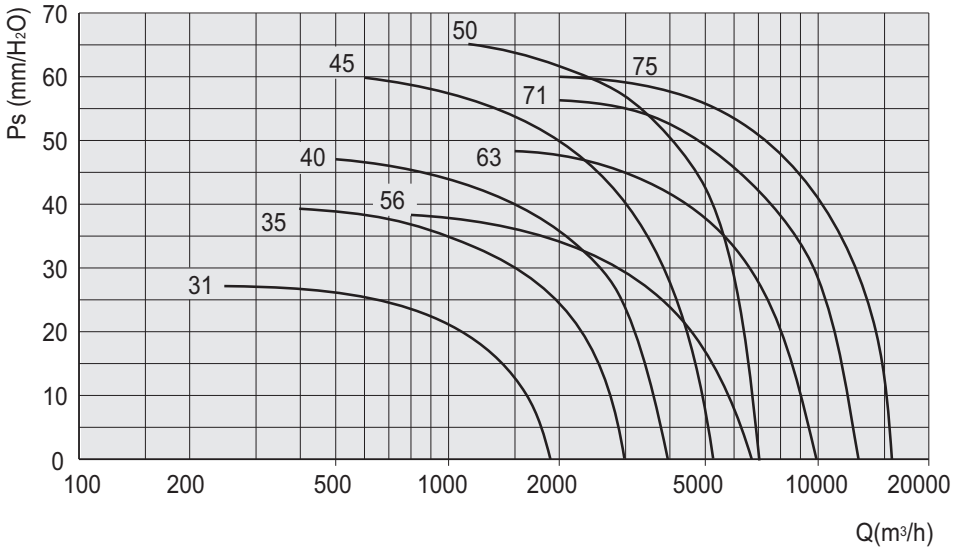
- Base frame in galvanized steel sheet.
- Protection guard in drawn steel rod protected against the atmospheric agents.
- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level.
- Upper cover in techno-polymer, with suitable slots for proper motor cooling.
- Outer deflector (FCV) in techno-polymer.
- Asynchronous three-phase motor according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC, CE marked. IP55, class F. Double speed by delta/ star switching.

ACCESSORIES

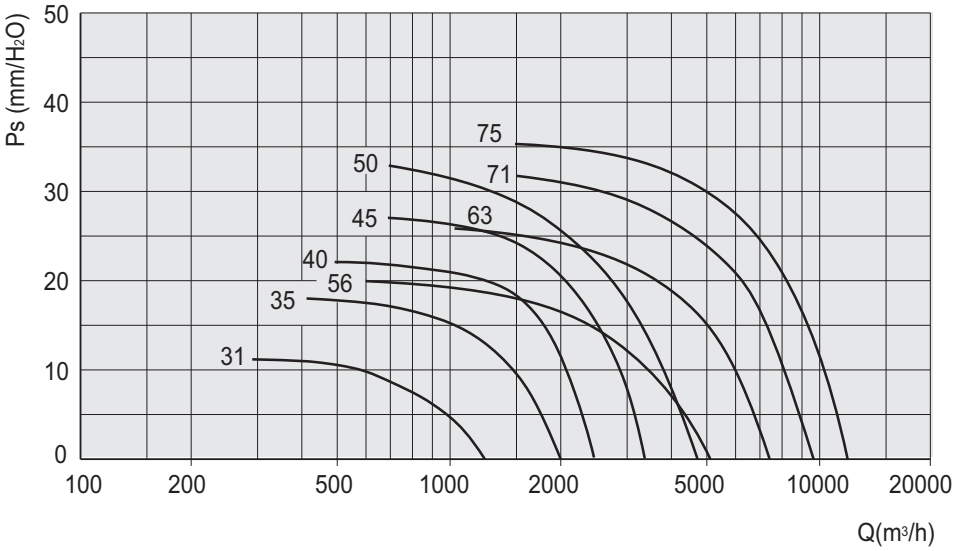
- Backdraught gravity shutter (TS).
- Silencer (GR).
- Counter base to be walled up (CB).
- Support base for corrugated roof coverings (BA).
- Inlet side guard (RA).
- External terminal box.
- Service switch.
- Speed regulators.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

Velika brzina / High speed (s)

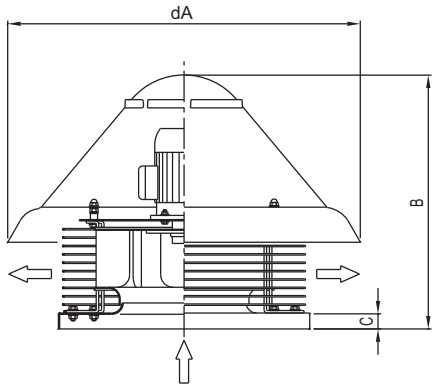


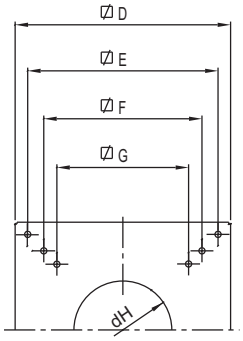
Mala brzina / Low speed (⅄)



Tip Type	Model Model	U	rpm s	rpm ⅄	Pm (kW)	In (A) s	In (A) ⅄	Mot. (Gr)	Lp dB(A) s	Lp dB(A) ⅄
FC-2V i FCV-2V	31	T	1450	950	0,18	0,8	0,46	63	51	45
FC-2V i FCV-2V	35	T	1450	950	0,26	0,96	0,55	71	56	48
FC-2V i FCV-2V	40	T	1450	950	0,55	1,6	0,9	80	61	50
FC-2V i FCV-2V	45	T	1450	950	0,75	2,2	1,3	80	65	52
FC-2V i FCV-2V	50	T	1450	950	1,1	2,8	1,6	90S	67	56
FC-2V i FCV-2V	56	T	950	700	0,55	2	1,3	80	59	52
FC-2V i FCV-2V	63	T	950	700	1,1	3,4	2	90L	61	54
FC-2V i FCV-2V	71	T	950	700	1,5	4,3	2,5	100L	65	57
FC-2V i FCV-2V	75	T	950	700	1,8	5	2,9	100L	67	58

FC-2V

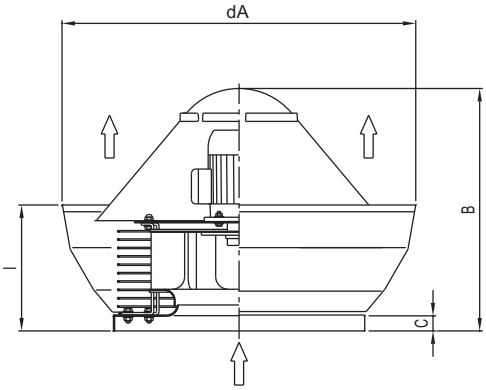


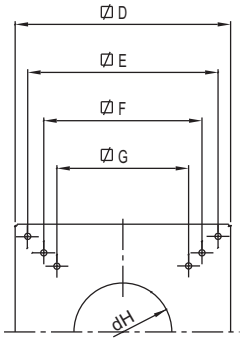


Tip/Type	dA	B	C	D	E	F	G	dH	kg.
FC-2V 31	600	500	38	400	360	/	307	220	16
FC-2V 35	750	580	38	500	450	/	380	270	25
FC-2V 40	900	640	38	650	600	530	471	296	30
FC-2V 45	900	650	38	650	600	530	471	296	38
FC-2V 50	1100	750	38	760	710	650	550	320	55
FC-2V 56	1100	750	38	760	710	650	550	370	57
FC-2V 63	1300	850	38	930	870	775	665	430	75
FC-2V 71	1300	880	38	930	870	775	665	480	94
FC-2V 75	1300	880	38	930	870	775	665	480	108

Dimenzije u mm/Dimensions in mm

FCV-2V



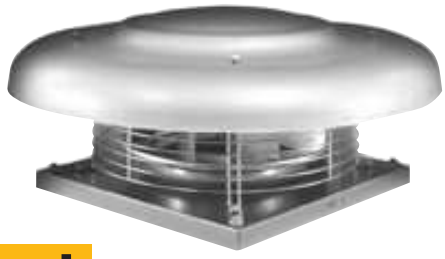


Tip/Type	dA	B	C	D	E	F	G	dH	I	kg.
FCV-2V 31	650	510	38	400	360	/	307	220	290	18
FCV-2V 35	800	580	38	500	450	/	380	270	340	27
FCV-2V 40	980	640	38	650	600	530	471	296	400	32
FCV-2V 45	980	650	38	650	600	530	471	296	400	40
FCV-2V 50	1200	750	38	760	710	650	550	320	490	58
FCV-2V 56	1200	750	38	760	710	650	550	370	490	60
FCV-2V 63	1400	850	38	930	870	775	665	430	540	78
FCV-2V 71	1400	880	38	930	870	775	665	480	540	100
FCV-2V 75	1400	880	38	930	870	775	665	480	540	110

Dimenzije u mm/Dimensions in mm

REA&REV

Centrifugalni krovni ventilatori sa spoljašnjim rotorom
Centrifugal roof fans with external rotor motor



SEK. 1

REA

REV

OSNOVNI PODACI :

REA & REV ventilatori su namenjeni za ventilaciju stambenih i industrijskih objekata sa direktnim izduvavanjem ili preko cevnih kanala. Kompaktnog su dizajna, lako se ugrađuju i veoma su tihog pogona. Pogodni su za transportovanje vazduha do 40° C. Trofazni ili monofazni motori dozvojavalju punu regulaciju brzine, uglavnom sa svim uobičajenim regulatorima .Jedino se sa trofaznom verzijom i to sa zvezda/delta prekidačem može dobiti linija sa dve brzine.Dostupno je sa horizontalni izlaznim otvorom (REA), ili sa vertikalnim izvlačenjem(REV).

KONSTRUKCIJA :

- Osnovni okvir je izrađen od galvanizovanog čeličnog lima.
- Zaštitne rešetke su od čelika.
- Radno kolo sa unazad zakrivljenim lopaticama , velikog deljstva i niskog nivoa buke izrađeno od galvanizovanog čeličnog lima.
- U interesu uspešnog hlađenja motora poklopac je izrađen od techno- polymer-a sa odgovarajućim otvorima. (REA).
- Spoljašnji deflektor je izrađen od techno-polymer-a . (REV).
- Trofazni ili monofazni motori sa spoljašnjim rotorom, IP44 200-250 i IP 54 310-400.

Opremljen termo zaštitom.

DODATNI DELOVI :

- Leptirasti gravitacioni ventil (TS).
- Prigušivač zvuka sa unutrašnje strane(GR).
- Ugradno postolje ventilatora (CB).
- Montažno postolje ventilatora (BA).
- Unutrašnja zaštita (RA).
- Spoljašnja priključna kutija.
- Regulator broja obrtaja.
- Servisni prekidač.
- Zvezda/delta prekidač.

GENERAL DESCRIPTION

These fans are designed for direct or ducted ventilation of civil and industrial buildings. The characteristics of this series are the compact design and ease of installation. They can exhaust clean air up to the maximum temperature of 40 ° C. The three-phase or single-phase external rotor motor allows full speed regulation, also with most common electronic regulators. Only for the three-phase version, it is possible to obtain the double speed feature by delta/ star switching. Available for horizontal outlet (REA) or vertical discharge (REV).

CONSTRUCTION

-Base frame in galvanized steel sheet.

-Protection guard in steel rod protected against the atmospheric agents.

- Backward curved wheel in galvanized steel sheet, with high efficiency and low noise level.

-Upper cover in aluminium (REA).

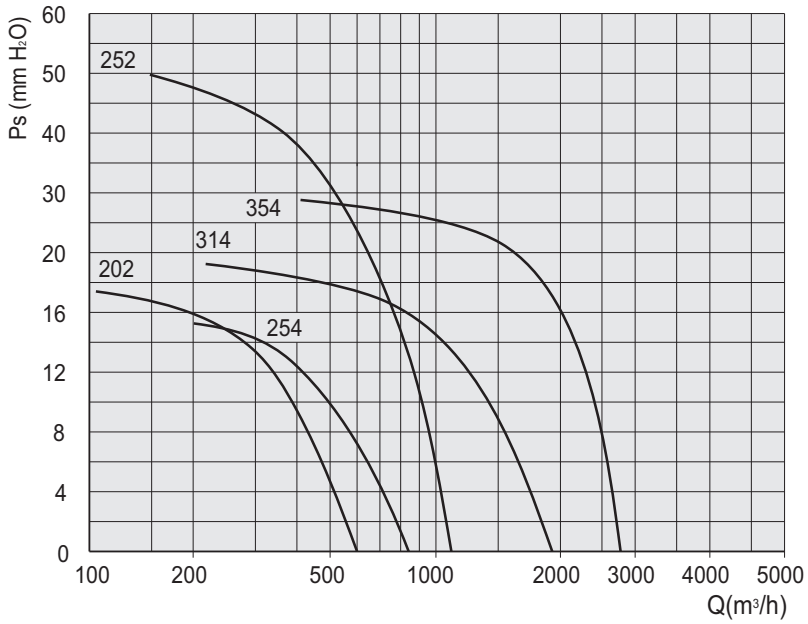
- Outer deflector (REV) in techno-polymer.

- External rotor motor, three-phase or single-phase, IP44 200-250 IP54 310-400, tropycalized with thermal protection.

ACCESSORIES

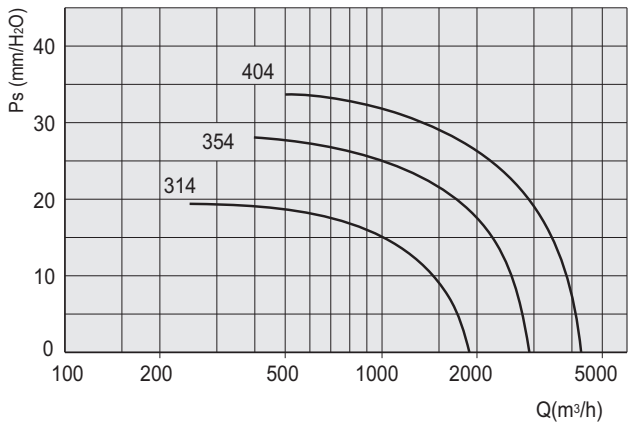
- Backdraught gravity shutter (TS).
- Silencer on inlet side (GR).
- Counter base to be walled up (CB).
- Support base for corrugated roof coverings (BA).
- Inlet side guard (RA).
- External terminal box.
- Speed regulators.
- Service switch.
- Delta/ star switch.

Prva brzina / Single speed

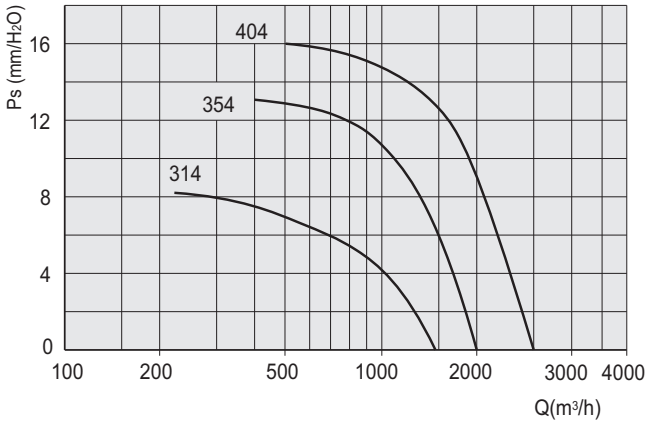


Tip Type	Model Model	U	P	Pm (kW)	In (A)	Lp dB(A)
REA	202	M	2	0,06	0,3	45
REA i REV	254	M	4	0,12	0,8	51
REA i REV	252	M	2	0,2	0,9	56
REA i REV	314	M	4	0,17	0,7	50
REA i REV	354	M	4	0,4	1,8	54

Velika brzina / High speed (s)

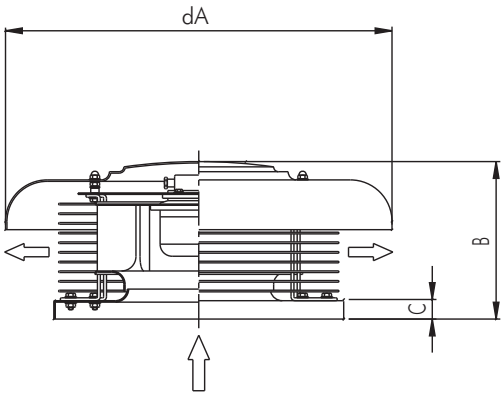


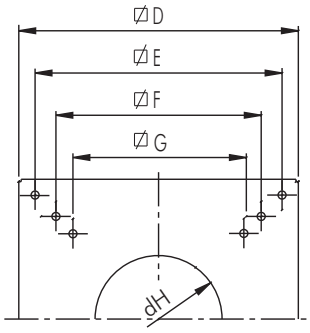
Mala brzina / Low speed (⅄)



Tip Type	Model Model	U	rpm s	rpm ⅄	Pm (kW)	In (A)	Lp dB(A) s	Lp dB(A) ⅄
REA i REV	314	T	1350	950	0,18	0,3	50	46
REA i REV	354	T	1350	950	0,4	0,7	54	51
REA i REV	404	T	1300	900	0,7	1,5	60	54

REA

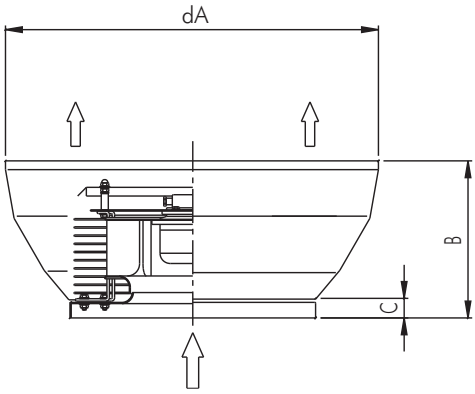


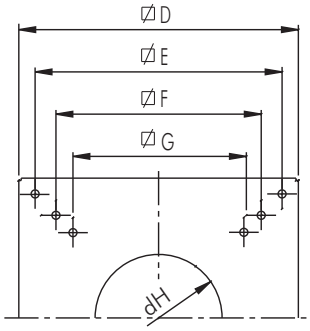


Tip/Type	dA	B	C	D	E	F	G	dH	kg.
REA 20	390	240	38	300	265	-	220	125	8
REA 25	490	230	38	400	360	-	257	162	13
REA 31	540	270	38	400	360	-	307	220	20
REA 35	700	315	38	500	450	-	380	270	30
REA 40	800	360	38	650	600	530	471	296	41

Dimenzije u mm/Dimensions in mm

REV





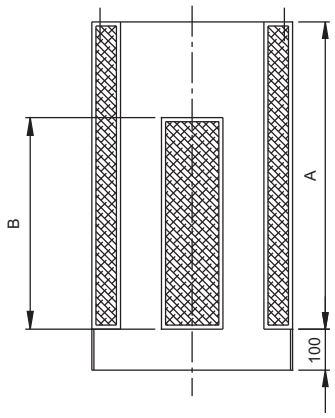
Tip/Type	dA	B	C	D	E	F	G	dH	kg.
REV 25	650	290	38	400	360	-	257	162	10
REV 31	650	290	38	400	360	-	307	220	15
REV 35	800	340	38	500	450	-	380	270	32
REV 40	980	400	38	650	600	530	471	296	45

Dimenzije u mm/Dimensions in mm

PRIGUŠIVAČI / SILENCERS

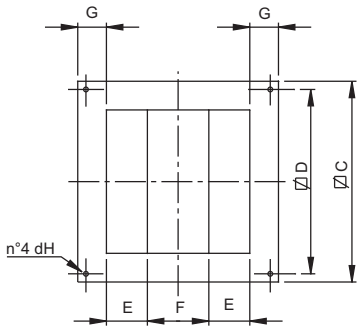
Apsorbni prigušivač smanjuje buku ventilatora,ugrađen sa strane ulaznog otvora.Zvučno apsorbni materijal : sintetička vuna
Kućište je izrađeno od galvanizovanog čelika
Pažnja ! : Upotreba prigušivača zajedno sa gravitacionim ventilom (TS) zahteva specijalnu verziju samog prigušivača sa smanjenom čaurom.

Absorption silencers. They reduce the noise of the fan, being fitted to inlet side. Sound absorbing material: mineral wool. Frame in galvanized steel sheet.
Attention: the use of a silencer in conjunction with a TS shutter requires special version of the silencer itself, with a reduced pod. Please mention it when ordering the silencer.



Tip/Type	A	B	C	D	E	F	G	H	Kg
GR 25	750	650	390	360	95	100	50	M8	28
GR 31	750	650	390	360	95	100	50	M8	28
GR 35	750	650	490	450	120	150	50	M8	37
GR 40	750	650	640	600	145	250	50	M8	42
GR 45	750	650	640	600	145	250	50	M8	42
GR 50	750	650	750	710	200	250	50	M10	42
GR 56	750	650	750	710	200	250	50	M10	50
GR 63	1000	800	920	870	210	400	50	M10	79
GR 71	1000	800	920	870	210	400	50	M10	79
GR 75	1000	800	920	870	210	400	50	M10	79

Dimenzije u mm/Dimensions in mm

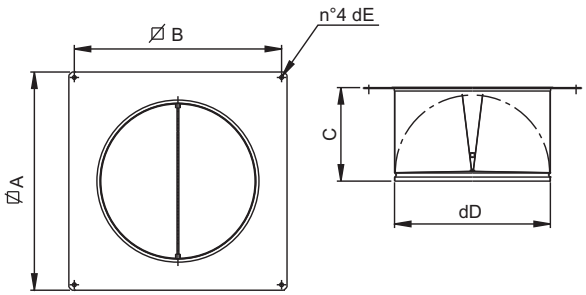


Oktava (HZ) spektruma prigušenja buke izražena je u dB Octave (HZ) spectrum of noise attenuation in dB							
Tip/Type	63	125	250	500	1000	2000	4000
GR 25	2	4	6	10	16	18	15
GR 31	2	4	6	10	16	18	15
GR 35	3	5	9	11	19	20	18
GR 40	3	4	8	9	18	15	10
GR 45	3	4	8	9	18	15	10
GR 50	4	5	11	15	16	12	9
GR 56	4	5	11	15	16	12	9
GR 63	3	4	5	8	14	9	7
GR 71	3	4	5	8	14	9	7
GR 75	3	4	5	8	14	9	7

GRAVITACIONE ŽALUZINE / GRAVITY SHUTTERS

Izbegavaju disperziju toplote kroz krovni ventilator i zahtevaju zanemarljiv otvoreni pritisak.Obod žaluzine se otvara pomoću vazdušnog strujanja prouzrokovanog radom ventilatora, u suprotnom se isti zatvara.Struktura žaluzine je izrađena od galvanizovanog čelika.

They avoid heat dispersions through the roof fan and require a negligible opening pressure. The shutter flaps are opened by the air depression produced by the fan when working, and they shut down by gravity after switching-off. The structure is made in galvanized steel sheet.



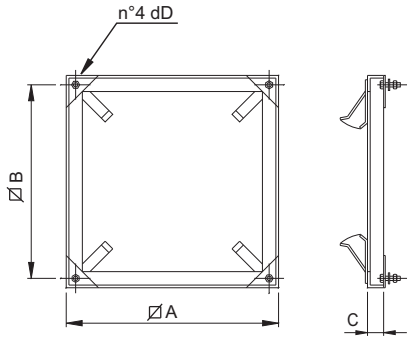
Tip/Type	A	B	C	dD	dE	Kg
TS 20	240	220	105	160	10	1,2
TS 25	280	257	125	200	10	1,5
TS 31	330	307	150	250	10	1,9
TS 35	410	380	200	310	10	3,1
TS 40	500	471	220	350	10	3,8
TS 45	500	471	220	350	10	3,8
TS 50	590	550	270	450	12	5,2
TS 56	590	550	270	450	12	5,2
TS 63	700	665	300	500	12	7,9
TS 71	700	665	300	500	12	7,9
TS 75	700	665	300	500	12	7,9

Dimenzije u mm/Dimensions in mm

UGRADNI TEMELJ / COUNTER BASES TO BE WALLED UP

Ovaj element obezbeđuje siguran spoj između ventilatora i nazidanog postolja. Poseduje četri pocinkovane nogice, koje je potrebno direktno uzidati na pripremjeno postolje.

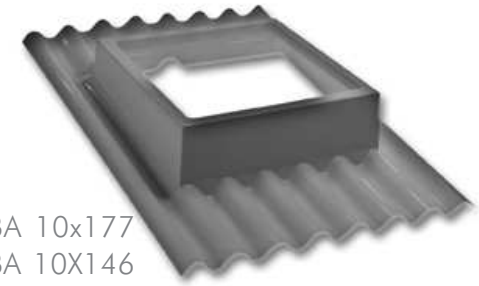
The counter base ensures an effective anchorage to the chimney stack, through the masonry of four metal strips suitably designed. It is made in solid steel with arrangement for fixing to the fan base.



Tip/Type	A	B	C	dD	kg
CB 20	290	265	30	M8x30	1,5
CB 25	390	360	30	M8x30	2,5
CB 31	390	360	30	M8x30	2,5
CB 35	490	450	30	M8x30	2,8
CB 40	630	600	30	M8x30	3,2
CB 45	630	600	30	M8x30	3,2
CB 50	740	710	30	M10x40	3,6
CB 56	740	710	30	M10x40	3,6
CB 63	900	870	30	M10x40	4,0
CB 71	900	870	30	M10x40	4,0
CB 75	900	870	30	M10x40	4,0

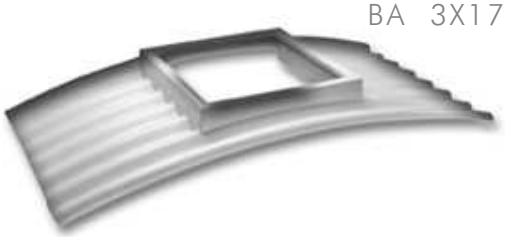
Dimenzije u mm/Dimensions in mm

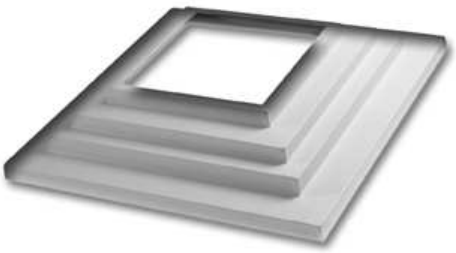
MONTAŽNO POSTOLJE ZA KROVNE VENTILATORE / SUPPORT BASE FOR ROOF FANS



BA 10x177
BA 10X146

BA 3X177





OSNOVNI PODACI :

BA montažna postolja i RD reducirni elementi su pogodni za ugradnju krovnih ventilatora na valovitim krovnim pločama.(BA) montažna postolja su pogodna za krovne ventilatore sa osnovnim postoljem veličine 930x930 mm ili većim.Sa pogodnim reducirnim elementom (RD) moguće je koristiti osnovno postolje krovnih ventilatora minimalne veličine 500x500.Reducir (RD) je poseban element sa mogućnošću usklađivanja istog sa veličinom datog ventilatora.

VERZIJE :

BA 10x177: Pogodan za EUROONDA
krovne ploče sa debljinom profila 51mm, sa razmakom valova 177mm , nagibom od 10% po propisu UNI 3949/77 i ISO R936.
BA 3x177: Pogodan za EUROONDA krovne ploče sa debljinom profila 51mm i sa razmakom valova 177mm a izrađuje se sa radijusom savijanja poluprečnika od 3m.
BA 10x146: Pogodan za EUROONDA
krovne ploče sa debljinom profila 48mm, sa razmakom valova 146mm i sa nagibom od 10% po propisima UNI 3949/77.
RD reducirni element.

KONSTRUKCIJA :

Smola ojačana slojevitim fiberglasom. Krajnji proizvod je RAL 9002 svetle sive boje.Spoljašnja površina je otporna na atmosferske uticaje.

UGRADNJA :

Korektna ugradnja predviđa poklapanje krovne ploče i reducirnog elementa uzvodno i nizvodno, sa površinom vala od jedne četvrtine sa obe strane.

GENERAL DESCRIPTION

The support base BA and reduction RD are suitable for installation of roof fans on weaved coverings, avoiding detrimental stagnation of water near to the fan and expensive carpentry works.
The support base BA is suitable for roof fans having base 930mm X 930mm or bigger . With the suitable reduction RD it is possible to use the base for roof fans from a minimum base dimensions of 500 X 500 . The reduction RD is a single element with the possibility to remove the exceeding part by a single cut.

VERSIONS

- BA 10x177: suitable for "EUROONDA" roof coverings pitch 177 mm, height 51 mm and 10% slope according to norms UNI 3949/77 – ISO R936.
- BA 3x177: suitable for "EUROONDA" roof coverings pitch 177 mm, height 51 mm and radius of curvature of the sheet of 3 meters.
- BA 10x146: suitable for "EUROONDA" roof coverings pitch146 mm, height 48 mm, and 10% slope according to norm UNI 3949/74.
- Reduction RD.

CONSTRUCTION

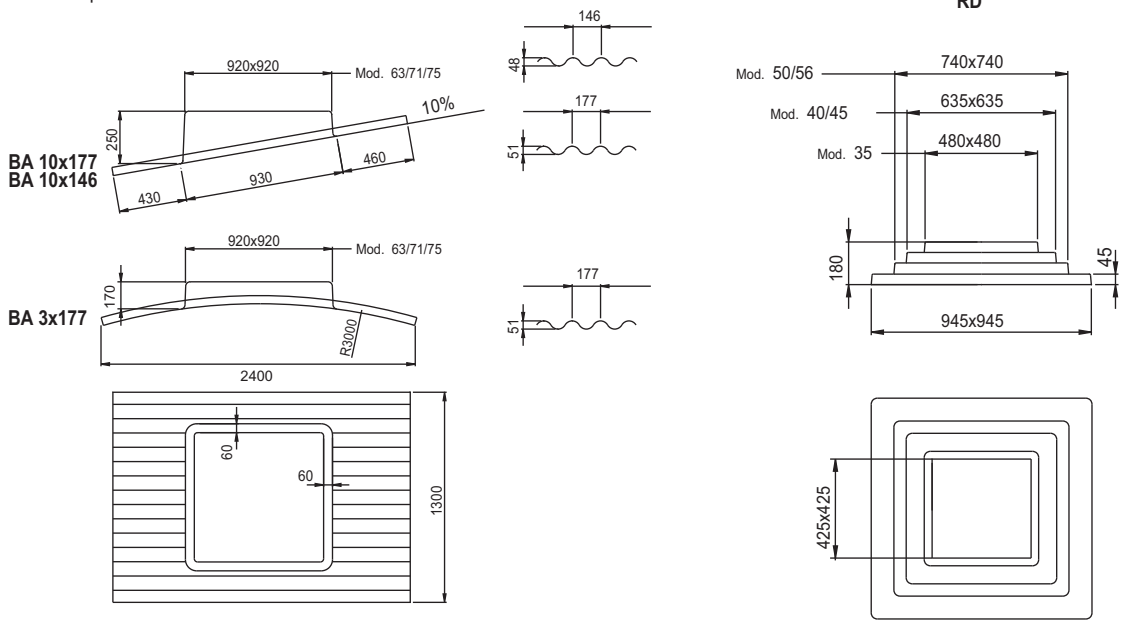
In polyester resins strengthened with stratified fibre glass.
The finishing is RAL 9002 (light grey). The external surface is treated against the action of atmospheric agents.

INSTALLATION

A correct laying foresees the overlap to the covering slab upstream and the underexposure downstream.
In addition it must be foreseen a side overlap of at least one and quarter wave for each side.

SEK. 1

Dimenzije u mm/Dimensions in mm



LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 6 m from the fan centre, in any direction, with ducted inlet and free outlet.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	FC	504	T

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	FC-2V	504	T

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	REA	314	T

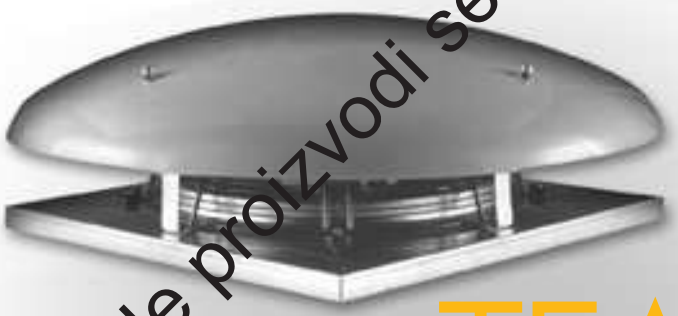
Tel. (++39) 030 9913575 (5 linee r.a.)
fax (++39) 030 9913766
E-mail dynair@dynair.it - www.dynair.it
Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

Predstavnik za Srbiju :
AVIT
21000 Novi Sad, Temerinski put br.8
Tel. +381-21- 64- 10 -160 , Fax: +381-21-64-10-159
E-mail: info@avit.co.yu www.avit.co.yu

Krovni aksijalni ventilatori
Axial roof fans

2

Ne proizvodi se !!!

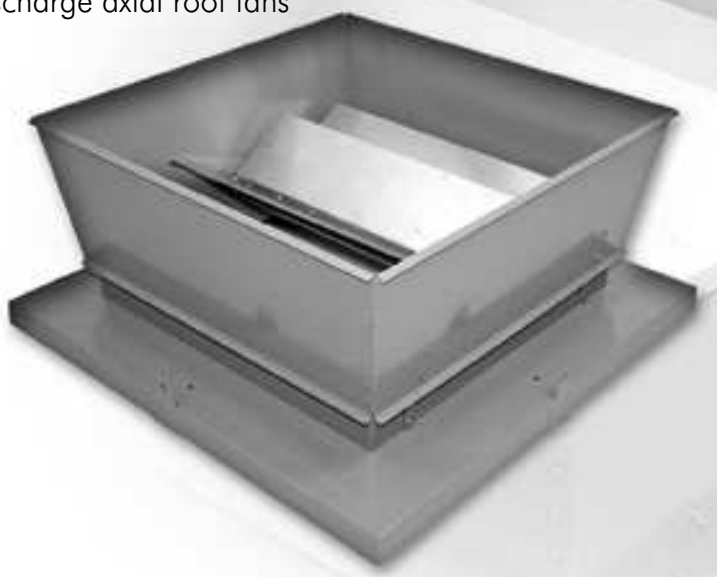


TEA
str. 2.2

Kompaktni krovni aksijalni ventilatori
Compact axial roof fans

TAV
STR. 6.2

Aksijalni krovni ventilatori sa vertikalnim izduvavanjem
Vertical discharge axial roof fans



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AXIAL ROOF FANS — SEK. 2

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TEA

Kompaktni krovni aksijalni ventilatori
Compact axial roof fans

Ne proizvodi se !!!

SEK. 2

OSNOVNI PODACI :

TEA krovni ventilatori su pogodni za izvlačenje velike količine vazduha.Zbog toga su delom dizajnirani za ventilaciju velikih prostorija-objekata,staklenika.....bez ili sa kratkim kanalnim cevnim sistemom Glavne osobine TEA serije ventilatora su :Mali gabarit, Aerodinamično formirana kupa radi veće efikasnosti i manje buke,monofazni i trofazni motori sa regulacijom brzine,počevši od veličine 500 koji su dostupni u dvobrzinskoj verziji, pomoću zvezda/delta prekidača.Predviđeni su za transport čistog vazduha maksimalne temperature do 50 °C.

KONSTRUKCIJA :

- Osnovno postolje je izrađeno od galvanizovanog čeličnog lima.
- Aluminijumsko radno kolo i čelična glavčina.
- Poklopac od polyester-fiberglasa pod pritiskom, otporan na spoljašnje uticaje.
- Strujanje vazduha od radnog kola ka motoru.
- Zaštitne rešetke na izlaznom otvoru u funkciji držača motora izrađene od legure čelika u skladu sa UNI 9219-DIN 31001 standardima.Zaštićeni od spoljnih uticaja.
- Asinhroni trofazni ili monofazni motori, modeli od 50- do 900 su dvobrzinski zbog zvezda/trougao prekidača, IP55, motor Klase F.

Pogodni su za S1 režim (neprekidan rad pri stalnom opterećeju).

DODATNI DELOVI :

- Unutrašnja gravitaciona žaluzina.
- Prigušivač zvuka.
- Ugradno postolje ventilatora.
- Montažno postolje ventlatora.
- Gravitaciona žaluzina.
- Zaštitne rešetke ispred lopatica.
- Servisni prekidač.
- Regulator broja obrtaja.
- Zvezda/delta prekidač.

GENERAL DESCRIPTION

These roof fans are suitable for extracting large air volumes. Therefore they are particularly designed for air exchange of premises of large volume and plants without (or with short) ducting. Main features of TEA series are: reduced height, aerodynamically shaped inlet cone for better efficiency and less noise, speed adjustable motors, either in single- and three-phase versions. Starting from size 500, they are available in double speed version, obtainable by "delta/ star" switching. The use of the TEA series is meant for clean air with max. temperature of +50°C.

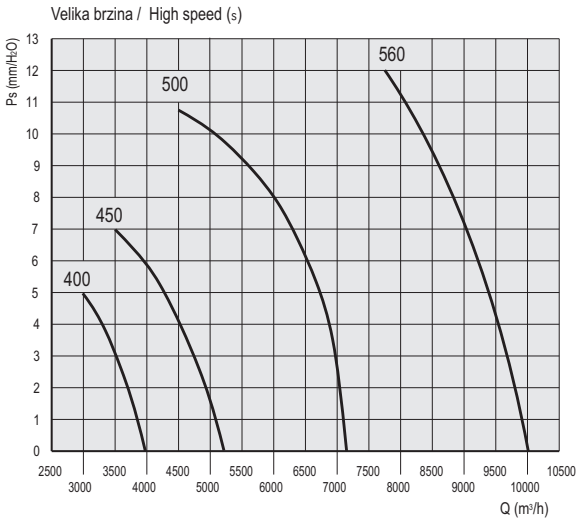
CONSTRUCTION

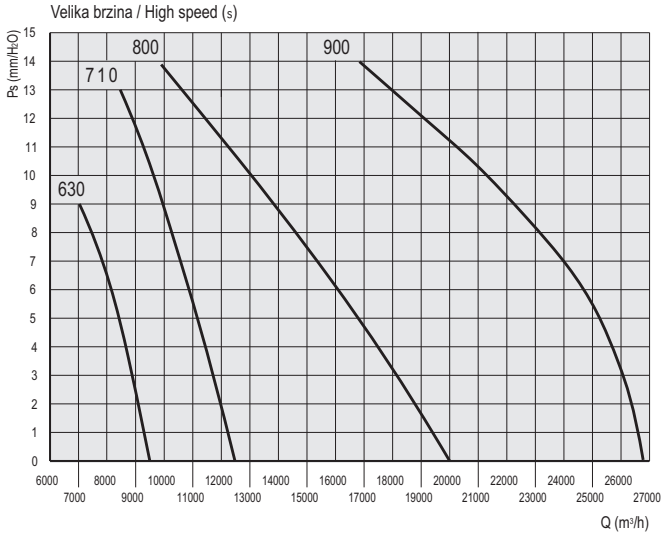
- Fixing base in galvanized steel sheet.
- Impeller with aluminium blades and steel hub.
- Upper cover in polyester-fiberglass loaded, resistant to atmospheric agents.
- Air flow from impeller to motor.
- Protection guard on outlet side, with function of motor support, in steel rod, manufactured according to rules UNI9219 - DIN31001 and protected against the atmospheric agents.
- Asynchronous three-phase or single-phase motor; from type 500 to 900 with double speed motors by delta/ star switch, IP55 , class F. Suitable for S1 service (continuos working at constant load).

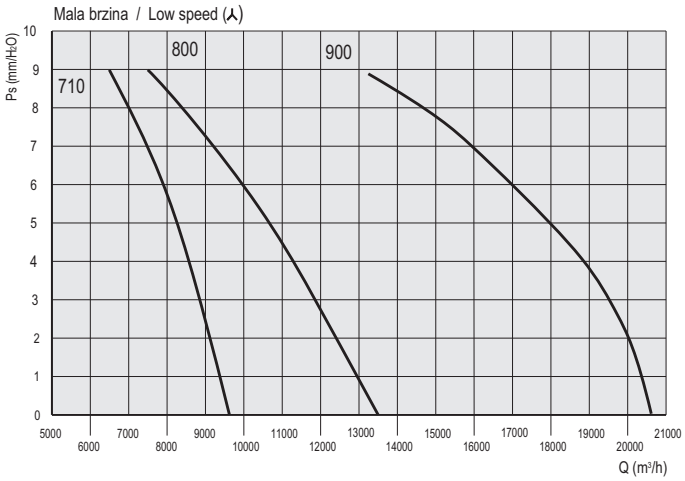
ACCESSORIES

- Inlet gravity shutter.
- Silencers.
- Counter-base to be walled up.
- Adaptation base for corrugated roof coverings.
- Gravity shutter.
- Intake guard.
- Service switch.
- Speed regulator.
- Delta/Star switch.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3







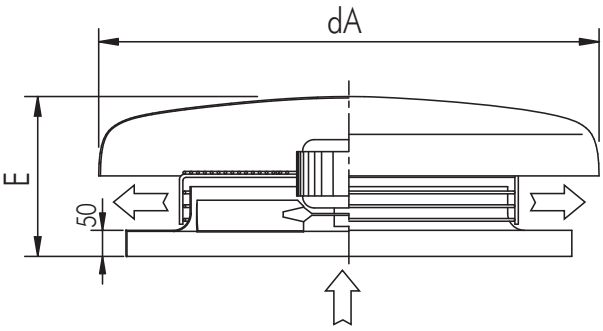
PRVA BRZINA / SINGLE SPEED

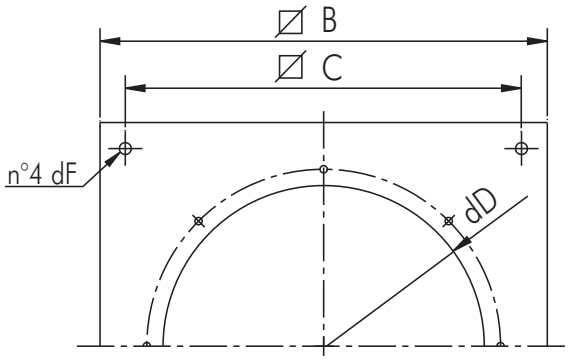
Tip Type	Model Model	U	Pm (kW)	rpm	In (A)	IP/CL	Lp dB(A)	Reg.
TEA	400	M	0,2	1380	1,7	55/F	51	RV/1
TEA	400	T	0,2	1380	0,9	55/F	51	RVT
TEA	450	M	0,3	1380	2	55/F	54	RV/1
TEA	450	T	0,3	1380	0,95	55/F	54	RVT

DUPLA BRZINA / DOUBLE SPEED

Tip Type	Model Model	U	Pm (kW)	rpm		In (A)		IP/CL	Lp dB(A)		Reg.
				s	⅄	s	⅄		s	⅄	
TEA	500-2V	T	0,5	1380	1100	1,6	0,8	55/F	61	51	Int. S/T
TEA	560-2V	T	1,1	1420	1200	1,9	1,4	55/F	64	51	Int. S/T
TEA	630-2V	T	0,5	900	660	1,4	0,8	55/F	56	48	Int. S/T
TEA	710-2V	T	1,1	880	700	3,3	1,5	55/F	62	56	Int. S/T
TEA	800-2V	T	1,3	900	660	3,6	1,9	55/F	68	62	Int. S/T
TEA	900-2V	T	1,8	900	660	5,4	2,8	55/F	72	66	Int. S/T

DIMENZIJE / DIMENSIONS TEA



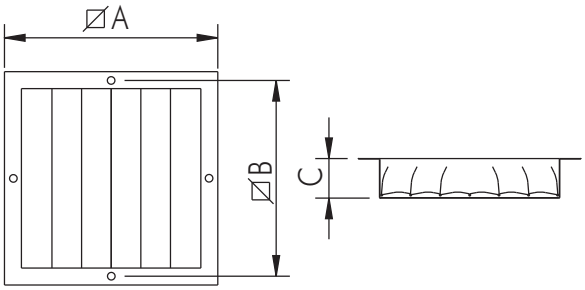


Tip/Type	dA	B	C	dD	E	dF	Kg
TEA 400	900	650	600	400	305	12	17
TEA 450	900	650	600	450	315	12	18
TEA 500	1100	760	710	500	357	14	27
TEA 560	1100	760	710	560	367	14	36
TEA 630	1300	930	870	640	422	14	40
TEA 710	1300	930	870	710	460	14	45
TEA 800	1600	1100	1030	810	600	14	60
TEA 900	1600	1300	1220	910	600	14	80

Dimenzije u mm/Dimensions in mm

DELOVI / ACCESSORIES TEA

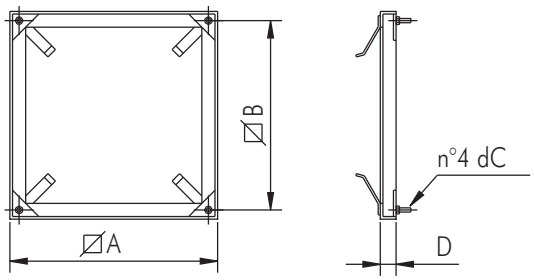
GRAVITACIONA ŽALUZINA / GRAVITY SHUTTER



Tip/Type	A	B	C	kg
40	525	512	200	6
45	525	565	200	7
50	640	625	200	8
56	640	675	200	9
63	750	725	200	10
71	820	805	200	11
80	990	970	200	13
90	1100	1075	200	15

Dimenzije u mm/Dimensions in mm

UGRADNI TEMELJ / COUNTER BASE TO BE WALLED UP



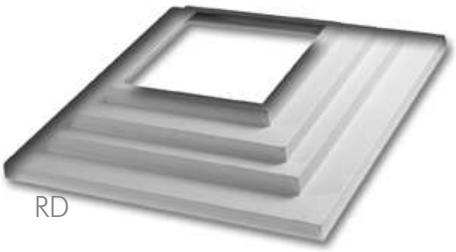
Tip/Type	A	B	C	kg
40 - 45	630	600	M8x30	3
50 - 56	740	710	M10x40	3,6
63 - 71	900	870	M10x40	4
80	1080	1030	M10x40	7
90	1270	1220	M 12x40	15

Dimenzije u mm/Dimensions in mm

MONTAŽNO POSTOLJE ZA KROVNE VENTILATORE / SUPPORT BASE FOR ROOF FANS

BA 10x177
BA 10X146

BA 3X177



RD

OSNOVNI PODACI :

BA montažna postolja i RD reducirni elementi su pogodni za ugradnju krovnih ventilatora na valovitim krovnim pločama.(BA) montažna postolja su pogodna za krovne ventilatore sa osnovnim postoljem veličine 930x930 mm ili većim.Sa pogodnim reducirnim elementom (RD) moguće je koristiti osnovno postolje krovnih ventilatora minimalne veličine 500x500.Reducir (RD) je poseban element sa mogućnošću usklađivanja istog sa veličinom datog ventilatora.

VERZIJE :

BA 10x177: Pogodan za EUROONDA krovne ploče sa debljinom profila 51mm, sa razmakom valova 177mm , nagibom od 10% po propisu UNI 3949/77 i ISO R936.
BA 3x177: Pogodan za EUROONDA krovne ploče sa debljinom profila 51mm i sa razmakom valova 177mm a izrađuje se sa radijusom savijanja poluprečnika od 3m.
BA 10x146: Pogodan za EUROONDA krovne ploče sa debljinom profila 48mm, sa razmakom valova 146mm i sa nagibom od 10% po propisima UNI 3949/77.
RD reducirni element.

KONSTRUKCIJA :

Smola ojačana slojevitim fiberglasom. Krajnji proizvod je RAL 9002 svetle sive boje.Spoljašnja površina je otporna na atmosferske uticaje.

UGRADNJA :

Korektna ugradnja predviđa poklapanje krovne ploče i reducirnog elementa uzvodno i nizvodno, sa površinom vala od jedne četvrtine sa obe strane.

GENERAL DESCRIPTION

The support base BA and reduction RD are suitable for installation of roof fans on weaved coverings, avoiding detrimental stagnation of water near to the fan and expensive carpentry works.
The support base BA is suitable for roof fans having base 930mm X 930mm or bigger . With the suitable reduction RD it is possible to use the base for roof fans from a minimum base dimensions of 500 X 500 . The reduction RD is a single element with the possibility to remove the exceeding part by a single cut.

VERSIONS

- BA 10x177: suitable for "EUROONDA" roof coverings pitch 177 mm, height 51 mm and 10% slope according to norms UNI 3949/77 – ISO R936.
- BA 3x177: suitable for "EUROONDA" roof coverings pitch 177 mm, height 51 mm and radius of curvature of the sheet of 3 meters.
- BA 10x146: suitable for "EUROONDA" roof coverings pitch146 mm, height 48 mm, and 10% slope according to norm UNI 3949/74.
- Reduction RD.

CONSTRUCTION

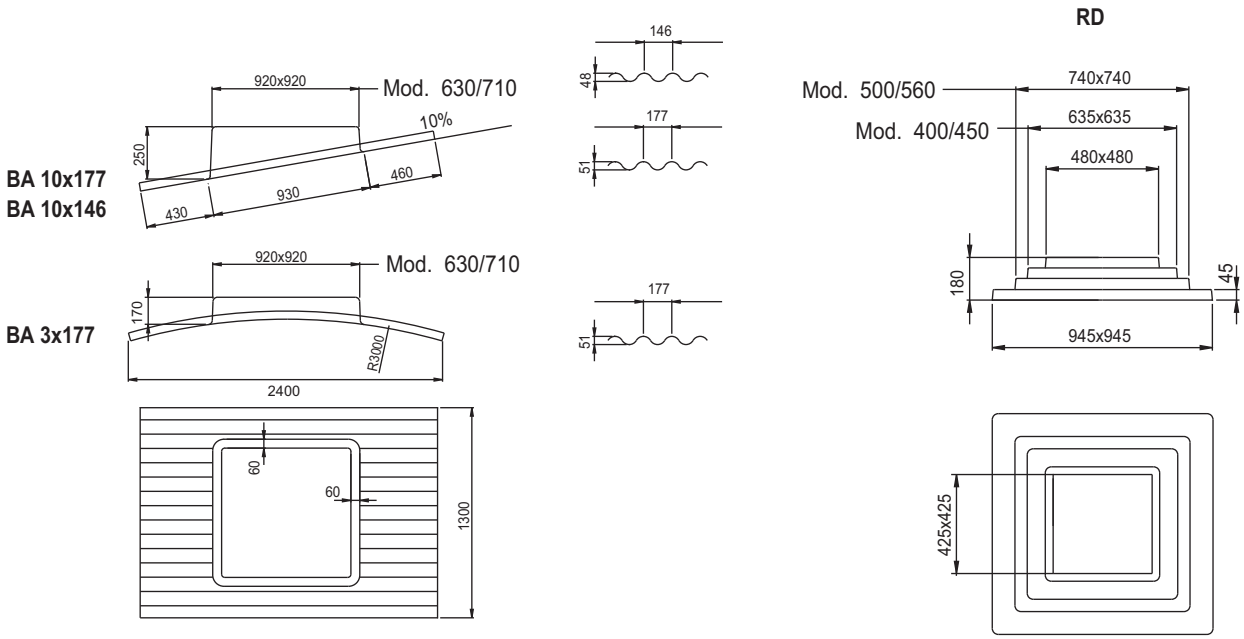
In polyester resins strengthened with stratified fibre glass.
The finishing is RAL 9002 (light grey). The external surface is treated against the action of atmospheric agents.

INSTALLATION

A correct laying foresees the overlap to the covering slab upstream and the underexposure downstream.
In addition it must be foreseen a side overlap of at least one and quarter wave for each side.

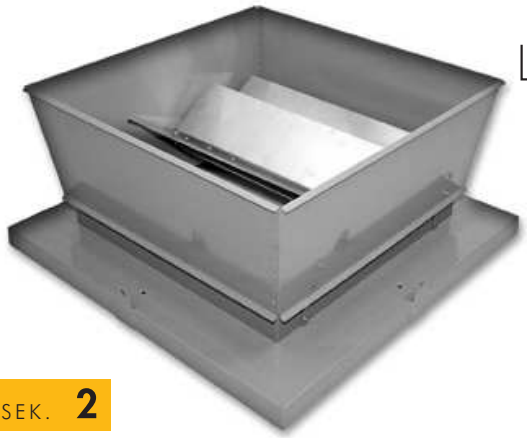
SEK. 2

Dimenzije u mm/Dimensions in mm



TAV

Aksijalni krovni ventilatori sa vertikalnim izduvavanjem
Vertical discharge axial roof fans



SEK. 2

OSNOVNI PODACI :

Ventilatori TAV serije su dizajnirani za izvlačenje velike količine vazduha posredstvom kanalnih-cevnih sistema ili direktnim putem i to za industrijske i trgovinske objekte.Karakteristika ove serije ventilatora je vertikalno vazdušno strujanje koje obezbeđuje veću efikasnost i bržu disperziju dima iz atmosfere.Žaluzina je dizajnirana kao zaštitna preventiva u slučaju kiše, kada je ventilator van pogona.Pogodni su za transport čistog vazduha maksimalne temperature do 50°C u standardnoj izvedbi, i do 400°C u (HT) verziji koja je specijalno dizajnirana za izvlačenje dima u slučajevima požara.
Serija je bazirana na 4. modela (veličine: 800,900,1000,1120,1250,1400) sa dve brzine (4 i 6 pol-ni).Ventilator i transporter se isporučuju posebno.

KONSTRUKCIJA :

- Spoljašnji transporter sa panelima je od galvanizovanog čeličnog lima i dopunjuje se sa postoljem od ofarbanog čeličnog lima.
- Aluminijumska dvokrilna gravitaciona žaluzina.
- Pločasta spoljnica od farbanog čeličnog lima.
- Zaštitne rešetke su izrađene u skladu sa UNI9219-DIN1001 propisima.
- Aksijalni ventilator sa cilindričnim kućištem (CC Serije) zaštićen od spoljašnjih uticaja epoxy farbom.Radno kolo sa aerofil profilom i promenjivim nagibnim uglom u stanju mirovanja, u termo-plastičnom materijalu.Glavčina od livenog aluminijuma.Radno kolo izrađeno od livenog aluminijuma kod (HT) verzije.
- Trofazni asinhroni motor je izrađen po IEC34IEC72 i 89/392 EEC-89/336 EEC-93/23 EEC standardima, CE kvalifikovan, B3 forma, IP55,motor klase F. Pogodan je za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Vidi CC serije (4. poglavje).

NA ZAHTEV :

- HT verzija za izvlačenja dima u slučaju požara , pare na 400°C /120 min, 200°C /120 min, 300°C /60 min.

Vidi 11. sekciju(TAV-HT).

GENERAL DESCRIPTION

The fans of the TAV series, designed to extract large air volumes, are intended for direct or ducted ventilation of commercial and industrial buildings. Characteristic of this series is the vertical air stream which allows a better efficiency and faster dispersion of the smokes in the atmosphere. The shutter is designed to prevent the entry of the rain when the fan is not working. They can exhaust clean air up to max. temperature of 50°C in standard version, and 400°C for 120 minutes in the HT version, expressly designed for evacuation of smokes in case of fire. The series is based on 4 models (sizes 800, 900, 1000, 1120,1250,1400) and two speeds (4 and 6 poles). Fan and conveyor are provided in separate way.

CONSTRUCTION

- Outer conveyor with panels in galvanized steel sheet complete with base in painted steel sheet.
- Double wing gravity shutter in aluminium sheet.
- Coupling plate to the fan in painted steel sheet.
- Outlet protection grid according to norms UNI9219 -DIN31001 and protected against atmospheric agents.
- Axial fan in cylindrical case (CC series), protected against atmospheric agents by epoxy paint. Impeller with aerofoil profile blades, variable pitch angle in still position, in thermo-plastic material ; hub in die-cast aluminium. Impeller completely in die-cast aluminium for HT version.
- Three-phase asynchronous motor according to IEC34-IEC72 , 89/392 EEC-89/336EEC 93/23EEC standards, CE marked . B3 form, IP55, class F. Suitable for S1 service (continuos working at constant load.

ACCESSORIES

- See CC series (Section 4).

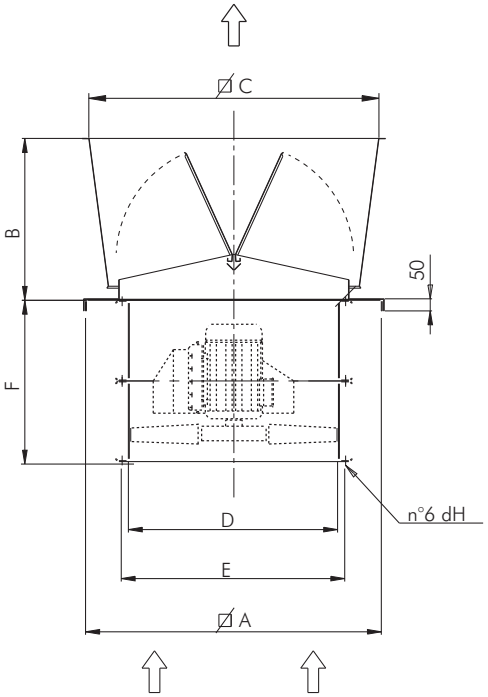
UPON REQUEST

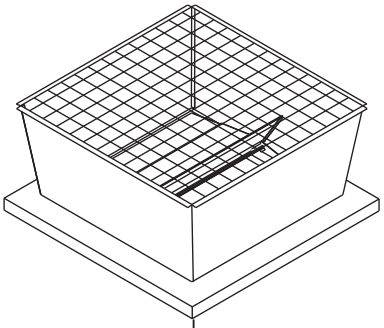
- Version for smoke evacuation in case of fire , suitable to exhaust fumes with temperature of 400°C for 2 hours, 200°C for 2 hours, 300°C for 1 hour. See section 11 (TAV-HT).

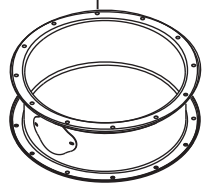
PERFORMANSE / PERFORMANCE TAV

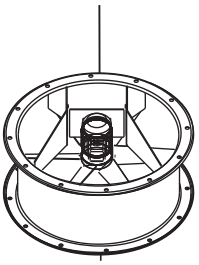
Pogledati performanse serije CC (sekcija 4).Verzije veličine 800, 900, 1000, 1120 sa 4, 6 pola.Razmatrati gubitak pritisne sile izazvane žaluzinom , od oko pola dinamičkog pritiska od relevantnog CC ventilatora (sekcija 4).
See performances of CC series (section 4). Sizes 800, 900, 1000, 1120 and 4, 6 poles versions. Consider a loss of head, caused by the shutter, of about half of the dynamic pressure of the ,CC fan (Section 4).

DIMENZIJE / DIMENSIONS TAV



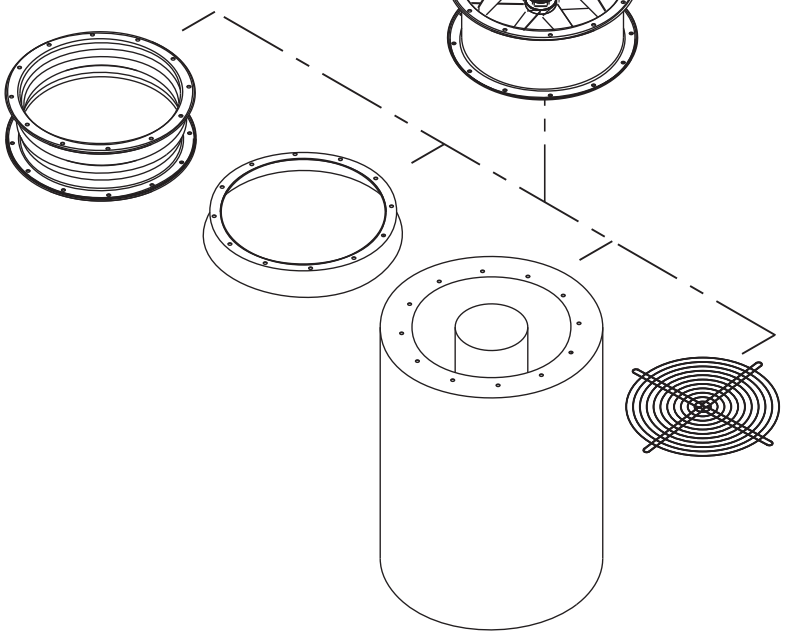






Tip/Type	A	B	C	dD	dE	F	G	dH	Kg (*)
TAV 800	1180	630	1140	800	860	590	16	12	70
TAV 900	1280	700	1250	900	970	690	16	16	80
TAV 1000	1430	500	1300	1000	1070	760	16	16	90
TAV 1120	1580	550	1470	1120	1190	760	20	16	120

Dimenzije u mm/Dimensions in mm
Važno: Dodati težinu ventilatora CC serije.
(*) Note: add the weight of fan series CC



TACC

Aksijalni krovni ventilatori
Axial roof fans

SEK. **2**

OSNOVNI PODACI :

TACC krovni ventilatori su pogodni za izvlačenje velike količine vazduha.Zbog toga su delom dizajnirani za ventilaciju velikih prostorija-objekata,staklenika.... Glavne osobine TACC ventilatora su:velika snaga,laka ugradnja i održavanje,velika efikasnost (zahvaljujući dizajnu i materijalu lopatica),lako povezivanje na kanalne - cevne sisteme,mogućnost promene pravca strujanja vazduha (za uvlačenje vazduha). Pogodni su za transport čistog vazduha na temperaturi od maksimalnih 50°C.

KONSTRUKCIJA :

- Fiksirajuće postolje je izrađeno od galvanizovanog čelika.
- Radno kolo izrađeno od techno-polymer-a , glavčina od livenog aluminijuma.
- Poklopac izrađen od poliester-fiberglasa otpornog na spoljne uticaje.
- Strujane vazduha od motora ka radnom kolu.
-Spoljašnja zaštitna rešetka je od čelične šipke, izrađena je u skladu sa UNI9219-DIN31001 propisima i zaštićena od atmosferskih uticaja.
- Asinhroni trofazni ili monofazni motori se izrađuju po IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC međunarodnim standardima, CE kvalifikovani, IP55, motor klase F. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Unutrašnja gravitaciona žaluzina.
- Prigušivači zvuka (GR).
- Ugradni temelj ventilatora (CB).
- Montažno postolje ventilatora za valovite krovne ploče (BA).
- Zaštitna rešetka sa strane motora (CCRC)
- Servisni prekidač.

GENERAL DESCRIPTION

These roof fans are suitable for extracting large air volumes. Therefore they are particularly designed for air exchange of large volume premises and plants. Main features of TACC series are high strenght and easy of installation and maintenance, high efficiency (thanks to impeller with airfoil blades), possibility to be easily ducted, possibility of reverse flow (for air intake). The use of the TACC series is meant for clean air with max. temperature of +50°C.

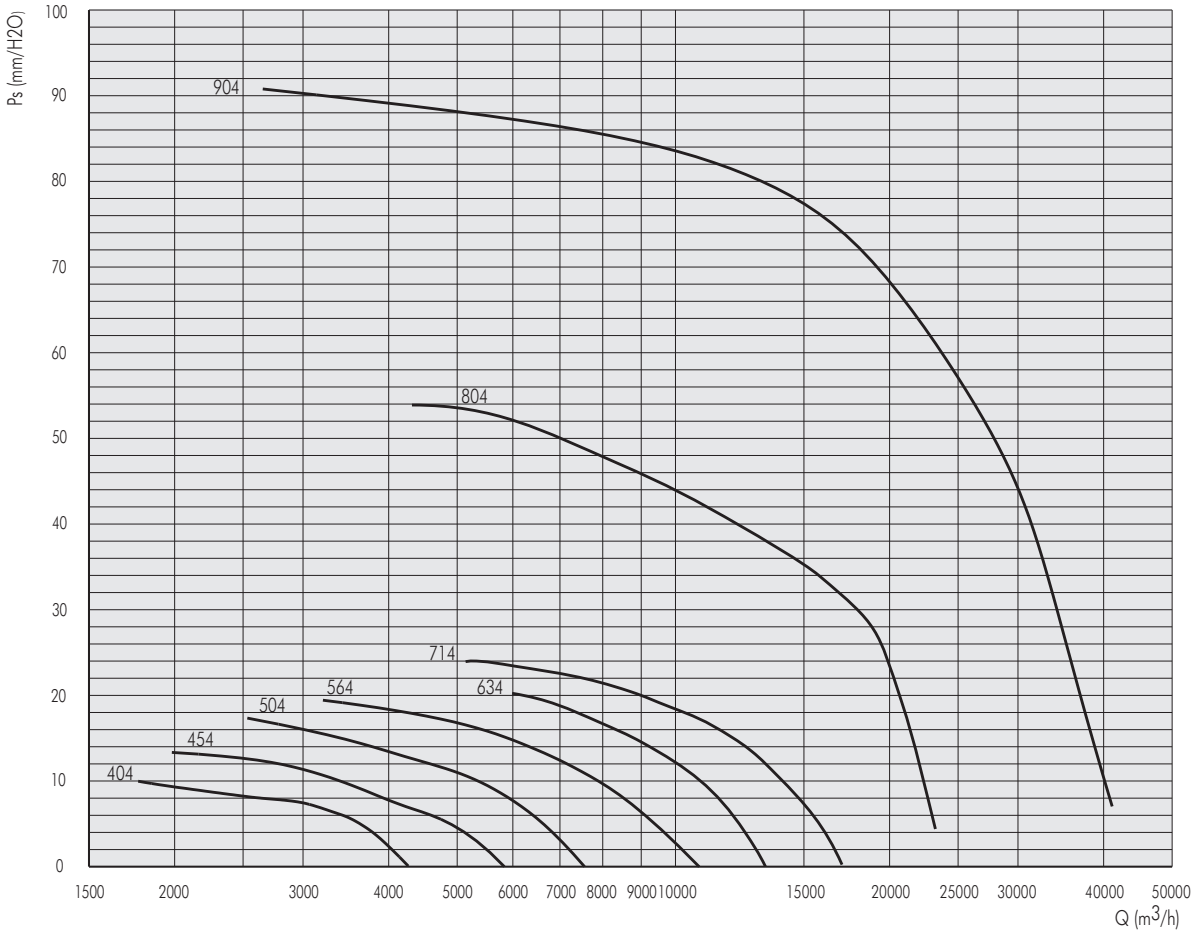
CONSTRUCTION

- *Fixing base in galvanized steel sheet.*
- *Impeller with aerofoil profile blades in techno-polymer material and die-cast aluminium hub. Variable pitch angle in still position.*
- *Upper cover in polyester-fiberglass loaded, resistant to atmospheric agents.*
- *Air flow from motor to impeller.*
- *Protection guard on outlet side, in steel rod, manufactured according to rules UNI9219 - DIN31001 and protected against the atmospheric agents.*
- *Asynchronous three-phase or single-phase motor according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC, CE marked. IP55, class F. S1 service (continuous working at constant load).*

ACCESSORIES

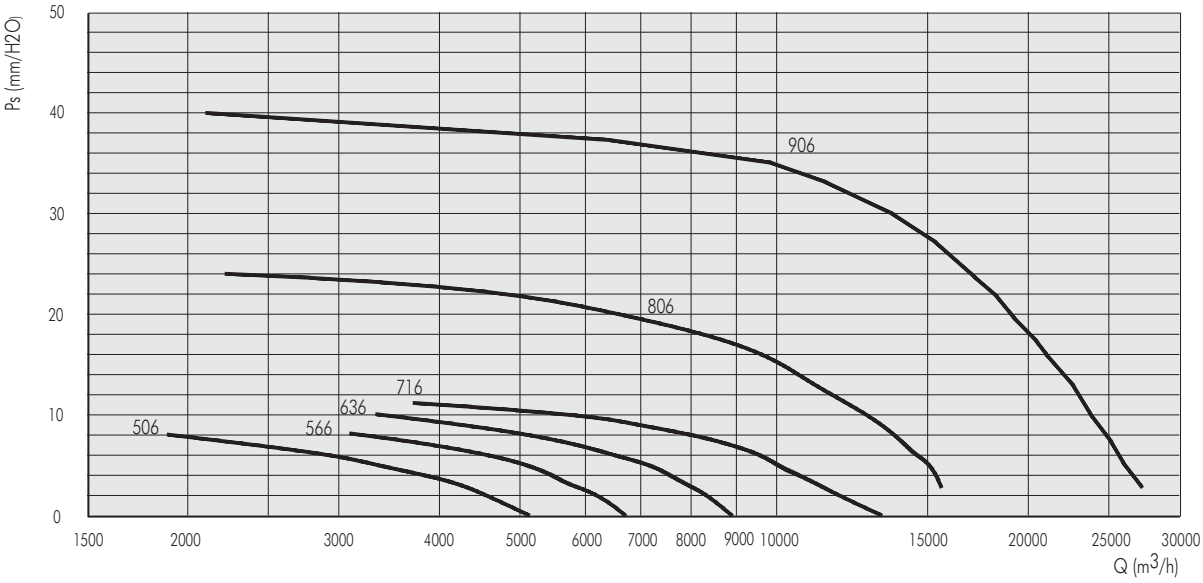
- *Inlet gravity shutter.*
- *Silencers (GR).*
- *Counter-base to be walled up (CB).*
- *Adaptation base for corrugated roof coverings (BA).*
- *Motor side protection grid (CCRC).*
- *Service switch.*

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



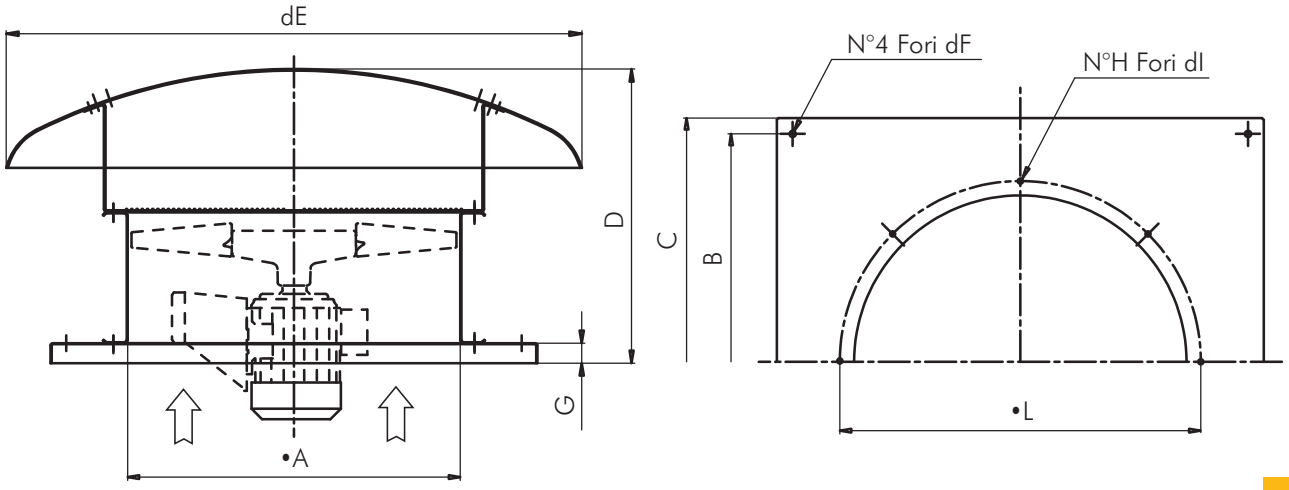
Tip/Type	U	Pm (kW)	In max (A)	rpm	IP/CL	Lp dB(A)
TACC 404	M	0,18	1,6	1380	55/F	52
TACC 404	T	0,18	0,65	1380	55/F	52
TACC 454	M	0,37	2,9	1380	55/F	56
TACC 454	T	0,37	1,2	1380	55/F	56
TACC 504	M	0,55	4,4	1380	55/F	59
TACC 504	T	0,55	1,6	1380	55/F	59
TACC 564	T	0,75	2	1380	55/F	61
TACC 634	T	1,1	2,8	1380	55/F	64
TACC 714	T	2,2	5,3	1380	55/F	68
TACC 804	T	4	9,4	1380	55/F	72
TACC 904	T	9,2	17,3	1380	55/F	77

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



Tip/Type	U	Pm (kW)	In max (A)	rpm	IP/CL	Lp dB(A)
TACC 506	T	0,18	0,82	1380	55/F	57
TACC 566	T	0,26	1,1	1380	55/F	60
TACC 636	T	0,37	1,2	1380	55/F	63
TACC 716	T	0,75	2,5	1380	55/F	65
TACC 806	T	1,5	4,2	1380	55/F	70
TACC 906	T	3	7,2	1380	55/F	75

DIMENZIJE / DIMENSIONS TACC

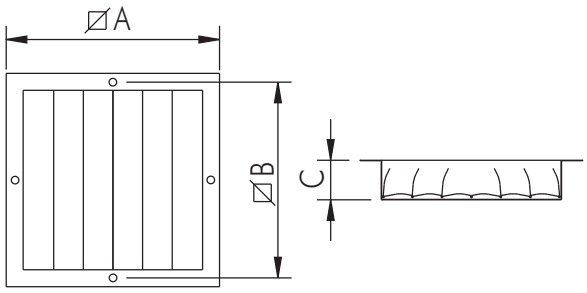


Tip/Type	dA	B	C	D	dE	dF	G	H	dI	dL	Kg
TACC 400	400	600	650	515	900	12	38	8	12	450	38
TACC 450	450	600	650	525	900	12	38	8	12	500	45
TACC 500	500	710	760	555	900	12	38	12	12	560	47
TACC 560	560	710	760	550	1100	12	38	12	12	620	52
TACC 630	630	870	930	565	1100	12	38	12	12	690	69
TACC 710	710	870	930	670	1300	12	38	16	12	770	80
TACC 800	800	1030	1100	800	1300	12	38	16	12	860	140
TACC 900	900	1220	1300	780	1600	16	50	16	16	970	210

Dimenzije u mm/*Dimensions in mm*

DODATNI DELOVI / ACCESSORIES TACC

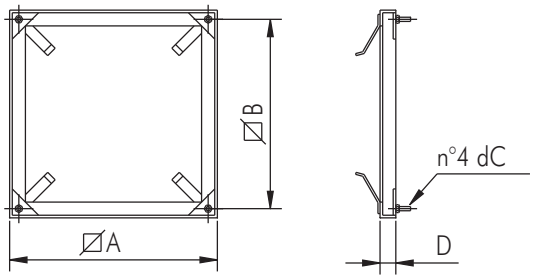
GRAVITACIONA ŽALUZINA / GRAVITY SHUTTER



Tip/Type	A	B	C	kg
40	465	450	240	6
45	520	500	260	7
50	580	560	260	8
56	640	620	280	9
63	710	690	300	10
71	790	770	300	11
80	880	860	300	13
90	1000	970	350	15

Dimenzije u mm/*Dimensions in mm*

UGRADNI TEMELJ / COUNTER BASE TO BE WALLED UP

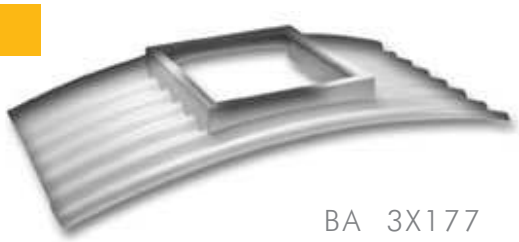


Tip/Type	A	B	C	kg
40 - 45	630	600	M8x30	3
50 - 56	740	710	M10x40	3,6
63 - 71	900	870	M10x40	4
80	1080	1030	M10x40	7
90	1270	1220	M 12x40	15

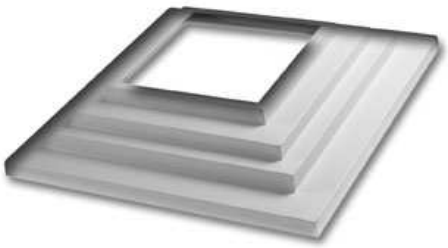
Dimenzije u mm/*Dimensions in mm*

MONTAŽNO POSTOLJE ZA KROVNE VENTILATORE / SUPPORT BASE FOR ROOF

BA 10x177
BA 10X146



BA 3X177



RD

OSNOVNI PODACI :

BA montažna postolja i RD reducirni elementi su pogodni za ugradnju krovnih ventilatora na valovitim krovnim pločama.(BA) montažna postolja su pogodna za krovne ventilatore sa osnovnim postoljem veličine 930x930 mm ili većim.Sa pogodnim reducirnim elementom (RD) moguće je koristiti osnovno postolje krovnih ventilatora minimalne veličine 500x500.Reducir (RD) je poseban element sa mogućnošću usklađivanja istog sa veličinom datog ventilatora.

VERZIJE :

BA 10x177: Pogodan za EUROONDA
krovne ploče sa debljinom profila 51mm, sa razmakom valova 177mm, nagibom od 10% po propisu UNI3949/77 i ISO R936.
BA 3x177: Pogodan za EUROONDA krovne ploče sa debljinom profila 51mm i sa razmakom valova 177mm a izrađuje se sa radijusom savijanja poluprečnika od 3m.
BA 10x146: Pogodan za EUROONDA krovne ploče sa debljinom profila 48mm, sa razmakom valova 146mm i sa nagibom od 10% po propisima UNI 3949/77.
RD reducirni element.

KONSTRUKCIJA :

Smola ojačana slojevitim fiberglasom. Krajnji proizvod je RAL 9002 svetle sive boje.Spoljašnja površina je otporna na atmosferske uticaje.

UGRADNJA :

Korektna ugradnja predviđa poklapanje krovne ploče i reducirnog elemnta uzvodno i nizvodno, sa površinom vala od jedne četvrtine sa obe strane.

GENERAL DESCRIPTION

The support base BA and reduction RD are suitable for installation of roof fans on weaved coverings, avoiding detrimental stagnation of water near to the fan and expensive carpentry works.
The support base BA is suitable for roof fans having base 930mm X 930mm or bigger . With the suitable reduction RD it is possible to use the base for roof fans from a minimum base dimensions of 500 X 500 . The reduction RD is a single element with the possibility to remove the exceeding part by a single cut.

VERSIONS

- BA 10x177: *suitable for "EUROONDA" roof coverings pitch 177 mm, height 51 mm and 10% slope according to norms UNI 3949/77 – ISO R936.*
- BA 3x177: *suitable for "EUROONDA" roof coverings pitch 177 mm, height 51 mm and radius of curvature of the sheet of 3 meters.*
- BA 10x146: *suitable for "EUROONDA" roof coverings pitch146 mm, height 48 mm, and 10% slope according to norm UNI 3949/74.*
- *Reduction RD.*

CONSTRUCTION

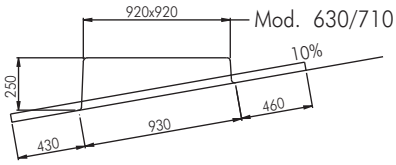
In polyester resins strengthened with stratified fibre glass.
The finishing is RAL 9002 (light grey). The external surface is treated against the action of atmospheric agents.

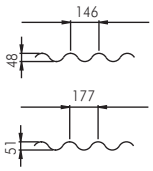
INSTALLATION

A correct laying foresees the overlap to the covering slab upstream and the underexposure downstream.
In addition it must be foreseen a side overlap of at least one and quarter wave for each side.

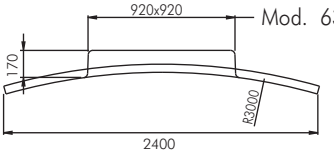
Dimenzije u mm/*Dimensions in mm*

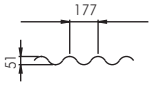
BA 10x177
BA 10x146

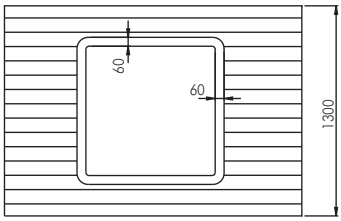




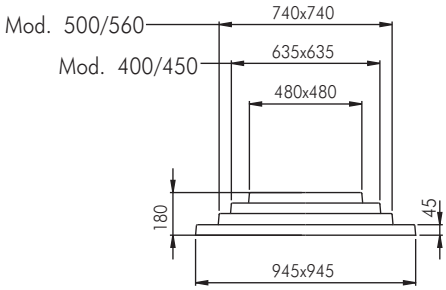
BA 3x177

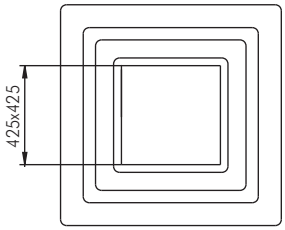


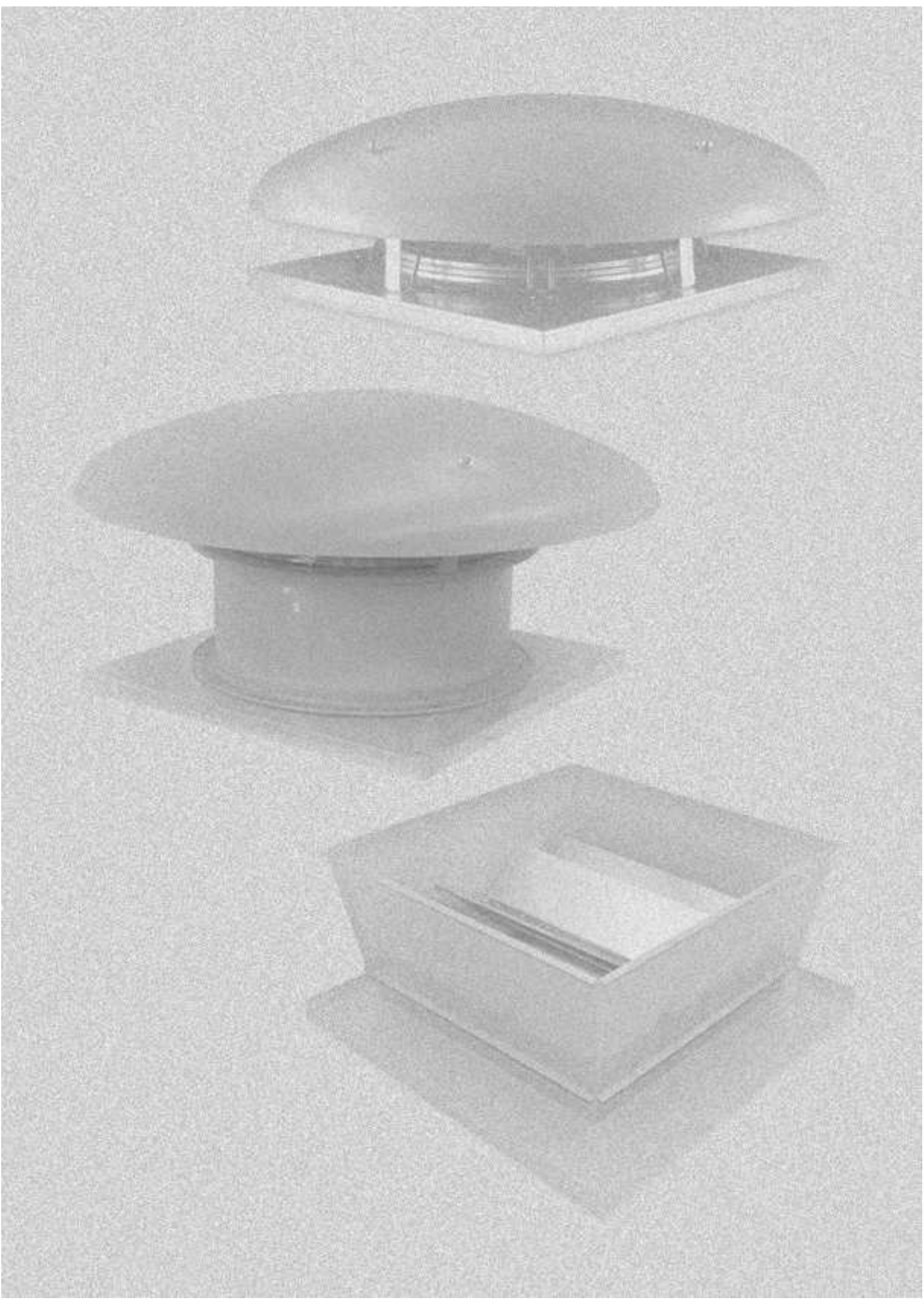




RD







LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 6 m from the fan centre, in any direction, with ducted inlet and free outlet.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	TAV	906	T

Primer / Example:	Tip / Type	Model /Model	Voltaža / Voltage
	TEA	450	T

Tel. (++39) 030 9913575 (5 linee r.a.)
fax (++39) 030 9913766
E-mail dynair@dynair.it - www.dynair.it
Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

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Ventilator sa ramom za usmeravanje vazduha
Plate mounted and ring axial fans

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Ventilator sa ramom za usmeravanje vazduha
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Ventilator sa ramom za usmeravanje vazduha
Plate mounted axial fans

SEK. 3

QC

QC-ATEX

OSNOVNI PODACI :

Ventilatori QC serije su ugradivi u zid-panel i pogodni su za ventilaciju industrijskih objekata,stočnih farmi,staklenika,garaža,sportskih hala,parkirališta ....itd.Serija je sačinjena od dve verzije- QC i QC-ATEX.
10. modela sa lopaticama dijametra od 200 do 700 mm.QC serija je predviđena za transport čistog vazduha temperature od maksimalnih 50 °C.QC- ATEX serija za transport čistog vazduha u zonama - sredinama gde je neophodna zagarantovana sigurnost od eksplozije,gasova,zapaljive prašine u skladu sa IEC79-10/CEI zakonima 64 -2.
Nivo buke je mali, a efikasnost velika zahvaljujući ulaznom otvoru usmerivača vazduha - rama.

KONSTRUKCIJA :

- Ram je izrađen od čeličnog lima , sa širokim snopom aspiracije, zaštićen od spoljne sredine epoxy farbom.
- Lopatice od specijalnog plastičnog materijala, glavčina od legure livenog aluminijuma.
- Izvedba 4. (direktno spojena sa lopaticama)protok vazduha tipa A (od motora ka radnom kolu).
- Zaštitna rešetka ulaznog otvora od čelične šipke ,zaštićena od spoljnih uticaja u skladu sa UNI9219-DIN31001 propisima.
- Motori:
A). QC: asinhroni monofazni ili trofazni motori po IEC34-IEC72 i 89/392 EEC-9/336 EEC-73/23 EEC međunarodnim standardima, CE kvalifikovan, IP55, motor klase F.
B). QC-EX: sa zaštitom od eksplozije, asinhroni trofazni ili monofazni motori Eex-d po IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC IEC79u skladu sa međunarodnim standardima, sa CESI sertifikacijom, CE kvalifikovan, IP55, motor klase F.
C). QC 200/500: IP32 i IP44 zaštita polova, motor klase B. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Gravitaciona žaluzina zaštićena od spoljnih uticaja (S).
- Graničnik izrađen od metala i zaštićen od spoljašnjih uticaja (D).
- Zaštitne rešetke lopatica ventilatora po UNI 9219-DIN 31001 standardu.

NA ZAHTEV :

- Radno kolo sa lopaticama od livenog aluminijuma sa podesivim nagibnim uglom u stanju mirovanja.
- Protok vazduha tipa- B (od radnog kola ka motoru).

GENERAL DESCRIPTION

The fans of the QC series are suitable for the ventilation, with fixing to walls or on panels, of industrial stock farms, greenhouses, garages, gymnasiums, car parks, etc. The series is constituted by two versions QC and QC-ATEX 10 models with impeller diameter from 200 to 700 mm. The use of the QC series is foreseen with clean air up to the temperature of 50° C. QC-ATEX series is suitable to convey clean air , in zones or environments where it is necessary to guarantee security against explosions and fires due to gas or flammable dusts as established by the IEC79-10/CEI rules 64 -2. The noise level is reduced and the efficiency is greater due to the inlet cone, which helps the air entry.

CONSTRUCTION

- Supporting frame in drawn steel sheet, with wide ray in aspiration. Protected against the atmospheric agents with epoxy particle painting.
- Impeller with wing profile blades in plastic material and hub in die-cast aluminium alloy.
- Execution 4 (direct coupling with impeller). Air-flow type A (from motor to impeller)
- Inlet protection guard in steel rod and protected against the atmospheric agents in accordance with UNI9219-DIN31001 rules.
- Motorizations:

a). QC: asynchronous three-phase or single-phase motors according to international rules IEC34-IEC72 and 89/392 EEC- 89/336 EEC-73/23 EEC, marked CE. IP55, class F.
b). QC-Ex: asynchronous three-phase motors or single-phase EEx-d IIB T3 according to international rules IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC IEC79, with CESI certificate and marked CE. IP55, class F.
c). QC 200/250: motors with shielded poles IP32 and IP44, class B. All suitable to S1 service (continuous working at constant load).

ACCESSORIES

- Gravity shutter protected against the atmospheric agents (S).
- Spacer manufactured in metal sheet protected against the atmospheric agents (D).
- Impeller side protection guard manufactured according to UNI9219-DIN31001 rules and protected against the atmospheric agents (R).

UPON REQUEST

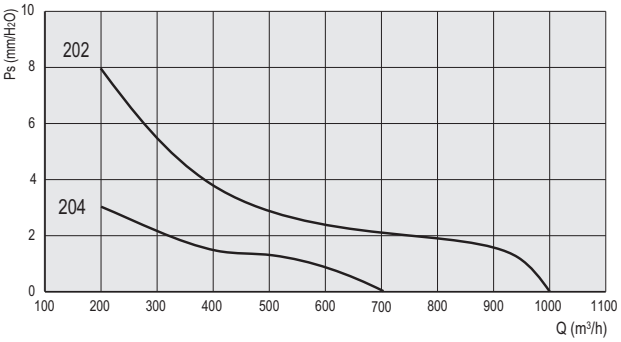
- Wing profile impeller completely in die-cast aluminium alloy, with variable pitch angle in still position.
- Airflow type B (from impeller to motor).

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

QC 20

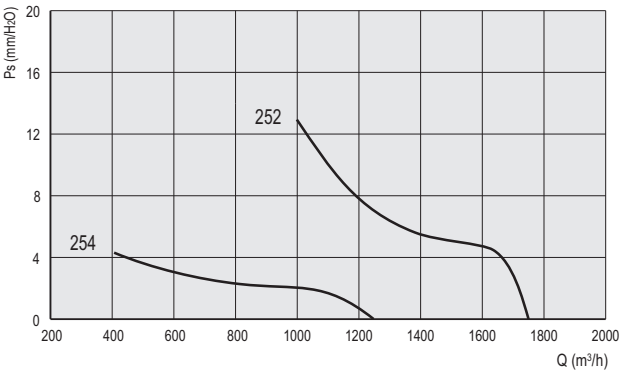
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A
QC	204	M	4	0,03	0,33	20/B	80x80	41
QC	204	T	4	0,03	0,16	44/B	50	41
QC-ATEX	204	M	4	0,04	0,39	55/F	56	41
QC-ATEX	204	T	4	0,09	0,36	55/F	56	41
QC	202	M	2	0,05	0,36	44/B	50	60
QC	202	T	2	0,05	0,17	44/B	50	60
QC-ATEX	202	T	2	0,12	0,64	55/F	63	60

Pažnja : Ne koristiti 2 polne verzije kod slobodnih ulaznih izvedbi ili sa malim gubicima u opterećenju .
Caution: do not use 2 poles version in free inlet application or with small charge losses!



QC 25

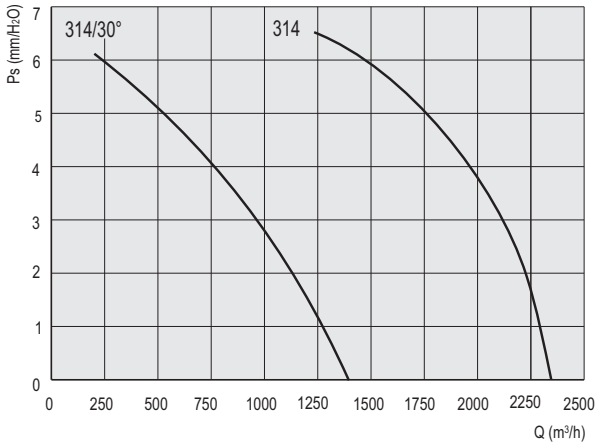
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A
QC	254	M	4	0,07	0,35	44/B	50	47
QC	254	T	4	0,03	0,16	44/B	50	47
QC-ATEX	254	M	4	0,04	0,39	55/F	56	47
QC-ATEX	254	T	4	0,09	0,36	55/F	56	47
QC	252	M	2	0,12	1,1	55/F	56	63
QC	252	T	2	0,12	0,42	55/F	56	63
QC-ATEX	252	T	2	0,12	0,64	55/F	63	63



SEK. 3

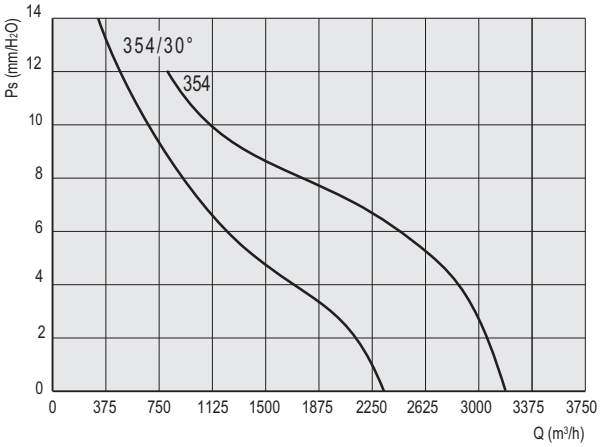
QC 31

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
QC	314	M	4	0,09	0,8	55/F	56	52
QC	314	T	4	0,09	0,35	55/F	56	52
QC-30°	314	M	4	0,07	0,35	44/B	50	49
QC-30°	314	T	4	0,03	0,16	44/B	50	49
QC-ATEX	314	M	4	0,04	0,39	55/F	56	52
QC-ATEX	314	T	4	0,09	0,36	55/F	56	52



QC 35

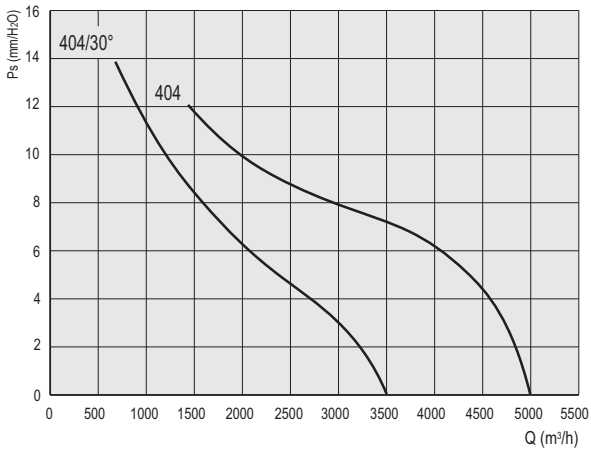
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
QC	354	M	4	0,12	1,1	55/F	63	57
QC	354	T	4	0,12	0,52	55/F	63	57
QC-30°	354	M	4	0,09	0,8	55/F	56	53
QC-30°	354	T	4	0,09	0,35	55/F	56	53
QC-ATEX	354	M	4	0,12	1,3	55/F	63	57
QC-ATEX	354	T	4	0,12	0,47	55/F	63	57



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

QC 40

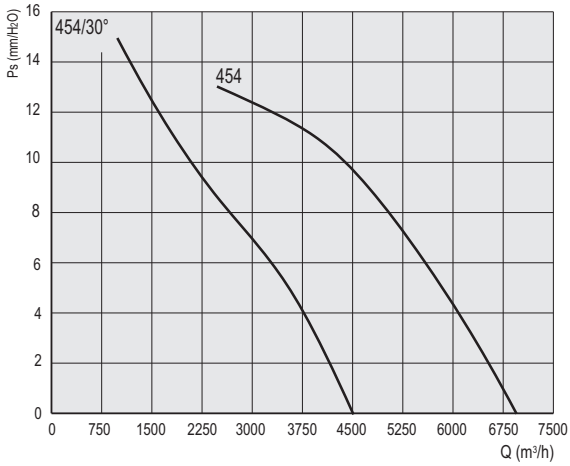
TipModel Type	U Model	P	Pm	In max (kW)	IP/CL (A)	Mot.	Lp (Gr)	dB(A)
QC	404	M	4	0,18	1,6	55/F	63	61
QC	404	T	4	0,18	0,65	55/F	63	61
QC-30°	404	M	4	0,12	1,1	55/F	63	56
QC-30°	404	T	4	0,12	0,52	55/F	63	56
QC-ATEX	404	M	4	0,18	1,8	55/F	71	61
QC-ATEX	404	T	4	0,18	0,68	55/F	63	61



SEK. 3

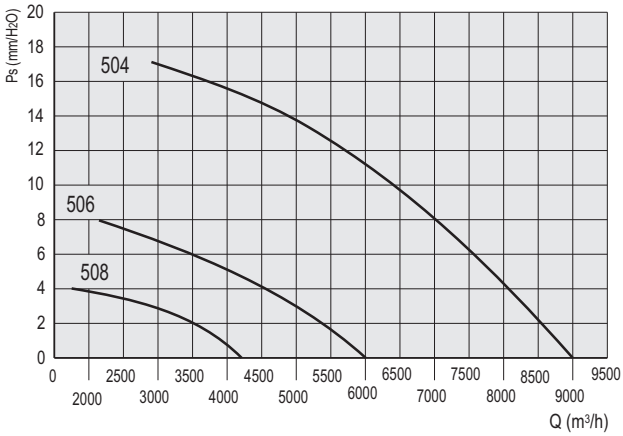
QC 45

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
QC	454	M	4	0,37	2,9	55/F	71	66
QC	454	T	4	0,37	1,2	55/F	71	66
QC-30°	454	M	4	0,18	1,6	55/F	63	61
QC-30°	454	T	4	0,18	0,65	55/F	63	61
QC-ATEX	454	T	4	0,37	1,22	55/F	71	66



QC 50

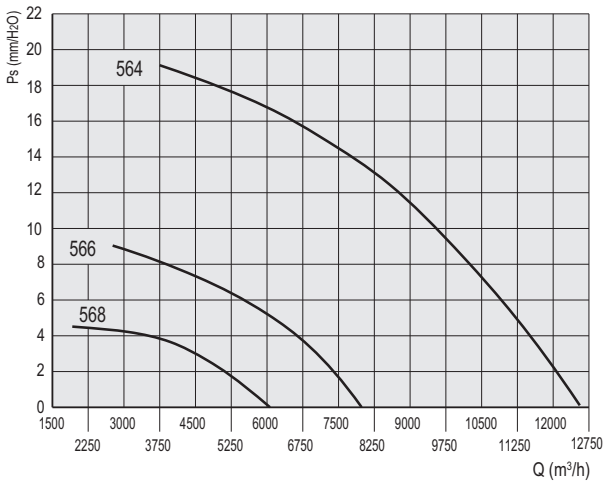
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
QC	504	T	4	0,55	1,6	55/F	80	68
QC-ATEX	504	T	4	0,55	1,75	55/F	80	68
QC	506	T	6	0,18	0,82	55/F	71	58
QC-ATEX	506	T	6	0,18	0,69	55/F	71	58
QC	508	T	8	0,12	0,75	55/F	71	51
QC-ATEX	508	T	8	0,09	0,56	55/F	71	51



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

QC 56

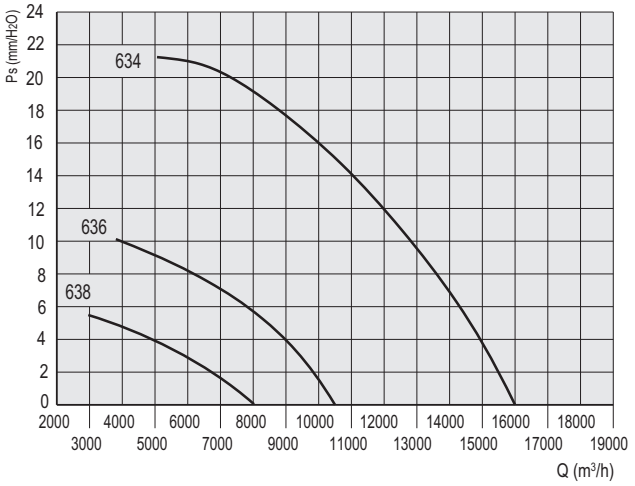
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
QC	564	T	4	0,75	2	55/F	80	72
QC-ATEX	564	T	4	0,75	2,11	55/F	80	72
QC	566	T	6	0,26	1,1	55/F	71	61
QC-ATEX	566	T	6	0,25	0,89	55/F	71	61
QC	568	T	8	0,12	0,75	55/F	71	54
QC-ATEX	568	T	8	0,18	0,87	55/F	80	54



SEK. 3

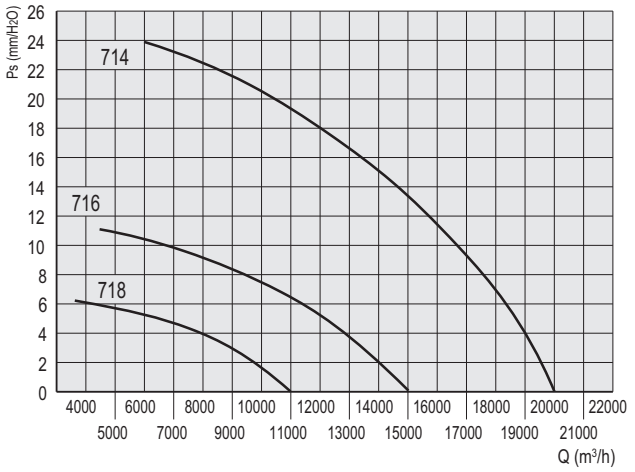
QC 63

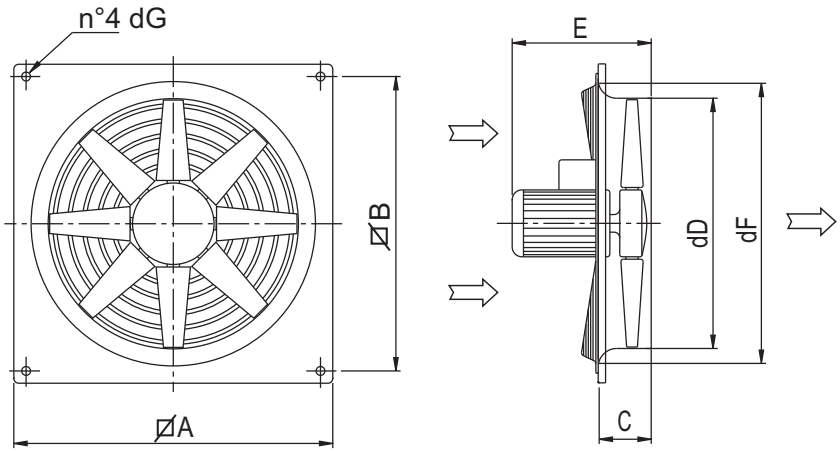
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
QC	634	T	4	1,10	2,8	55/F	90S	75
QC-ATEX	634	T	4	1,10	2,8	55/F	90S	75
QC	636	T	6	0,37	1,2	55/F	80	65
QC-ATEX	636	T	6	0,37	1,37	55/F	80	65
QC	638	T	8	0,26	1,2	55/F	80	58
QC-ATEX	638	T	8	0,18	0,87	55/F	80	58



QC 71

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
QC	714	T	4	2,20	5,3	55/F	100L	81
QC-ATEX	714	T	4	2,20	5,1	55/F	100L	81
QC	716	T	6	0,75	2,5	55/F	90S	68
QC-ATEX	716	T	6	0,75	2,23	55/F	90S	68
QC	718	T	8	0,37	1,6	55/F	90S	61
QC-ATEX	718	T	8	0,37	1,55	55/F	90S	61

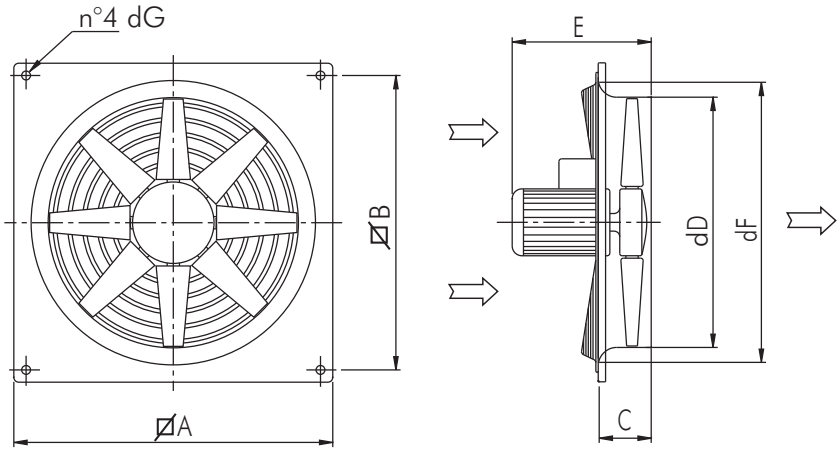




QC

Tip/Type	A	B	C	dD	E	dF	dG	Kg
QC 20	290	250	88	210	240	260	9	5
QC 25	340	300	88	260	240	315	9	7
QC 31	390	350	88	310	280	365	9	8
QC 35	440	400	108	360	320	410	9	9
QC 40	490	450	108	410	320	465	9	10
QC 45	540	500	108	460	340	510	9	14
QC 50	650	600	108	510	365	570	12	20
QC 56	700	630	108	570	365	630	12	22
QC 63	800	730	108	640	385	700	12	26
QC 71	850	800	108	710	440	770	12	35

Dimenzije u mm/Dimensions in mm



QC - ATEX

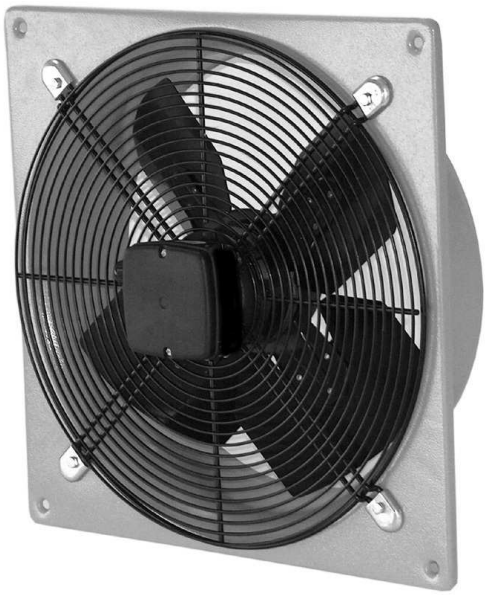
Tip/Type	A	B	C	dD	E	dF	dG	Kg
QC-EX 20	290	250	88	210	295	260	9	13
QC-ATEX 25	340	300	88	260	295	315	9	14
QC-ATEX 31	390	350	88	310	295	365	9	14
QC-ATEX 35	440	400	108	360	355	410	9	20
QC-ATEX 40	490	450	108	410	390	465	9	23
QC-ATEX 45	540	500	108	460	405	510	9	30
QC-ATEX 50	650	600	108	510	405	570	12	35
QC-ATEX 56	700	630	108	570	405	630	12	37
QC-ATEX 63	800	730	108	640	405	700	12	46
QC-ATEX 71	850	800	108	710	490	770	12	59

Dimenzije u mm/Dimensions in mm

COMPACT/N

Kompaktni aksijalni ventilatori sa eksternim rotorom

Compact axial fans with external rotor motor



OSNOVNI PODACI :

Ugradivi u zid-panel, ventilatori COMPACT/N serije su pogodni za ventilaciju industrijskih objekata,stočnih farmi,staklenika,garaža,sportskih hala, parkirališta i ostalih objekata gde se traži manja dimenzija uređaja sa podesivim performansama.Seriju čini 6. modela sa diametrom lopatica od 350 do 630 m. Pogodni su za transport čistog vazduha do temperature od -30°C do 50°C.Nizak nivo buke i velika efikasnost postignuta je aerodinamičnim dizajnom ulaznog otvora usmerivača vazduha- rama.

KONSTRUKCIJA :

- Ram je izrađen od čeličnog lima , sa širokim snopom aspiracije, zaštićen od spoljašnje sredine epoxy farbom.
-Lopatice od aluminijuma i glavčina od legure livenog aluminijuma.Zaštićene od spoljnašnjih uticaja.
-Izvedba 5. (sa radnim kolom direktno spojenim na osovinu motora), strujanje vazduha od motora ka radnom kolu.
-Trofazni i monofazni motori sa spoljašnjim rotorom su kompaktnog dizajna sa ugrađenom termo zaštitom. IP54, motor klase F, 100% je omogućena je regulacija broja obrtaja.
-Zaštitne rešetke ulaznog otvora izrađene od čelične šipke ,zaštićene od spoljašnjih uticaja. Proizvedene u skladu sa UNI10615 - DIN31001standardima.

DODATNI DELOVI :

- Gravitaciona žaluzina, zaštićena od dejstva spoljašnjih uticaja (S).
- Graničnik, zaštićen od spoljašnjih uticaja (D ili D/N)- (vidi dimenzije graničnika)
- Zaštitne rešetke ulaznog otvora u skladu sa UNI 10615-DIN 31001 standardima, zaštićene od dejstva spoljašnjih uticaja (R).
- Zvezda/delta prekidač za trofazne motore.

GENERAL DESCRIPTION

The fans of the COMPACT/N series are suitable for ventilation, by wall- or panel-fiixing, of industrial buildings, stock farms, greenhouses, garages, gymnasiums, car parks, where reduced dimensions and adjustable performances are required. The series consists of 6 models with impeller diameter from 350 to 630 mm. They are suitable for clean air with range of temperature between -30°C to 50°C. Reduced noise level and high efficiency thanks to the aerodynamically shaped inlet cone.

CONSTRUCTION

- Supporting frame in drawn steel sheet, with wide inlet cone. Protected against atmospheric agents by epoxy paint.

- Impeller with aluminium blades and hub in die-cast aluminium alloy, protected against atmospheric agents.

- Execution 5 (with impeller directly coupled to motor shaft). Air flow from motor to impeller.

- Three-phase and single-phase external rotor motor in compact design with built in thermal protection. IP54, class F, 100 % speed adjustable.

- Inlet protection guard, in drawn steel rod protected against atmospheric agents. Manufactured in accordance to UNI10615 - DIN31001standard.

ACCESSORIES

- Gravity shutter protected against atmospheric agents (S).

- Spacer in steel sheet protected against atmospheric agents (D or D/N) (see spacer dimensions).

- Inlet protection guard, in accordance to UNI10615-DIN31001 norm and protected against atmospheric agents (R).

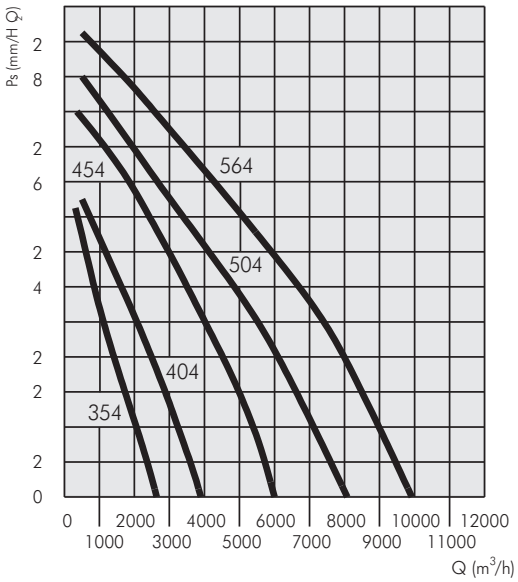
- Delta / star switch for three-phase motor.

PERFORMANSE / PERFORMANCE — COMPACT/N

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3

Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

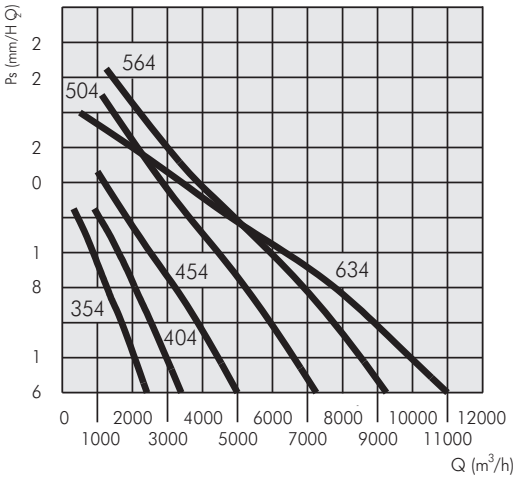
MONOFAZNI



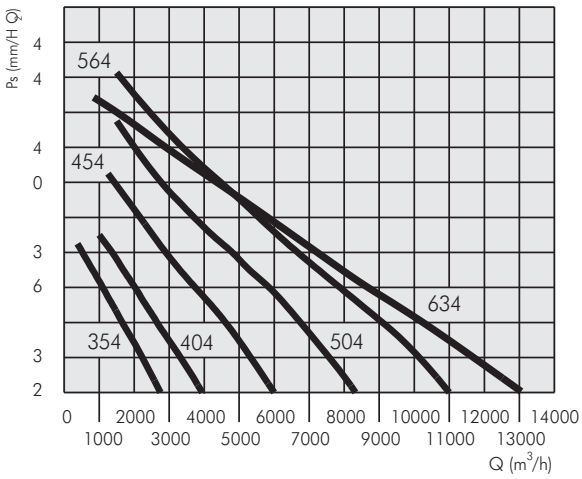
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)	Reg.
COMPACT/ N	354	M	4	0.10	0.8	54/F	58	RVM
COMPACT/ N	404	M	4	0.15	1.0	54/F	56	RVM
COMPACT/ N	454	M	4	0.30	1.9	54/F	57	RVM
COMPACT/ N	504	M	4	0.45	3.0	54/F	63	RVM
COMPACT/ N	564	M	4	0.55	3.9	54/F	68	RVM

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)	Reg.	
COMPACT/ N	354	T	4	0.10	0.40	54/F	61	RVT	△/⅄
COMPACT/ N	404	T	4	0.20	0.52	54/F	52	RVT	△/⅄
COMPACT/ N	454	T	4	0.30	0.85	54/F	56	RVT	△/⅄
COMPACT/ N	504	T	4	0.55	1.34	54/F	59	RVT	△/⅄
COMPACT/ N	564	T	4	0.73	2.0	54/F	65	RVT	△/⅄
COMPACT/ N	634	T	4	0.73	2.0	54/F	70	RVT	△/⅄

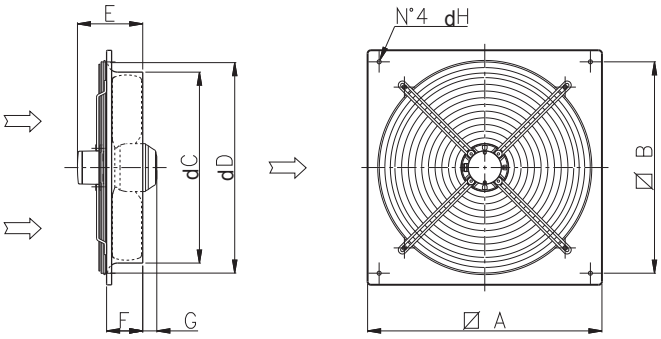
MALA BRZINA / LOW ⅄

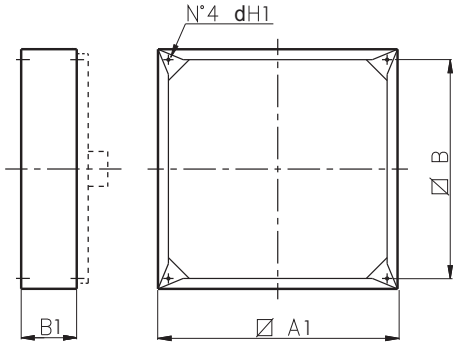


VELIKA BRZINA / HIGH △



DIMENZIJE / DIMENSIONS — GRANIČNIK / SPACER





Tip/Type	A	B	C	D	E	F	G	H	Kg
COMPACT/ N 35	440	400	360	410	190	108	-	9	6.5
COMPACT/ N 40	490	450	410	465	190	108	-	9	8
COMPACT/ N 45	540	500	460	510	200	108	-	9	12
COMPACT/ N 50	650	600	510	570	200	108	22	12	17
COMPACT/ N 56	700	630	570	630	200	108	42	12	19
COMPACT/ N 63	800	730	640	700	200	108	42	12	21

Dimenzije u mm/*Dimensions in mm*

Tip/Type	A1	B1	H1	Kg
D 35	430	115	M6	3.0
D 40	480	115	M6	3.5
D 45	530	115	M6	4.0
D/ N 50	640	140	M8	4.5
D/ N 56	690	160	M8	5.0
D/ N 63	790	160	M8	6.0

Dimenzije u mm/*Dimensions in mm*

BASIC

Aksijalni ventilatori malih kapaciteta
Small capacity axial fan

OSNOVNI PODACI :

Ugradivi u zid-panel, ventilatori BASIC serije su pogodni za ventilaciju manjih prostorija-objekata kao što su: kancelarije,laboratorije,trgovine.....itd. Dostupno 4. modela.Glavna karakteristika BASIC serije ventilatora je konkurentna cena.Pogodan za transport čistog vazduha do maksimalne temperature od 40°C.

KONSTRUKCIJA :

- Ram je izrađen od čeličnog lima , sa širokim snopom aspiracije, zaštićen od spoljašnje sredine epoxy farbom.
- Lopatice od vučenog aluminijuma , propisno oblikovani radi veće efikasnosti.
- Izvedba 5. (radno kolo direktno spojeno na osovinu motora) protok vazduha tipa A (od motora ka radnom kolu)
- Zaštitne rešetke sa strane motora izrađene su od čelične šipke, zaštićene od spoljašnjih uticaja u skladu sa UNI9219-DIN31001 propisima.
-Monofazni motori sa zaštićenim polovima, IP20, klasa B, sa naponskim kablovima i termo zaštitom.
Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Gravitaciona žaluzina za zaštitom od spoljašnjih uticaja (S).
- Graničnik izrađen od čeličnog lima, zaštićen od spoljašnjih uticaja (D).
- Zaštitne rešetke radnog kola sa lopaticama izrađene u skladu sa UNI 9219-DIN 31001 standardima i zaštićene od spoljašnjih uticaja (R).

GENERAL DESCRIPTION

The fans of the BASIC series are suitable, by wall- or panel-mounting, for ventilation of small premises: offices, laboratories, shops, etc. Available in 4 models, the main characteristic of this series is the competitive price. Suitable for conveying clean air with maximum temperature of 40°C.

CONSTRUCTION

- Supporting frame in drawn steel sheet, with wide inlet cone. Protected against atmospheric agents by epoxy paint.
- Impeller in drawn aluminium, properly shaped to grant an acceptable efficiency.
- Execution 5 (with impeller directly coupled with motor shaft). Air flow from motor to impeller.
- Motor side protection guard in drawn steel rod, protected against atmospheric agents in accordance to UNI9219-DIN31001 norms.
- Shielded pole motor, single-phase, IP20, class B, with supply cable and built-in thermal protection. Service S1 (continuous working at constant load).

ACCESSORIES

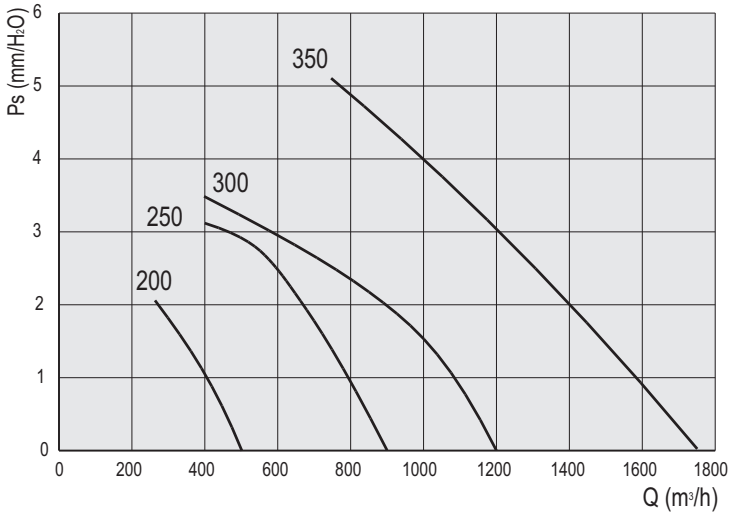
- Gravity shutter, protected against the atmospheric agents (S).
- Spacer manufactured in steel sheet protected against atmospheric agents (D).
- Impeller side protection guard manufactured according to UNI9219-DIN31001 norms and protected against atmospheric agents (R).

PERFORMANSE / PERFORMANCE BASIC

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

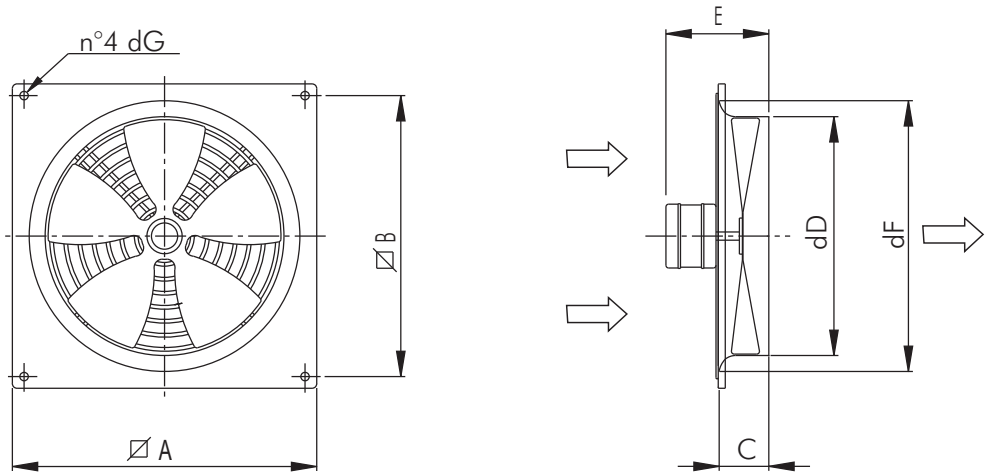
BASIC

Tip Type	Model Model	U	P	Pm (W)	In max (A)	IP/CL	Lp dB(A)
BASIC	200	M	4	48	0.33	20/B	37
BASIC	250	M	4	48	0.33	20/B	42
BASIC	300	M	4	105	0.46	20/B	48
BASIC	350	M	4	116	0.98	20/B	54



SEK. 3

DIMENZIJE / DIMENSIONS BASIC



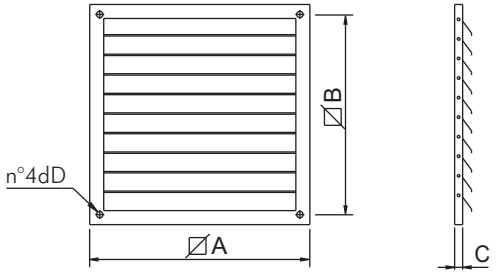
Tip/Type	A	B	C	dD	E	dF	dG	Kg
BASIC 200	290	250	88	210	150	260	9	2,3
BASIC 250	340	300	88	260	150	315	9	2,6
BASIC 300	390	350	88	310	155	365	9	3,6
BASIC 350	440	400	108	360	190	410	9	4,4

Dimenzije u mm/Dimensions in mm

GRAVITACIONA ŽALUZINA / GRAVITY SHUTTER

Prilikom uključenja ventilatora pod uticajem vazdušne struje lamele žaluzine se otvaraju, a pri zaustavljanju na uticaj gravitacione sile se zatvaraju. Pomoću ovog proizvoda može se izbeći ulazak vazduha, ptica, kiše,...itd, i nepoželjno gubljenje toplote. Okvir je od farbanog čeličnog lima a lamele od jakog PVC-a. Pomoću gravitacione žaluzine moguća je realizacija redukcije kapaciteta.

It avoids heat loss and entry of wind, rain and birds. The fins of the shutter are opened by the air flow when the fan is working and they close down by gravity when the fan is switched off. The frame is in steel sheet painted with epoxy powder coating and the fins are in techno-polymer. The use of the gravity shutter causes a small capacity reduction.



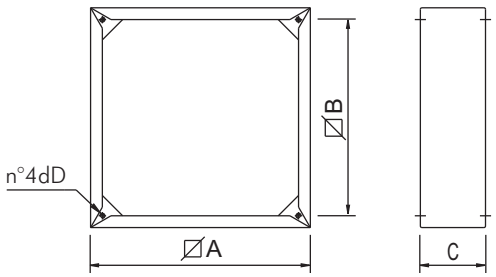
Tip/Type	A	B	C	dD	kg
S 20	275	250	10	10	1.0
S 25	325	300	10	10	1.5
S 31	375	350	10	10	2.0
S 35	425	400	10	10	2.5
S 40	475	450	10	10	3.0
S 45	530	500	15	10	3.5
S 50	630	600	15	10	4.0
S 56	660	630	15	10	4.5
S 63	760	730	15	10	5.5
S 71	830	800	15	10	6.0

Dimenzije u mm/Dimensions in mm

GRANIČNIK / SPACER

Graničnici se primenjuju u slučajevima kada je debljina ventilatorove osnove manja od dužine konusa ulazne cevi koja se izdiže iz zida. Četvorougla konstrukcija je izrađena od galvanizovanog čelika zaštićena od spoljašnjih uticaja epoxy farbom, fiksirajući ventilator sa jedne strane i žaluzine ili rešetke sa druge strane.

It is needed to support the fan when the width of the wall is smaller than the dimension "C" (height of the fan inlet cone). Frame is in steel sheet painted with epoxy powder coating; on the four corners there are 8 threaded inserts in galvanized steel sheet, for fixing the fan in one side and the shutter and/ or the grid on the other side.



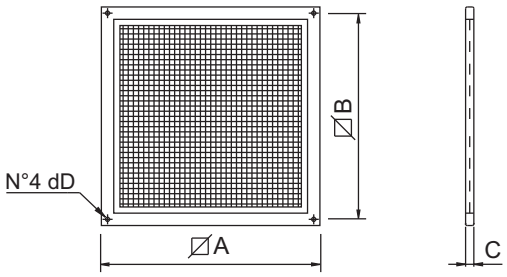
Tip/Type	A	B	C	dD	kg
D 20	280	250	95	M6	1.0
D 25	330	300	95	M6	2.0
D 31	380	350	95	M6	2.5
D 35	430	400	115	M6	3.0
D 40	480	450	115	M6	3.5
D 45	530	500	115	M6	4.0
D 50	640	600	115	M8	4.5
D 56	690	630	115	M8	5.0
D 63	790	730	115	M8	6.0
D 71	840	800	115	M8	6.5

Dimenzije u mm/Dimensions in mm

ZAŠTITNA REŠETKA / PROTECTION GUARD

Zaštitne rešetke sprečavaju bilo kakav kontakt sa pokretnim delovima ventilatora. Okvir i rešetke su od čelika, zaštićeni su od atmosferskih uticaja epoxy farbom.

It avoids the accidental contact with the impeller of the fan. Frame and grid are in epoxy painted steel sheet.



Tip/Type	A	B	C	dD	kg
R 20	275	250	10	10	1.3
R 25	325	300	10	10	1.5
R 31	375	350	10	10	1.9
R 35	425	400	10	10	2.3
R 40	475	450	10	10	2.7
R 45	530	500	15	10	2.8
R 50	630	600	15	10	4.0
R 56	660	630	15	10	4.6
R 63	760	730	15	10	5.3
R 71	830	800	15	10	6.0

Dimenzije u mm/Dimensions in mm

AC-A&AC-B

Aksijalni ventilatori sa prstenastim ramom
Ring axial fans

AC-A

AC-B

OSNOVNI PODACI :

Ventilatori AC serije su dizajnirani za ventilaciju industrijskih objekata,stočnih farmi,staklenika,garaža,sportskih hala, parkirališta....itd, gde je neophodna relevantna isporuka vazduha bez potrebe za cevnim-kanalnim sistemom.Osnovna karakteristika AC serije ventilatora je u visokoj strukturnoj tvrdoći u poređenju sa ventilatorima koji se ugrađuju u zid-panel.Serija je bazirana na 2. verzije: AC/A i AC/B.
26. modela sa diametrom lopatica od 300 do 1250 mm i sa 4. brzinske opcije.AC/A model je predviđen sa usmerivačem vazduha samo sa strane ulaznog otvora, dok je AC/B model predviđen sa usmerivačem vazduha i sa strane izlaznog otvora.Dizajnirani su za transport čistog vazduha sa temperaturom od maksimalnih 50 °C.Nizak nivo buke i velika efikasnost postignuta je aerodinamičnim dizajnom ulaznog otvora usmerivača vazduha- rama.

KONSTRUKCIJA :

- Prsten sa formiranim ulaznim otvorom izrađen od čelika:
AC/A sa usmerivačem na ulaznoj strani
AC/B sa usmerivačem na obe strane.
zaštićen od spoljašnjih uticaja epoxy farbom.
- Aerofoil radno kolo sa lopaticama izrađenim od plastificirane smole,glavčina od livenog aluminijuma,sa podesivim nagibnim stepenom u stanju mirovanja.
- Izvedba 4. (radno kolo direktno spojeno na osovinu motora), strujanje od motora ka radnom kolu.
- Zaštitna rešetka sa strane motora izrađena od čelične šipke, zaštićena od spoljnih uticaja,proizvedena u skladu sa UNI9219-DIN31001 standardima.
- Trofazni i monofazni asinhroni motori su izrađeni u skladu sa IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, CE kvalifikovani, IP55, motor klase F. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

Zaštitne rešetke sa strane lopatica u skladu sa UNI9219-DIN31001 standardima, zaštićene od spoljašnjih uticaja.

NA ZAHTEV :

- Aerofol radno kolo sa lopaticama od legura livenog aluminijuma sa podesivim nagibnim uglom u stanju mirovanja.
- Strujanje vazduha od radnog kola ka motoru.
- Asinhroni trofazni ili monofazni modeli sa zaštitom od eksplozije EEx-d IIb T3 su izrađeni u skladu sa međunarodnim standardima IEC34-IEC72 i 89/392 EEC-73/23 EEC, IEC79 sa CESI sertifikacijom, CE kvalifikovani, IP55, motor klase F.

GENERAL DESCRIPTION

The fans of the AC series are designed for ventilation of industrial buildings, stock farms, greenhouses, garages, gymnasiums, car parks, etc., in which are requested relevant air deliveries without ducting. The main characteristic of AC series is the higher structural rigidity in comparison with the wall-mounted fans. The series is based on 2 versions: AC/A and AC/B, 26 models with impeller diameter from 300 to 1250 mm and 4 speed options. The AC-A model foresees a shaped cone only in the inlet side while for AC/B the shaped cone is foreseen also for the outlet. They are designed for clean air with maximum temperature of 50°C. Reduced noise level and high efficiency are due to the aerodynamically shaped inlet cone.

CONSTRUCTION

- Ring with shaped mouthpieces in steel sheet: AC-A with shaped cone only in the inlet side; AC/B with shaped cone in the inlet and outlet sides. Protected against atmospheric agents by epoxy paint.
- Aerofoil impeller with blades in plastic resins and die-cast aluminium hub, with variable pitch angle in still position.
- Execution 4 (impeller directly coupled to motor shaft). Air flow from motor to impeller.
- Motor side protection guard in drawn steel rod protected against atmospheric agents. Manufactured according to UNI 9219-DIN 31001 standards.
- Three-phase or single-phase asynchronous motors in accordance to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC and marked CE. IP55, class F. Service S1 (continuous working at constant load).

ACCESSORIES

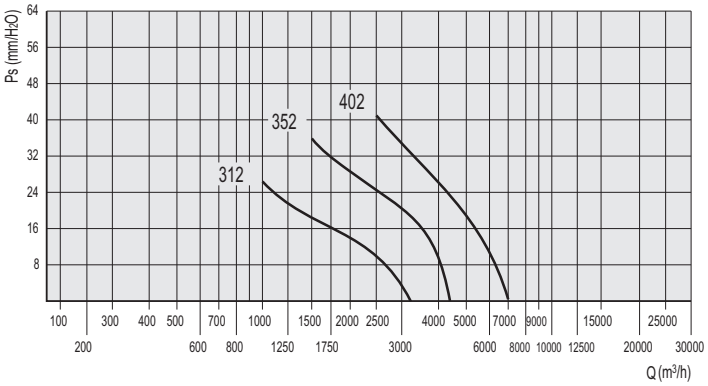
- Impeller side protection guard, according to UNI9219-DIN31001 norms and protected against the atmospheric agents.

UPON REQUEST

- Aerofoil impeller completely in die-cast aluminium alloy. Variable pitch angle in still position.
- Airflow from impeller to motor.
- Explosion proof versions, with three-phase or single-phase asynchronous motors EEx-d IIB T3 according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC, IEC79 with CESI certificate and marked CE. IP 55, class F.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

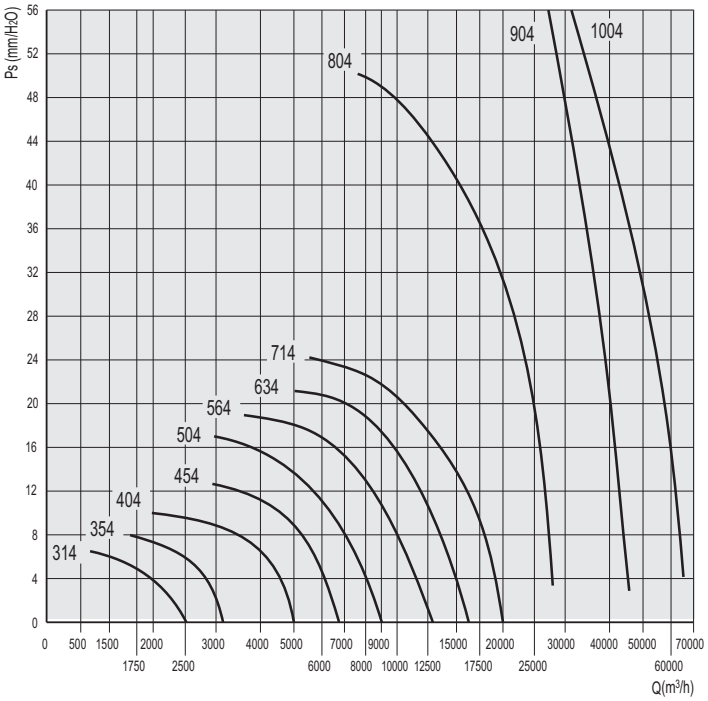
2 pola/poles



Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
AC	312	T	2	0,25	0,78	55/F	63	68
AC	312	M	2	0,25	1,7	55/F	63	68
AC	352	T	2	0,55	1,4	55/F	71	72
AC	352	M	2	0,55	4,2	55/F	71	72
AC	402	T	2	1,1	2,8	55/F	80	76
AC	402	M	2	1,1	6,2	55/F	80	76

Pažnja : Ne koristiti 2 polne verzije sa slobodnim vazduhom ili kod programa sa malim gubitkog opterećenja.
Attention: do not use the 2 pole versions with free air or small load losses applications

4 pola/poles

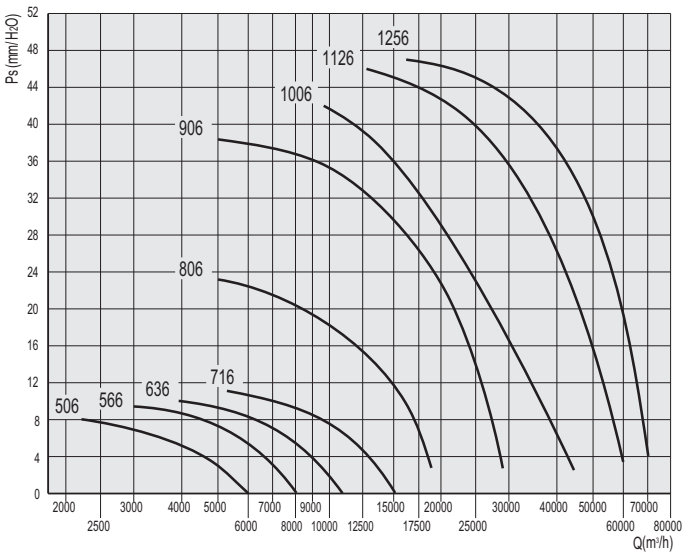


Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
AC	314	T	4	0,12	0,52	55/F	63	52
AC	314	M	4	0,12	1,1	55/F	63	52
AC	354	T	4	0,12	0,52	55/F	63	57
AC	354	M	4	0,12	1,1	55/F	63	57
AC	404	T	4	0,18	0,65	55/F	63	61
AC	404	M	4	0,18	1,6	55/F	63	61
AC	454	T	4	0,37	1,2	55/F	71	66

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
AC	454	M	4	0,37	2,9	55/F	71	66
AC	504	T	4	0,55	1,6	55/F	80	68
AC	564	T	4	0,75	2	55/F	80	72
AC	634	T	4	1,10	2,8	55/F	90S	75
AC	714	T	4	2,20	5,3	55/F	100L	81
AC	804	T	4	4,00	9,4	55/F	112M	85
AC	904	T	4	7,50	15,4	55/F	132M	90
AC	1004	T	4	9,20	17,3	55/F	132M	93

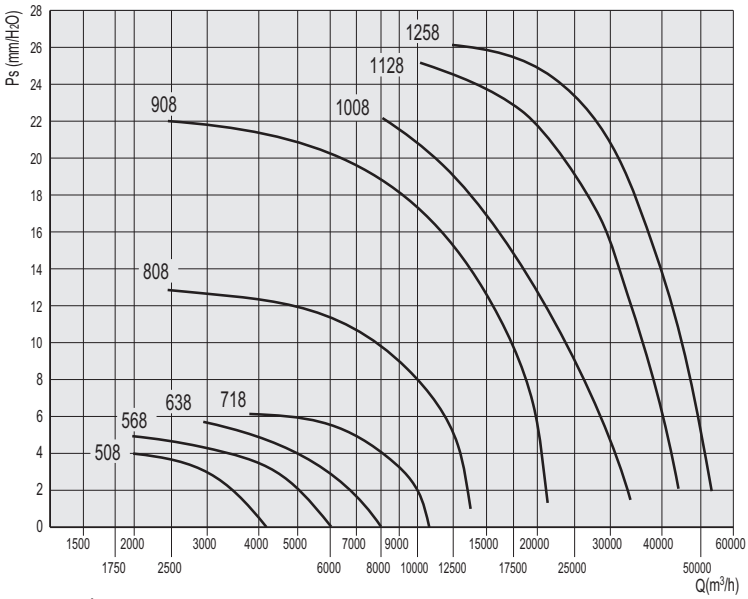
Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

6 pola/poles



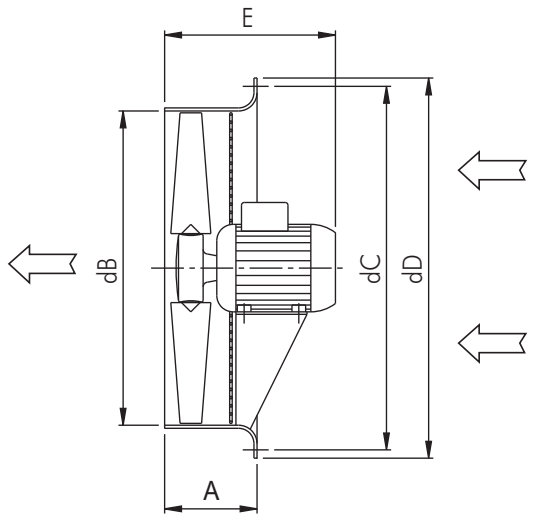
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
AC	506	T	6	0,18	0,82	55/F	71	58
AC	566	T	6	0,26	1,1	55/F	71	61
AC	636	T	6	0,37	1,2	55/F	80	65
AC	716	T	6	0,75	2,5	55/F	90S	68
AC	806	T	6	1,50	4,2	55/F	100L	74
AC	906	T	6	2,20	5,3	55/F	112M	79
AC	1006	T	6	4,00	10	55/F	132M	81
AC	1126	T	6	5,50	13,5	55/F	132M	84
AC	1256	T	6	7,50	17	55/F	160M	87

8 pola/poles

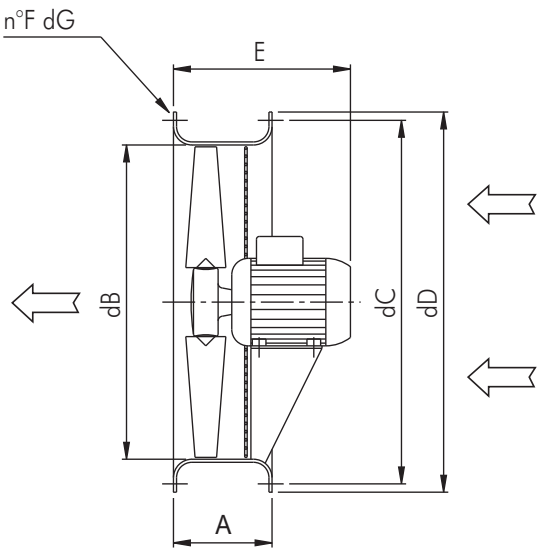


8 pola

Tip Type	Modell U Model	P	Pm	In max (kW)	IP/CL (A)	Mot.	Lp (Gr)	dB(A)
AC	508	T	8	0,15	0,7	55/F	71	51
AC	568	T	8	0,15	0,7	55/F	71	54
AC	638	T	8	0,26	1,2	55/F	80	58
AC	718	T	8	0,37	1,6	55/F	90S	61
AC	808	T	8	0,55	2,3	55/F	90L	68
AC	908	T	8	1,10	4	55/F	100L	72
AC	1008	T	8	1,50	4,5	55/F	112M	74
AC	1128	T	8	2,20	6,8	55/F	132S	77
AC	1258	T	8	3,00	8,9	55/F	132M	79



AC-A



AC-B

Tip/Type	(AC-A) A	(AC-B) A	dB	dC	dD	E	n°F	dG	Kg
AC 31	150	150	310	365	390	260	4	8	10
AC 35	150	150	360	430	465	260	4	8	13
AC 40	150	150	410	480	510	260	4	10	15
AC 45	150	150	460	535	560	270	8	10	20
AC 50	150	150	510	590	610	330	8	10	22
AC 56	150	180	570	645	670	330	8	10	25
AC 63	180	180	640	720	750	370	8	10	32
AC 71	180	180	710	780	815	480	8	12	40
AC 80	200	200	810	880	915	520	8	12	47
AC 90	250	250	910	980	1015	560	16	12	65
AC 100	250	250	1010	1080	1115	560	16	12	98
AC 112	250	250	1135	1226	1250	560	16	12	112
AC 125	250	250	1265	1350	1380	600	16	12	140

Dimenzije u mm/Dimension in mm

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
Cl = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
Cl = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 3 m from the fan centre, in any direction, with free inlet and outlet.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	QC	454	T

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	COMPACT	454	T

Primer / Example:	Tip / Type	Model / Model
	BASIC	250

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	AC-A	454	T

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E-mail: info@avit.co.yu www.avit.co.yu

Cevni aksijalni ventilatori
Ducted axial fans

4

CC
str. 2.4

Cevni aksijalni ventilatori
Ducted axial fans

str. 18.4

CCT

Aksijalni ventilatori na remeni pogon
Belt drive ducted axial fans

str. 20.4

CCP

Pokretni aksijalni ventilatori
Portable ducted axial fans

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CC

Cevni aksijalni ventilatori
Ducted axial fans

SEK. **4**

OSNOVNI PODACI :

Aksijalni ventilatori CC serije koriste unapred zakrivljene lopatice sa velikom efikasnošću.Idealni su za ugradnju u objekte sa potrebom veće količine transportovanog vazduha uz relativno mali transportni pritisak,i to za ventilaciju, rashlađivanje industrijskih objekata,brodova,sušara, razmenjivača toplote,itd.Prednosti ove serije, nasuprot centrifugalnim ventilatorima je u manjoj dimenziji i lakoj ugradnji.Standardna serija se zasniva na 13 veličina (od 310 do 1250 mm) sa 4. brzinske opcije (2-4-6-8 pol-a).Pogodni su za transport čistog vazduha sa temperaturom od - 10 °C do 50 °C pri kontinuiniranom radu.

KONSTRUKCIJA :

- Usko čelično kućište sa fiksirnim obodima izrađenim u skladu sa UNI ISO 6580-EUROVENT standardima. Uređaji su zaštićeni od atmosferskih uticaja sa epoxy farbom.
- Aerofoil radno kolo sa lopaticama izrađenim od techno-polymer-a ,glavčina od livenog aluminijuma.Promenjiv nagibni ugao u stanju mirovanja.
- Izvedba 4. (sa radnim kolom direktno spojenim na kraj osovine motora),strujanje vazduha od motora ka radnom kolu.
- Trofazni i monofazni asinhroni motori su izrađeni u skladu sa internacionalnim standardimaIEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, CE kvalifikovani, IP55, motor klase F. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Produžetak (za verzije sa dužim kućištem , servisnim vratima (CCpro)
- Ravna zaštitna rešetka (CCr)
- Konusna zaštitna rešetka (CCrc)
- Fleksibilni priključakCCga)
- Spona za fiksiranje(CCst)
- Usmerivač vazduha (CCbo)
- Prigušivač zvuka u tri veličine sa ili bez čaure(CCsa i CCsb)
- Obodi (CCf)
- Obodi sa fiksirnim ramom(CCfc)

NA ZAHTEV :

- Performanse različite od standarda
- Aerofoil radno kolo sa lopaticama ,izrađenim od livenog aluminijuma sa podesivim nagibnim uglom u stanju mirovanja.
- Kućište zaštićeno od spoljnih uticaja dubokom galvanizacijom. Strujane vazduha od radnog kola ka motoru.
- Spoljašnja priključna kutija.
- Višestepena verzija (mogućnost rotacije u oba smera)Za (CCD) serije Mobilna verzija sa potpornim nogicama maksimalne veličine tipa 7a1 (CCP).
- Verzija na remeni pogon u izvedbi 9 i 12 sa prenosom preko trapezoidnih remena.(CCT).
- Verzija sa zaštitom od eksplozije sa asinhronim trofaznim ili monofaznim motorom EEx-d IIB T3 izrađen u skladu sa internacionalnim standardimaEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, IEC79 sa CESI sertifikacijom, CE kvalifikovani, IP55, motor klase F.(CC-ATEX).

GENERAL DESCRIPTION

The axial fans of CC series use aerofoil profile impellers with high efficiency. They are ideal for installations requiring large capacities with pressures relatively low, like ventilation and cooling of industrial facilities, ventilation plants on ships, evaporative towers, heat exchangers, etc. This series presents, against centrifugal fans, the advantage of reduced dimensions and a greater installation easiness. The standard series is based on 13 sizes (from 310 to 1250 mm) with 4 speed options (2-4-6-8 poles) . Suitable for conveying clean air with temperature from –10 °C to +50°C in continuous service.

CONSTRUCTION

- Short casing in steel sheet, with fixing flanges manufactured according to UNI ISO 6580-EUROVENT _ standard. Protected against atmospheric agents by epoxy paint.
- Impeller with aerofoil profile blades in techno-polymer material and die-cast aluminium hub. Variable pitch angle in still position.
- Execution 4 (with impeller directly coupled to the motor shaft end) and airflow from motor to impeller.
- Asynchronous three-phase or single-phase motor according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC, CE marked. IP55, class F. S1 service (continuous working at constant load).

ACCESSORIES

- Extension (for long casing version) with inspection door (CCpro).
- Flat protection grid (CCr).
- Conic protection grid (CCrc).
- Flexible connection (CCga).
- Fixing feet (CCst)
- Inlet cone (CCbo).
- Silencers with and without pod with three various lengths (CCsa and CCsb).
- Counter flange (CCf).
- Counter flange with collar (CCfc).

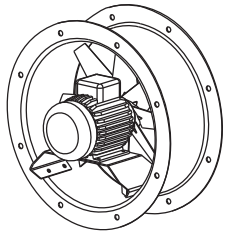
UPON REQUEST

- Performances differing from standard.
- Aerofoil profile impeller, completely in die cast aluminium, with variable pitch angle in stand position.
- Casing protected against atmospheric agents by hot-dip galvanizing.
- Air flow from impeller to motor.
- Outer terminal box .
- Multistage versions (equi-rotating or contra-rotating), for installations in series (CCD).
- Portable versions, with case supported by stand, maximum size type 71 (CCP).
- Belt drive versions in execution 9 or 12 with transmission through trapezoidal belts (CCT).
- Explosion proof versions, with asynchronous three-phase or single-phase motor EEx-d IIB T3 according to international standard IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23EEC, IEC79 and with CESI certificate, CE marked. IP55, class F (CC-ATEX).

KRATKO KUĆIŠTE / SHORT CASING

Ventilatori CC serije u standardnoj verziji dolaze sa kratkim kućištem. Ova izvedba je uglavnom namenjena za montiranje na početak ili kraj cevi. U slučaju montiranja sa unutrašnje strane, radi održavanja potrebnih performansi, pravilna konfiguracija predviđa upotrebu unutrašnjeg konusa "CCbo". (videti dodatnu opremu).

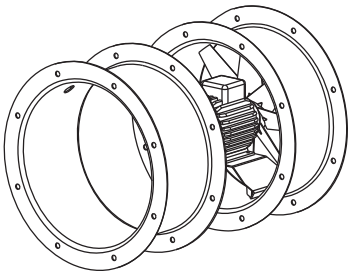
The fans of CC series are in short casing execution as standard. This execution is mainly conceived for assembling in the initial or final part of a duct. In case of assembly in inlet, to obtain the requests performances the correct configuration foresees the use of the inlet cone "CCbo" (see accessories).



DUŽE KUĆIŠTE/ LONG CASING

Ventilatori CC serije mogu se isporučiti u izvedbi sa dužim kućištem, radnim kolom i motorom potpuno pokrivenim samim kućištem i to sa upotrebom nastavka "CCpro" (videti dodatnu opremu). Ovo kombinovano rešenje ima sledeće prednosti:
–Veću tvrdoću u odnosu na jednodelni klasični ventilator sa dužim kućištem
– Jednostavnost električnog priključka: u nedostatku spoljašnje priključne kutije, nije neophodno rastaviti ventilator da bi se pristupilo priključnoj tabli (ovaj problem naročito postoji kod malog /srednjeg diametra)
– Velika fleksibilnost: montaža verzije sa širokim kućištem je moguća na licu mesta. Nastavak " CCpro" već sadrži servisna vratanca i otvore za prolaz kablova.

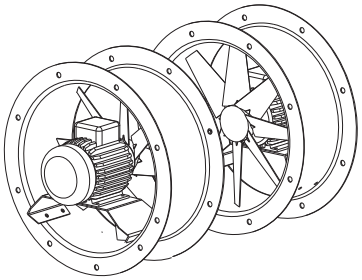
The CC series fans can be provided in long casing execution, with impeller and motor completely covered by the casing, by using the extension "CCpro" (see accessories). This combined solution has the following advantages:
-Greater rigidity against the traditional long casing fans manufactured in a single piece.
-Electric connection easiness: in absence of outer terminal box, it is not necessary to dismantle the fan to get access to the motor terminal board (problem especially existing on middle/ small diameters).
-Greater flexibility: the assembly of long casing versions is possible also at site. The extension "CCpro" is complete of inspection door and holes for cable entry.



VIŠESTEPENA IZVEDBA / MULTISTAGE

Ventilatori CC serije su predviđeni za višestepenu kontra-rotacionu izvedbu (montaža dva ili više jednostepenih ventilatora sa radnim kolom rotiranja u suprotnom smeru). Ova konfiguracija omogućava povraćaj rotacione komponente vazduha, i tako značajno povećava konačan pritisak. Po pojedinostima, CC serija sa dve kontra-rotirajuće jedinice razvija 2,5 puta veći pritisak u odnosu na jednostepeni ventilator istog prečnika i brzine, sa potrošnjom električne energije ne većom od 2 puta. Osim same višestepene opcije, ako se upoređuje sa jednostepenim, ima i bolji odnos performanse / buke, pošto se željena performansa može postići pri nižoj brzini rotiranja.

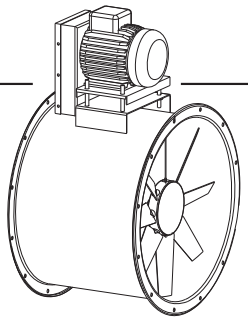
The fans of the CC series foresee the possibility of multistage contra-rotating execution (assembly of two or more single-stage fans with impellers rotating in opposite directions). This configuration allows the recovery of the air rotation component, considerably increasing the final pressure. In details, the CC series with two contra-rotating stages develops 2.5 times the pressure of a single-stage fan of equal diameter and speed, with a power absorption not bigger than 2 times. Besides the multistage option, if compared with the single-stage one, has a favourable relation performances/ noise, as the requested performances can be achieved with a lower rotation speed.



REMENI POGON / BELT DRIVEN

CCT serija je idealna za sušare, klimatizaciju, za izvlačenje i uvlačenje vazduha sa dimom, prašinom i vlagom,i za bilo koju primenu gde je neophodno da motor ne bude zahvaćen protokom vazduha. Radna temperatura je između –20°C i +60°C.

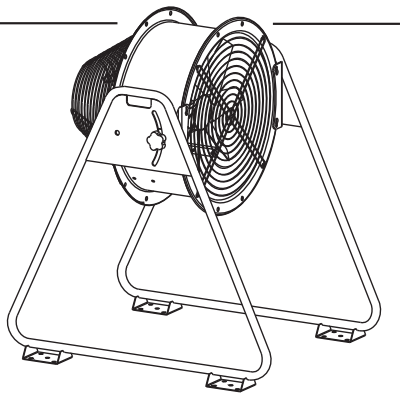
The CCT series is ideal for drying plants, conditioning, suction and intake of air rich of smokes, dust and humidity and for all the applications where it is necessary having the motor not lapped by the air flow. The working temperature is between –20°C and +60°C.



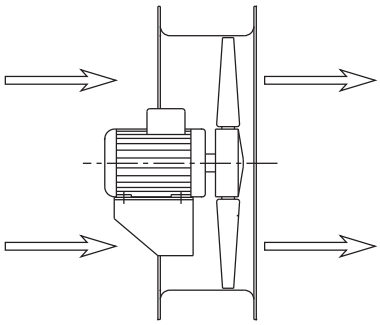
MOBILNA IZVEDBA / PORTABLE

CCP serija je dizajnirana za situacije gde je neophodno obezbediti izbacivanje vazduha ili vazdušnu zavesu; ovo se može desiti u specifičnim situacijama, na primer pri stvaranju scenskih efekata ili za hlađenje osoba koji rade kraj izvora toplote.
U suštini je veoma jednostavno uperiti i pomeriti CCP ventilator u najrazličitijim situacijama. Radna temperatura je od –10°C do +50°C pri kontinuiranom radu.

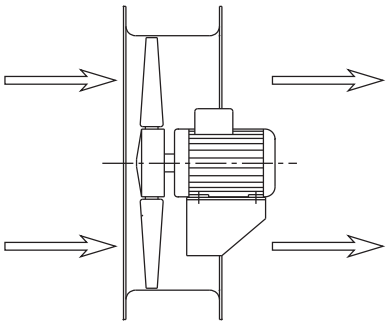
The CCP series is designed for situations where it is necessary having air throws or air curtains; this can happen in particular situations, for instance, to create scenic effects or to cool people working near to heat sources (mancooler).
In fact it is easily possible to orient and to move the CCP fan in the most desired situation. Working temperature from –10°C to +50°C in continuous service.



ARANŽMAN / ARRANGEMENTS CC



Standardan protok vazduha sa
MOTORA na LOPATICE
Standard airflow from
MOTOR to IMPELLER



Na zahtev protok vazduha sa
LOPATICA na MOTOR
Upon request airflow from
IMPELLER TO MOTOR

PERFORMANSE / PERFORMANCE CC

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

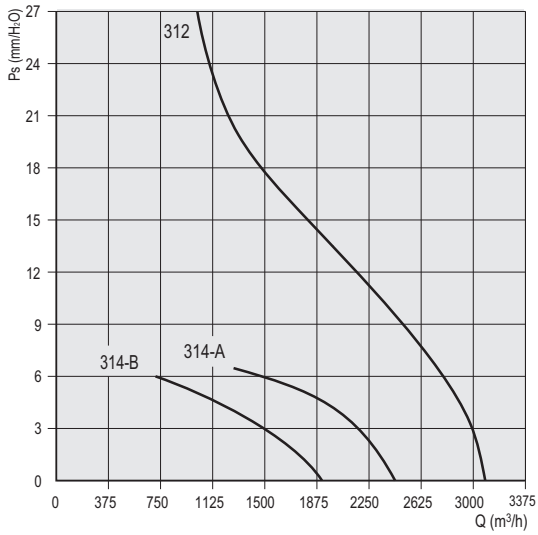
Napomena: u ovom katalogu se nalazi izbor performansi ostvarljiv sa serijom CC, koji su sposobni da odgovore većini zahteva i izabrani su na osnovu odnosa cene / performanse i vremena dostave. Na zahtev, naša tehnička služba je u mogućnosti da projektuje nekoliko različitih konfiguracija i instalacija, zasnovanu na klijentovim željama.

Note: in this catalogue , a selection only of the performances obtainable with the CC series is shown, able to solve several demands and chosen to combine cost/ performances and delivery time. Upon request, our technical service is able to design several different configurations and installations, based on customer specs.

CC 31

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	314/A	T	4	0,12	0,52	55/F	63	52
CC	314/A	M	4	0,12	1,1	55/F	63	52
CC	314/B	T	4	0,12	0,52	55/F	63	49
CC	314/B	M	4	0,12	1,1	55/F	63	49
CC	312	T	2	0,25	0,78	55/F	63	68
CC	312	M	2	0,25	1,7	55/F	63	68
CC-ATEX	314/A	T	4	0,12	0,47	55/F	63	52

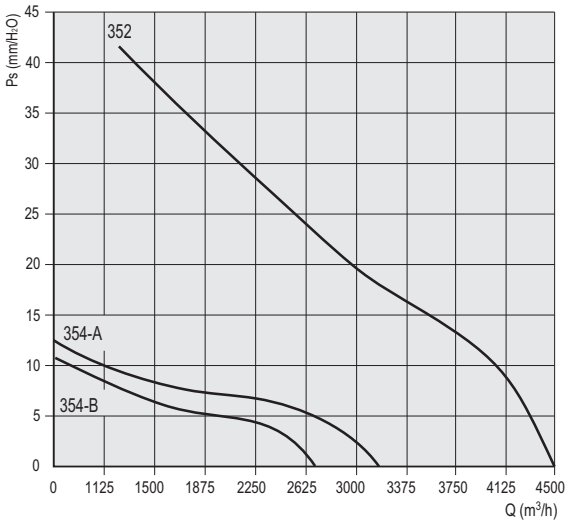
Pažnja : Ne koristiti 2 polne verzije sa slobodnim vazduhom ili kod programa sa malim gubitkog opterećenja.
Attention: do not use the two pole versions with free air or small load losses applications.



CC 35

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	354/A	T	4	0,12	0,52	55/F	63	57
CC	354/A	M	4	0,12	1,1	55/F	63	57
CC	354/B	T	4	0,12	0,52	55/F	63	55
CC	354/B	M	4	0,12	1,1	55/F	63	55
CC	352	T	2	0,55	1,4	55/F	71	71
CC	352	M	2	0,55	4,2	55/F	71	71
CC-ATEX	354/A	T	4	0,12	0,47	55/F	63	57

Pažnja : Ne koristiti 2 polne verzije sa slobodnim vazduhom ili kod programa sa malim gubitkog opterećenja.
Attention: do not use the two pole versions with free air or small load losses applications.

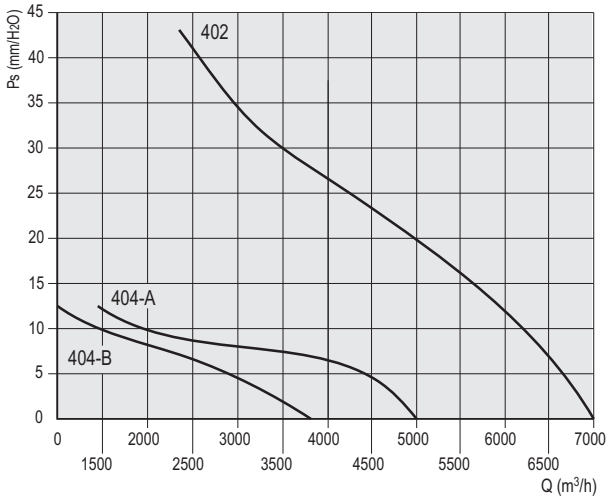


Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

CC 40

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	404/A	T	4	0,18	0,65	55/F	63	61
CC	404/A	M	4	0,18	1,6	55/F	63	61
CC	404/B	T	4	0,18	0,65	55/F	63	58
CC	404/B	M	4	0,18	1,6	55/F	63	58
CC	402	T	2	1,1	2,8	55/F	80	75
CC	402	M	2	1,1	6,2	55/F	80	75
CC-ATEX	404/A	T	4	0,18	0,68	55/F	63	61

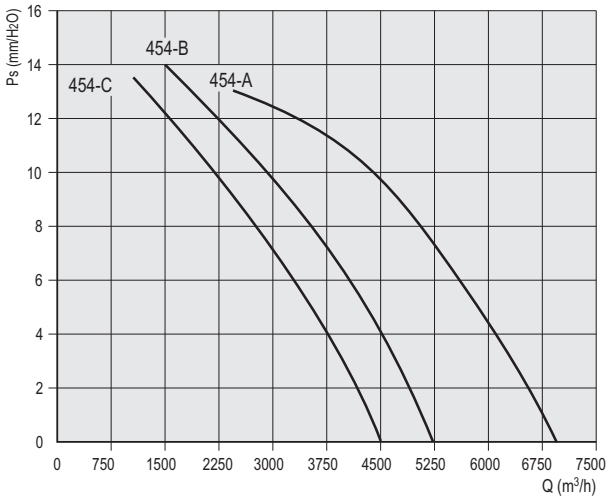
Pažnja : Ne koristiti 2 polne verzije sa slobodnim ulaznim otvorom ili kod programa sa malim gubitkog opterećenja.
Caution: do not use 2 poles version in free inlet application or with small cherge losses!



SEK. 4

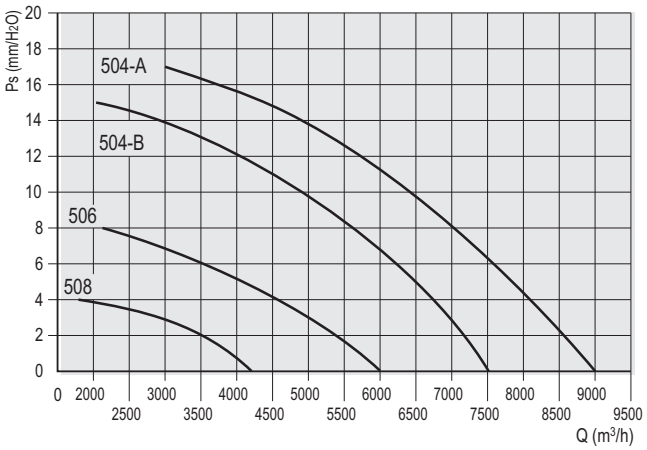
CC 45

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	454/A	T	4	0,37	1,2	55/F	71	65
CC	454/A	M	4	0,37	2,9	55/F	71	65
CC	454/B	T	4	0,37	1,2	55/F	71	62
CC	454/B	M	4	0,37	2,9	55/F	71	62
CC	454/C	T	4	0,18	0,65	55/F	63	61
CC	454/C	M	4	0,18	1,6	55/F	63	61
CC-ATEX	454/A	T	4	0,37	1,22	55/F	71	65



CC 50

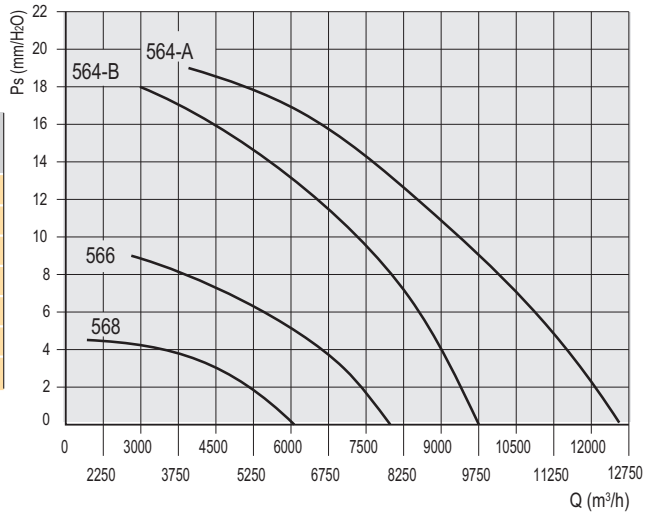
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	504/A	T	4	0.55	1,6	55/F	80	67
CC	504/B	T	4	0.55	1,6	55/F	80	64
CC	506	T	6	0.18	0,82	55/F	71	57
CC	508	T	8	0.15	0,7	55/F	71	50
CC-ATEX	504/A	T	4	0.55	1,75	55/F	80	67
CC-ATEX	506	T	6	0.18	0,69	55/F	71	57
CC-ATEX	508	T	8	0,09	0,56	55/F	71	50



Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

CC 56

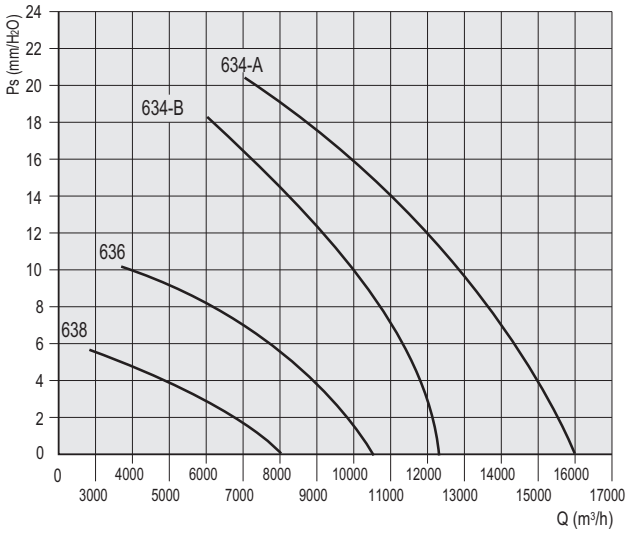
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	564/A	T	4	0,75	2	55/F	80	70
CC	564/B	T	4	0,75	2	55/F	80	67
CC	566	T	6	0,26	1,1	55/F	71	60
CC	568	T	8	0,15	0,7	55/F	71	53
CC-ATEX	564/A	T	4	0,75	2,11	55/F	80	70
CC-ATEX	566	T	6	0,25	0,89	55/F	71	60
CC-ATEX	568	T	8	0,18	0,87	55/F	80	53



SEK. 4

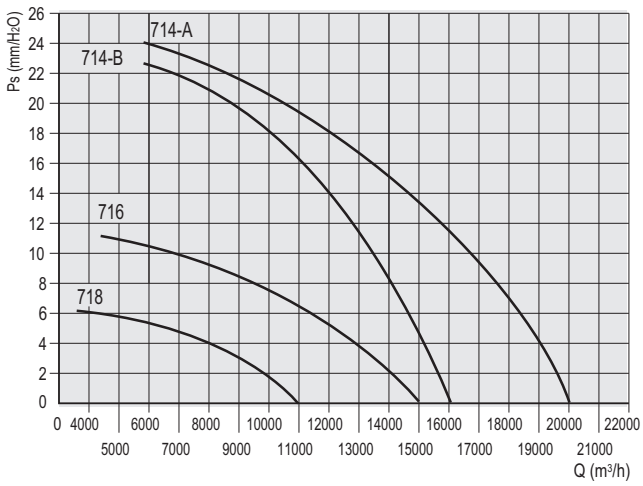
CC 63

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	634/A	T	4	1,1	2,8	55/F	90S	73
CC	634/B	T	4	1,1	2,8	55/F	90S	70
CC	636	T	6	0,37	1,2	55/F	80	63
CC	638	T	8	0,26	1,2	55/F	80	57
CC-ATEX	634/A	T	4	1,10	2,8	55/F	90S	73
CC-ATEX	636	T	6	0,37	1,37	55/F	80	63
CC-ATEX	638	T	8	0,18	0,9	55/F	80	57



CC 71

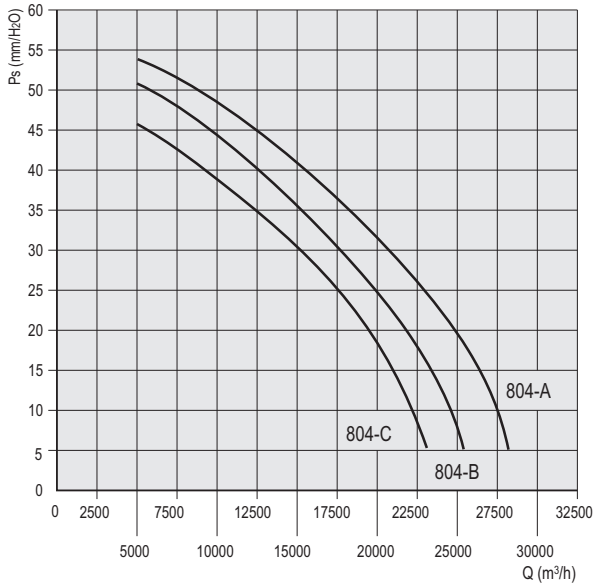
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	714/A	T	4	2,2	5,3	55/F	100L	77
CC	714/B	T	4	2,2	5,3	55/F	100L	72
CC	716	T	6	0,75	2,5	55/F	90S	65
CC	718	T	8	0,37	1,6	55/F	90S	59
CC-ATEX	714/A	T	4	2,20	5,07	55/F	100L	77
CC-ATEX	716	T	6	0,75	2,23	55/F	90S	65
CC-ATEX	718	T	8	0,37	1,55	55/F	90S	59



Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

CC 80 (4 pola /poles)

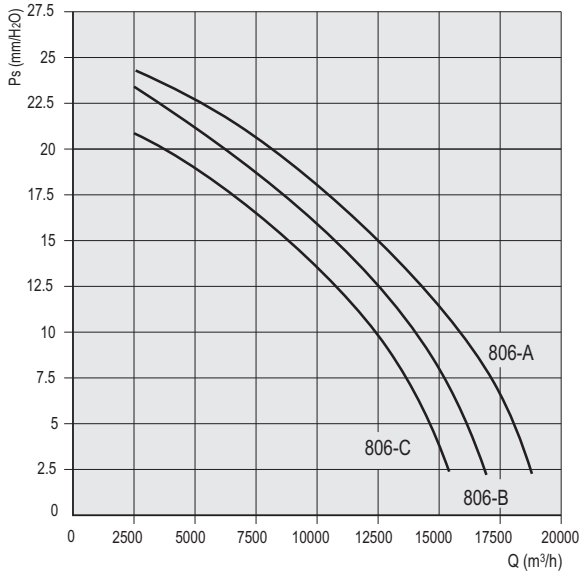
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	804/A	T	4	4	9,4	55/F	112M	81
CC	804/B	T	4	4	9,4	55/F	112M	80
CC	804/C	T	4	3	6,7	55/F	100L	78
CC-ATEX	804/B	T	4	4	8,6	55/F	112M	80



SEK. 4

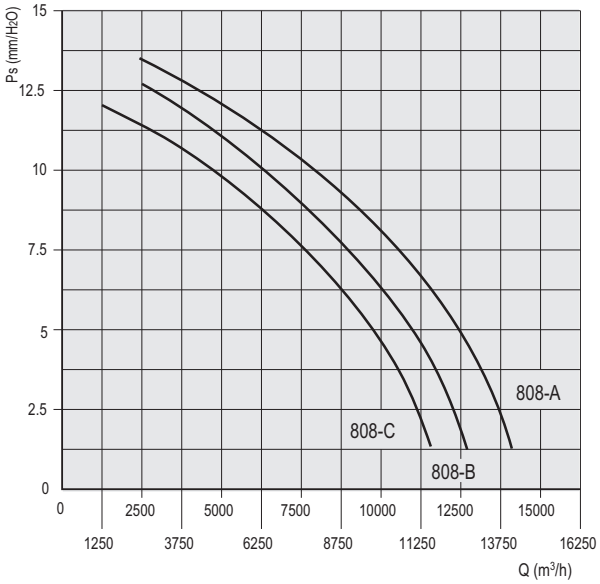
CC 80 (6 pola /poles)

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	806/A	T	6	1,5	4,2	55/F	100L	70
CC	806/B	T	6	1,1	3,4	55/F	90L	69
CC	806/C	T	6	1,1	3,4	55/F	90L	67
CC-ATEX	806/B	T	6	1,1	2,9	55/F	90L	69



CC 80 (8 pola /poles)

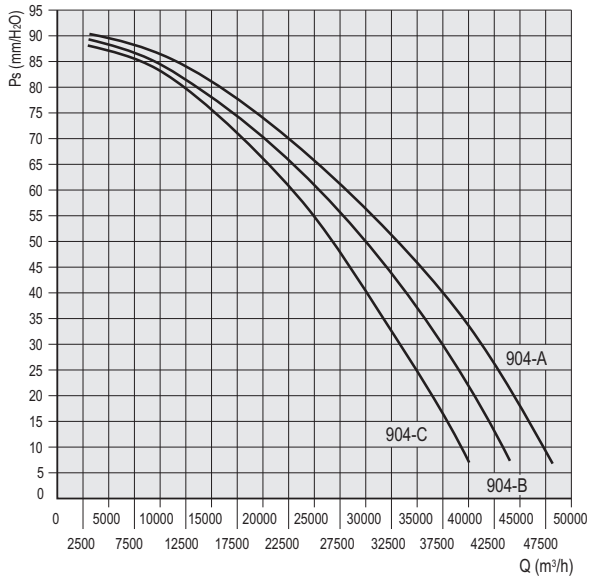
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	808/A	T	8	0,55	2,3	55/F	90L	64
CC	808/B	T	8	0,55	1,6	55/F	90L	63
CC	808/C	T	8	0,37	1,6	55/F	90S	61
CC-ATEX	808/B	T	8	0,55	1,98	55/F	90L	63



Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

CC 90 (4 pola /poles)

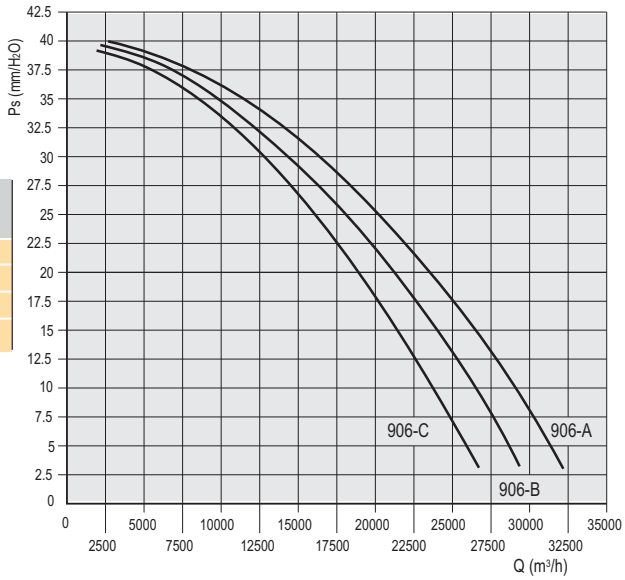
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	904/A	T	4	9,2	17,3	55/F	132M	86
CC	904/B	T	4	7,5	15,4	55/F	132M	85
CC	904/C	T	4	5,5	12	55/F	132S	83
CC-ATEX	904/B	T	4	7,5	15,7	55/F	132M	85



SEK. 4

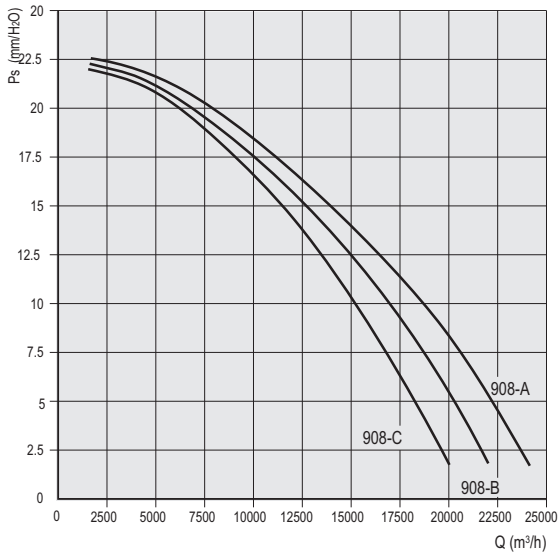
CC 90 (6 pola

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	906/A	T	6	3,0	7,2	55/F	132M	75
CC	906/B	T	6	2,2	5,32	55/F	112M	74
CC	906/C	T	6	2,2	5,1	55/F	112M	72
CC-ATEX	906/B	T	6	2,2	5,6	55/F	112M	74



CC 90 (8 pola /poles)

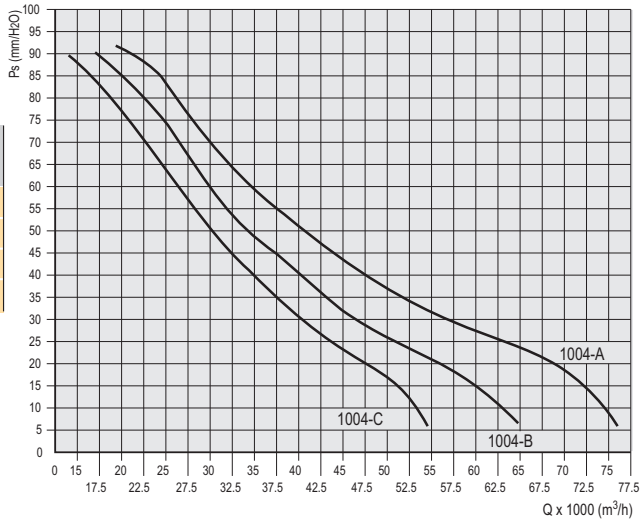
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	908/A	T	8	1,5	4,5	55/F	112M	68
CC	908/B	T	8	1,1	4,1	55/F	100L	67
CC	908/C	T	8	1,1	4	55/F	100L	65
CC-ATEX	908/B	T	8	1,1	3,99	55/F	100L	67



Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

CC 100 (4 pola /poles)

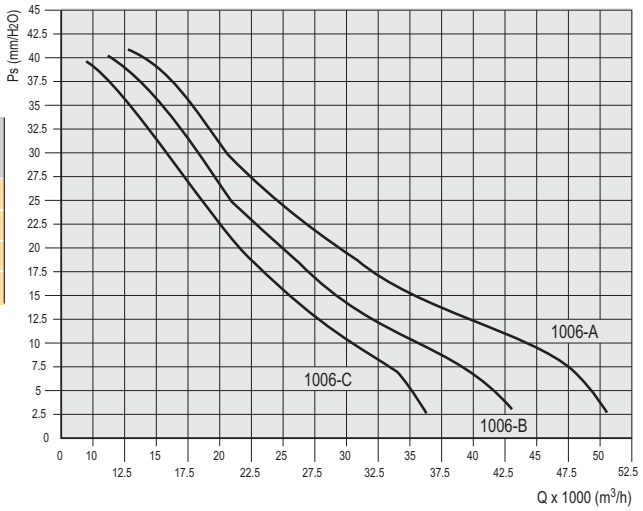
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	1004/A	T	4	15	29	55/F	160L	91
CC	1004/B	T	4	9,2	17,3	55/F	132M	88
CC	1004/C	T	4	7,5	15,4	55/F	132M	86
CC-ATEX	1004/B	T	4	11	21	55/F	160M	88



SEK. 4

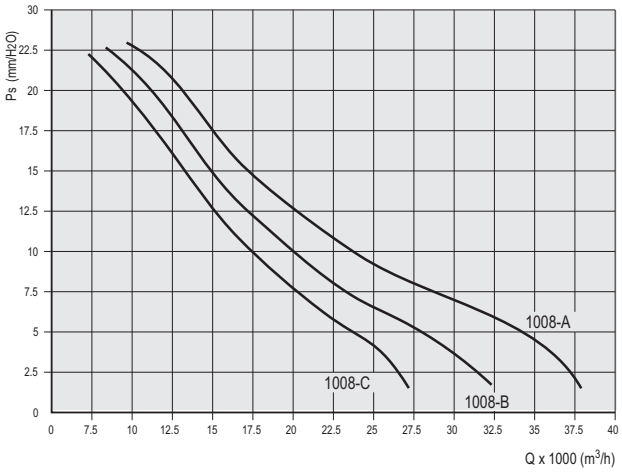
CC 100 (6 pola /poles))

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	1006/A	T	6	5,5	13,5	55/F	132M	80
CC	1006/B	T	6	4	10	55/F	132M	78
CC	1006/C	T	6	3	7,5	55/F	132S	76
CC-ATEX	1006/B	T	6	4	9,6	55/F	132M	78

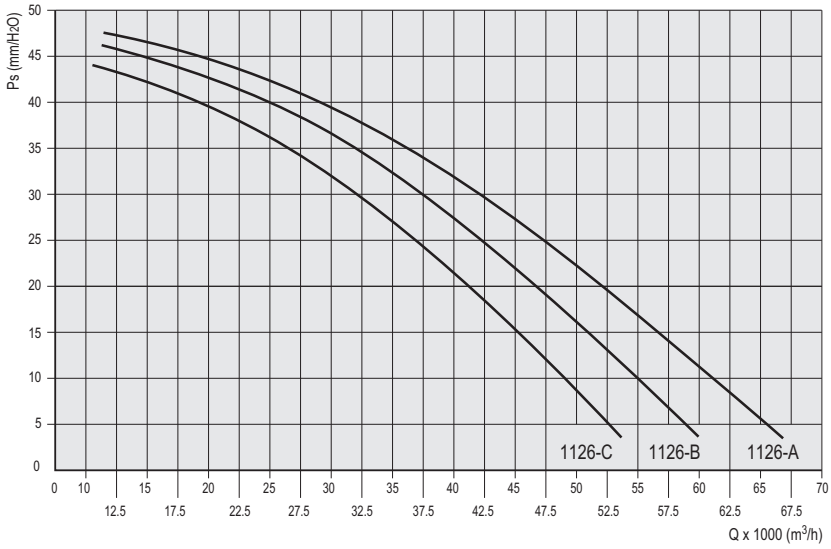


CC 100 (8 pola /poles))

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	1008/A	T	8	2,2	6,8	55/F	132S	74
CC	1008/B	T	8	1,5	4,5	55/F	112M	71
CC	1008/C	T	8	1,1	4	55/F	100L	70
CC-ATEX	1008/B	T	8	1,5	4,2	55/F	112M	71

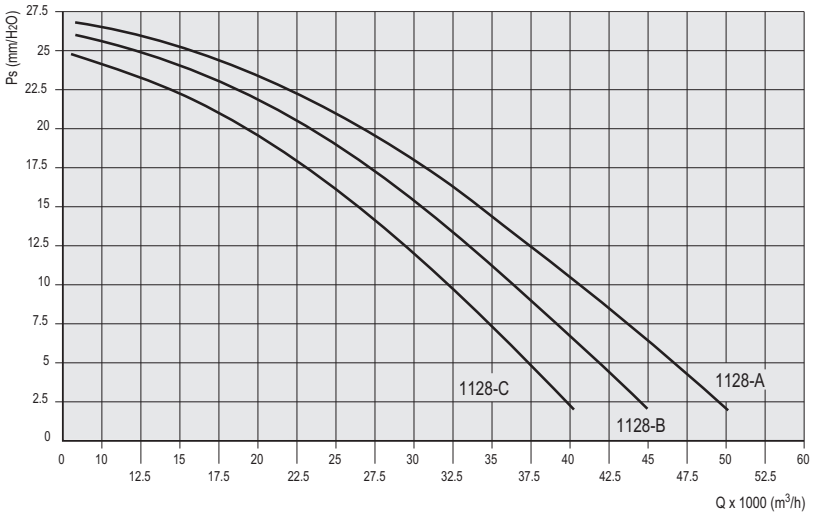


Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



CC 112 (6 pola /poles)

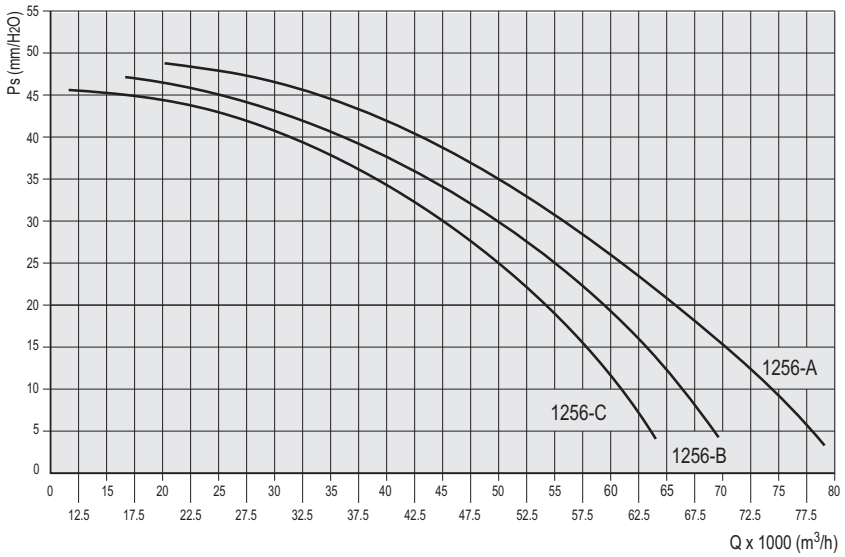
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	1126/A	T	6	7,5	17	55/F	160M	83
CC	1126/B	T	6	5,5	13,5	55/F	132M	81
CC	1126/C	T	6	5,5	13,5	55/F	132M	79



CC 112 (8 pola /poles)

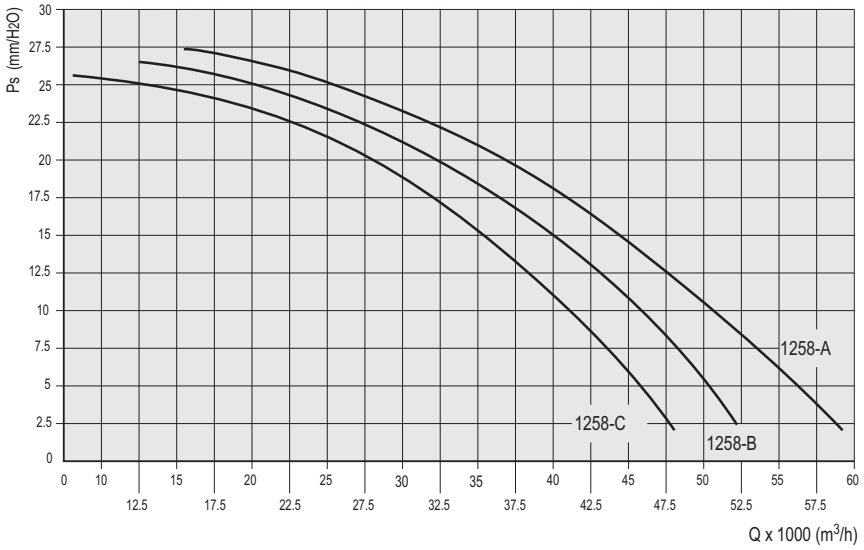
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	1128/A	T	8	3	8,9	55/F	132M	76
CC	1128/B	T	8	2,2	6,8	55/F	132S	74
CC	1128/C	T	8	2,2	6,8	55/F	132S	72

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



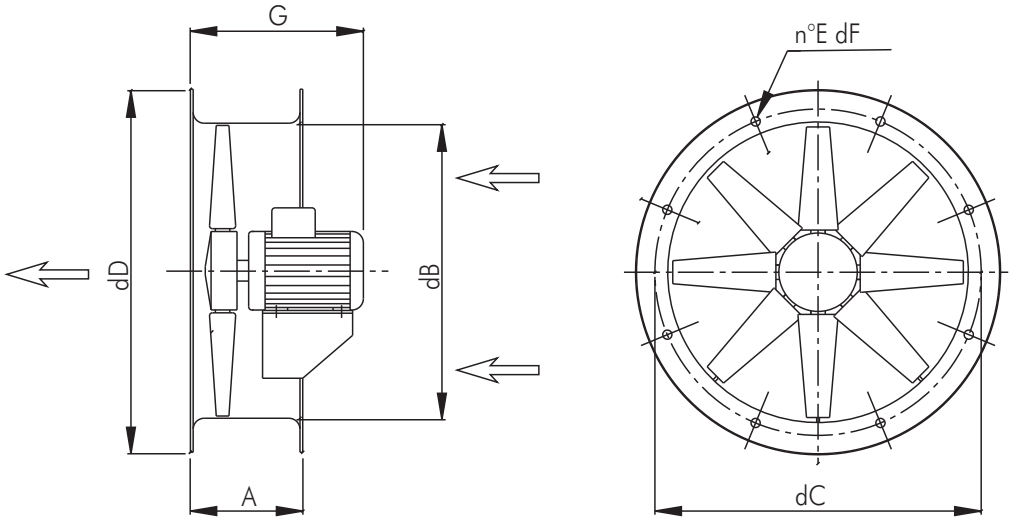
CC 125 (6 pola /poles)

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	1256/A	T	6	11	22,5	55/F	160L	87
CC	1256/B	T	6	7,5	17,0	55/F	160M	84
CC	1256/C	T	6	5,5	13,5	55/F	132M	82



CC 125 (8 pola /poles)

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC	1258/A	T	8	4	10,3	55/F	160M	79
CC	1258/B	T	8	3	8,9	55/F	132M	76
CC	1258/C	T	8	2,2	6,8	55/F	132S	74



Tip/Type	A	dB	dC	dD	E	dF	G	Kg
CC 31	200	310	355	395	8	10	380	22
CC 35	200	350	395	446	8	10	380	25
CC 40	230	400	450	496	8	12	430	30
CC 45	230	450	500	546	8	12	430	38
CC 50	250	500	560	598	12	12	440	39
CC 56	250	560	620	658	12	12	440	42
CC 63	250	630	690	730	12	12	470	52
CC 71	250	710	770	810	16	12	520	66
CC 80	350	800	860	910	16	12	580	125
CC 90	350	900	970	1030	16	16	680	180
CC 100	350	1000	1070	1130	16	16	750	215
CC 112	350	1120	1190	1250	20	16	750	205
CC 125	350	1250	1320	1380	20	16	750	235

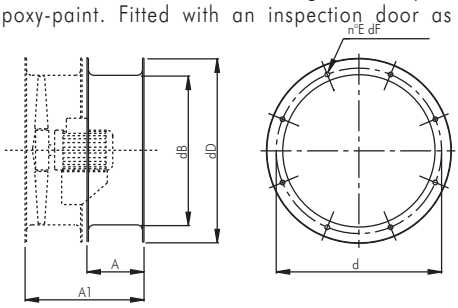
Dimenzije u mm/Dimensions in mm

CCpro NASTAVAK

Omogućava montažu, na licu mesta, verzije sa dužim kućištem, radnim kolom i motorom potpuno zatvorenim u kućištu ventilatora. Proizvedeno od čeličnog lima sa ivicom za fiksiranje po UNI ISO6580-EUROVENT1/2 standardu. Zaštićen od atmosferskih uticaja epoxy bojom. Opremljen servisnim vratancem.

CCpro EXTENSION

it allows the assembly, also at site, of the long casing version with impeller and motor completely enclosed in the fan casing. Manufactured in steel sheet, with fixing flanges according to UNI ISO6580 – EUROVENT1/2 standard. Protected against atmospheric agents by epoxy-paint. Fitted with an inspection door as standard.



Tip/Type	A	A1	dB	dC	dD	E	dF	kg
CCpro 31	180	380	315	355	395	8	10	4
CCpro 35	180	380	350	395	446	8	10	5
CCpro 40	200	430	400	450	496	8	12	6
CCpro 45	200	430	450	500	546	8	12	7
CCpro 50	200	450	500	560	598	12	12	8
CCpro 56	200	450	560	620	658	12	12	9
CCpro 63	240	490	630	690	730	12	12	11
CCpro 71	280	530	710	770	810	16	12	13
CCpro 80	240	590	800	860	910	16	12	20
CCpro 90	340	690	900	970	1030	16	16	31
CCpro 100	410	760	1000	1070	1130	16	16	39
CCpro 112	410	760	1120	1190	1250	20	16	44
CCpro 125	410	760	1250	1320	1380	20	16	50

Dimenzije u mm/Dimensions in mm

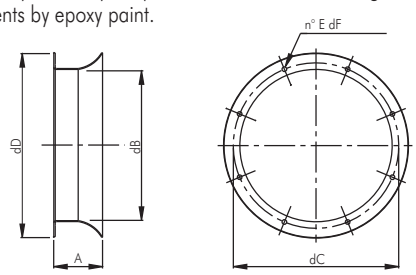
KONUS ULAZNOG OTVORA CCbo

SEK.4

Omogućava veću efikasnost ventilatora u slučaju ako se ventilacija ne odvija preko cevnog sistema. Proizvedeno od čeličnog lima sa ivicom za fiksiranje po UNI ISO6580-EUROVENT1/2 standardu za odgovarajuća kućišta ventilatora i sa aerodinamičnim konusom ulaznog otvora.

INLET CONE CCbo

It allows a greater fan efficiency in case of non ducted intake. Manufactured in steel sheet, with a flange according to UNI ISO6580 – EUROVENT1/2 standard for fan casing matching and with an aerodynamically shaped inlet cone. Protected against atmospheric agents by epoxy paint.



Tip/Type	A	dB	dC	dD	E	dF	kg
CCbo 31	135	315	355	395	8	10	2
CCbo 35	135	350	395	446	8	10	3
CCbo 40	135	400	450	496	8	12	4
CCbo 45	135	450	500	546	8	12	5
CCbo 50	135	500	560	598	12	12	6
CCbo 56	135	560	620	658	12	12	6
CCbo 63	135	630	690	730	12	12	7
CCbo 71	170	710	770	810	16	12	11
CCbo 80	200	800	860	910	16	12	13
CCbo 90	250	900	970	1030	16	16	18
CCbo 100	250	1000	1070	1130	16	16	20
CCbo 112	300	1120	1190	1250	20	16	23
CCbo 125	300	1250	1320	1380	20	16	25

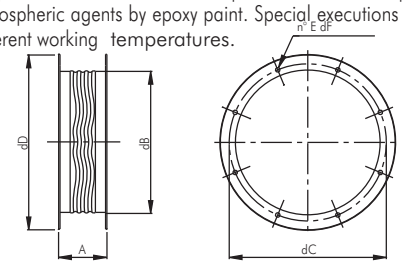
Dimenzije u mm/Dimensions in mm

FLEKSIBILNI PRIKLJUČAK CCga

Sprečava prenos vibracija duž cevi. Proizvedeno sa dva fiksirna prstena od čeličnog lima,po UNI ISO6580-EUROVENT1/2 standardu za fiksiranje na kućište, i od čvrstog elastičnog tekstila.Radna temperatura od -30°C do 80 °C. Delovi od čeličnog lima su zaštićeni epoxy bojom. Specijalne izvedbe su predviđene za različite radne temperature.Str. 14

FLEXIBLE CONNECTION CCga

It prevents from propagation of vibrations along the duct. Manufactured with two flanges in steel sheet, according to UNI ISO6580 – EUROVENT1/2 standard for fixing to the case, and a sturdy flexible texture. Working temperatures –30°C +80°C. Components in steel sheet protected against atmospheric agents by epoxy paint. Special executions are foreseen for different working temperatures.



Tip/Type	A	•B	•C	•D	E	•F	kg
CCga 31	200	315	355	395	8	10	5
CCga 35	200	350	395	446	8	10	6
CCga 40	200	400	450	496	8	12	7
CCga 45	200	450	500	546	8	12	8
CCga 50	200	500	560	598	12	12	9
CCga 56	200	560	620	658	12	12	10
CCga 63	200	630	690	730	12	12	11
CCga 71	200	710	770	810	16	12	13
CCga 80	200	800	860	910	16	12	21
CCga 90	200	900	970	1030	16	16	23
CCga 100	200	1000	1070	1130	16	16	26
CCga 112	200	1120	1190	1250	20	16	29
CCga 125	200	1250	1320	1380	20	16	32

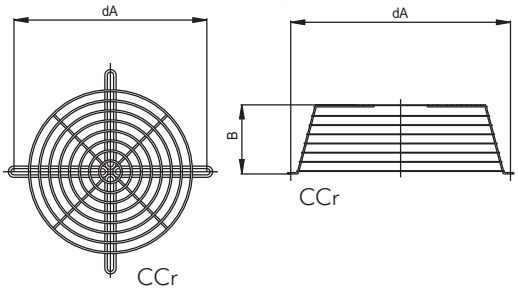
Dimenzije u mm/Dimensions in mm

ZAŠTITNE REŠETKE CCr/CCrc

Zaštita od slučajnog dodira pokretnih delova ventilatora. Proizvedeni su od čelične šipke u skladu sa UNI9219-EUROVENT1/3 standardima i zaštićeni su od atmosferskih uticaja.
CCr: ravna verzija (za duga kućišta i kratka kućišta sa strane lopatica)
CCrc: konusna verzija (kratka kućišta sa strane radnog kola)

PROTECTION CCr/CCrc guards

They safeguard from the casual contact with moving parts of the fan. Manufactured in steel rod according to UNI9219 – EUROVENT1/3 standard and protected against atmospheric agents.
CCr: flat version (for long casing and short casing on impeller side),
CCrc: conic version (short casing version on motor side).



Tip/Type	dA	kg
CCr 31	355	0,6
CCr 35	395	0,7
CCr 40	450	0,8
CCr 45	500	1,0
CCr 50	560	1,3
CCr 56	620	1,6
CCr 63	690	1,9
CCr 71	770	2,2
CCr 80	860	3,0
CCr 90	970	3,4
CCr 100	1070	3,5
CCr 112	1190	4,0
CCr 125	1320	4,5

Tipo/Type	dA	B	kg
CCrc 31	355	115	1
CCrc 35	395	115	1,1
CCrc 40	450	115	1,3
CCrc 45	500	115	1,5
CCrc 50	560	115	1,8
CCrc 56	620	115	2,2
CCrc 63	690	115	3
CCrc 71	770	150	4,5
CCrc 80	860	150	5,8
CCrc 90	970	305	7
CCrc 100	1070	305	8,5
CCrc 112	1190	305	10
CCrc 125	1320	305	11

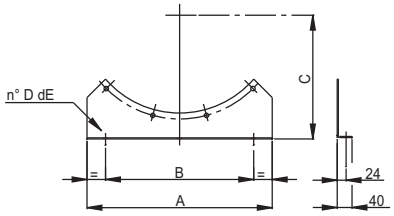
SEK. 4

POTPORNE NOŽICE CCst

Omogućavaju fiksiranje ventilatora. Proizvedeni od čeličnog lima i zaštićeni od atmosferskih uticaja.
Str. 15

SUPPORT FEET CCst

They allow the anchorage of the fan. Manufactured in steel sheet and protected against atmospheric agents.

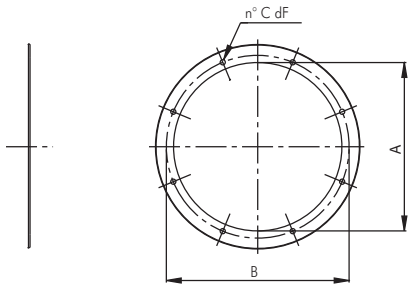


Tip/Type	A	B	C	D	dE	kg
CCst 31	320	200	280	2	10	1
CCst 35	350	250	300	2	10	1
CCst 40	400	300	320	2	10	1
CCst 45	450	350	350	2	10	1,2
CCst 50	500	400	380	2	10	1,8
CCst 56	560	460	410	2	10	2,0
CCst 63	630	480	450	2	10	2,2
CCst 71	710	550	490	2	10	2,5
CCst 80	800	660	540	3	14	3,0
CCst 90	900	760	600	3	14	3,5
CCst 100	1000	860	640	3	14	4,0
CCst 112	1120	980	710	3	14	5,0
CCst 125	1250	950	770	3	14	7,5

Dimenzije u mm/Dimensions in mm

OBODI - CCf

COUNTER FLANGE – CCf

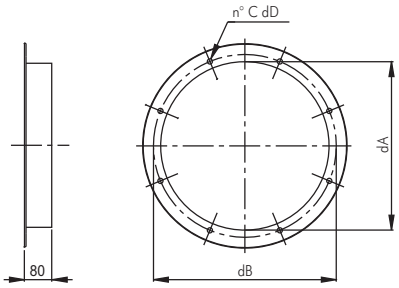


Tip/Type	dA	dB	C	dD	kg
CCf 31	315	355	8	10	1,2
CCf 35	350	395	8	10	1,5
CCf 40	400	450	8	12	1,7
CCf 45	450	500	8	12	1,9
CCf 50	500	560	12	12	2,1
CCf 56	560	620	12	12	2,4
CCf 63	630	690	12	12	2,7
CCf 71	710	770	16	12	3,3
CCf 80	800	860	16	12	3,7
CCf 90	900	970	16	16	4,7
CCf 100	1000	1070	16	16	5,2
CCf 112	1120	1190	20	16	6,5
CCf 125	1250	1320	20	16	8

Dimenzije u mm/Dimensions in mm

OBOD SA OGRLICOM - CCfc

COUNTER FLANGE WITH COLLAR – CCfc



Tip	dA	dB	C	dD	kg
CCfc 31	315	355	8	10	1,2
CCfc 35	350	395	8	10	1,5
CCfc 40	400	450	8	12	1,7
CCfc 45	450	500	8	12	2
CCfc 50	500	560	12	12	2,2
CCfc 56	560	620	12	12	2,5
CCfc 63	630	690	12	12	2,9
CCfc 71	710	770	16	12	3,3
CCfc 80	800	860	16	12	3,8
CCfc 90	900	970	16	16	4,2
CCfc 100	1000	1070	16	16	5
CCfc 112	1120	1190	20	16	5,8
CCfc 125	1250	1320	20	16	6,5

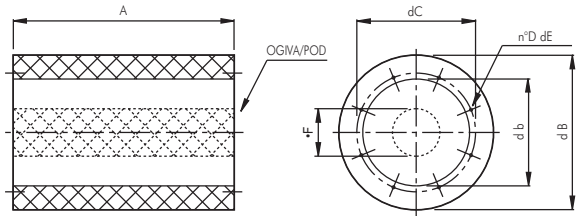
Dimenzije u mm/Dimensions in mm

CILINDRIČNI PRIGUŠIVAČ - CCsa/CCsb

Cilindrični prigušivači CCs su dostupni u dve verzije, bez čaure (CCsa) i sa čaurom (CCsb), prisustvo čaure omogućava veću prigušenost zvuka ali dovodi do gubitka u naboju uređaja. Obe verzije se mogu fiksirati na odgovarajuću ivicu CC-a na ulazni i izlazni otvor. CCsa serija ne menja bitnije performanse (raspon / pritisak) ventilatora. CCsb serija uključuje gubitak naboja po dijagramu na strani 17. Za instalaciju ovih prigušivača na ulazni otvor potrebno je predvideti dužinu cevi od minimum jednog prečnika da bi se umetnulo između samog prigušivača i ventilatora. Standardna dužina je jednaka prečniku (b), ali na zahtev je moguće obezbediti verziju sa 1,5 i 2 puta dužine prečnika. Ovi prigušivači se proizvode potpuno od galvanizovanog čelika. Unutrašnji deo i čaura je u perforiranom limu sa svrhom da obezbede efikasnost uložka od mineralne vune koja apsorbuje zvuk. Radna temperatura je od –40°C do +150°C a maksimalni pritisak odgovara 1000mm/H2O.

CYLINDRICAL SILENCERS - CCsa/CCsb

The cylindrical silencers CCs are available in two versions, without pod (CCsa) and with pod (CCsb) , the presence of the pod allows a greater attenuation of the noise but produces a load loss in the plant. Both the versions can be fixed to the corresponding flange of the CC in inlet and outlet. The CCsa series doesn't change the performances (range/ pressure) of the fan in relevant way. The CCsb series involves a loss of load according to the diagram of page 17. For the installation of this silencer in inlet it is necessary to foresee a duct length of minimum one diameter to be inserted between the silencer itself and the fan. The standard length is equal to the (b) diameter, but upon request it is possible to provide versions with length of 1,5 and 2 times diameter (b). These silencers are manufactured completely in galvanized steel. The internal part and the pod in punctured sheet with the purpose to allow the effectively action of the sound proof mattress in mineral wool. The working temperature is included from -40 and +150°C and the maximum pressure corresponds to 1000 mm/H2O.



Tip/Type CCsa/CCsb	d B	d b	dC	D	dE	dF
31	455	315	355	8	M8	150
35	495	355	395	8	M8	150
40	540	400	450	8	M10	195
45	610	450	500	8	M10	195
50	660	500	560	12	M10	250
56	720	560	620	12	M10	250
63	790	630	690	12	M10	300
71	870	710	770	16	M10	380
80	1000	800	860	16	M10	380
90	1100	900	970	16	M12	380
100	1200	1000	1070	16	M12	655
112	1320	1120	1190	20	M12	655
125	1450	1250	1320	20	M12	655

Dimenzije u mm/Dimensions in mm

CCsa: bez čaure /without pod

Tip/Type CCsa	A 1•	kg	A 1,5•	kg	A 2•	kg
31	315	8	470	11	630	14
35	350	10	525	14	700	17
40	400	12	600	17	800	21
45	450	15	675	20	900	24
50	500	18	750	25	1000	32
56	560	21	840	28	1120	35
63	630	24	945	33	1260	43
71	710	35	1065	49	1420	63
80	800	43	1200	61	1600	79
90	900	70	1350	94	1800	112
100	1000	113	1500	137	2000	161
112	1120	130	1680	154	2240	178
125	1250	152	1875	185	2500	213

Dimenzije u mm/Dimensions in mm

CCsb: sa čaurom / with pod

Tip/Type CCsb	A 1•	kg	A 1,5•	kg	A 2•	kg
31	315	10	470	14	630	16
35	350	12	525	16	700	18
40	400	14	600	21	800	26
45	450	17	675	24	900	29
50	500	23	750	32	1000	39
56	560	28	840	37	1120	44
63	630	32	945	44	1260	55
71	710	44	1065	62	1420	78
80	800	56	1200	79	1600	101
90	900	130	1350	153	1800	175
100	1000	143	1500	180	2000	216
112	1120	165	1680	202	2240	238
125	1250	193	1875	240	2500	282

Dimenzije u mm/Dimensions in mm

CCsa/CCsb

CCsa: bez čaure / without pod

A= 1 x d b

Tip/Type CCsa	Oktava spektruma (Hz) prigušenja zvuka dB Octave spectium (Hz) of noise attenuation in dB					
	125	250	500	1K	2K	4K
31	1	3	8	14	9	8
35	0	3	9	14	10	8
40	0	4	10	13	8	8
45	1	4	12	12	9	6
50	0	4	13	11	9	6
56	0	4	14	11	8	5
63	1	5	14	10	9	5
71	1	5	12	9	7	5
80	3	7	9	8	6	5
90	3	7	13	8	6	5
100	3	8	12	8	4	4
112	3	8	13	7	5	4
125	3	9	13	7	4	4

CCsb: sa čaurom / with pod

A= 1 x d b

Tip/Type CCsb	Oktava spektruma (Hz) prigušenja zvuka dB Octave spectium (Hz) of noise attenuation in dB					
	125	250	500	1K	2K	4K
31	1	4	9	16	17	13
35	0	4	11	22	21	15
40	1	4	11	20	18	14
45	1	6	14	21	19	13
50	2	5	13	20	16	11
56	1	6	15	21	17	11
63	1	6	15	19	16	10
71	2	7	15	20	18	12
80	3	9	12	17	15	9
90	4	8	15	16	11	8
100	8	14	20	24	21	14
112	6	13	20	21	14	8
125	7	12	18	19	10	6

A= 1,5 x d b

Tip/Type CCsa	Oktava spektruma (Hz) prigušenja zvuka dB Octave spectium (Hz) of noise attenuation in dB					
	125	250	500	1K	2K	4K
31	2	5	12	19	13	11
35	0	5	12	21	13	11
40	1	5	14	19	12	10
45	1	6	17	17	13	9
50	1	6	18	17	12	9
56	2	7	20	15	11	8
63	2	7	20	14	12	8
71	2	7	18	11	9	6
80	5	10	13	12	9	7
90	5	11	16	11	7	7
100	5	12	17	10	6	6
112	5	12	18	8	6	5
125	6	12	17	8	5	5

A= 1,5 x d b

Tip/Type CCsb	Oktava spektruma (Hz) prigušenja zvuka dB Octave spectium (Hz) of noise attenuation in dB					
	125	250	500	1K	2K	4K
31	4	5	13	23	26	18
35	1	7	15	33	32	22
40	2	6	15	31	27	19
45	2	7	19	31	28	18
50	3	7	19	29	24	14
56	3	9	22	32	27	15
63	2	9	22	29	23	14
71	3	11	22	31	25	13
80	6	13	18	26	22	12
90	5	12	20	24	16	10
100	10	22	30	37	29	16
112	10	19	29	33	20	11
125	10	18	28	29	14	9

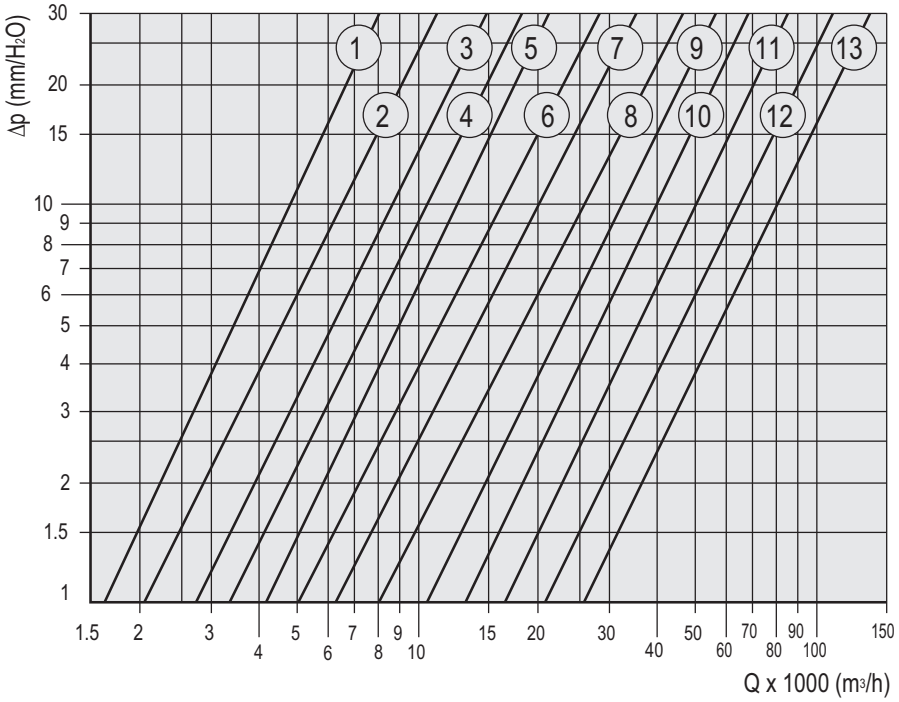
A= 2 x d b

Tip/Type CCsa	Oktava spektruma (Hz) prigušenja zvuka dB Octave spectium (Hz) of noise attenuation in dB					
	125	250	500	1K	2K	4K
31	6	6	16	26	17	13
35	2	6	15	25	16	12
40	2	7	18	24	15	12
45	1	7	21	21	15	10
50	2	8	23	21	14	11
56	1	9	24	19	14	10
63	2	9	25	17	14	10
71	4	9	24	14	11	8
80	6	13	22	14	10	9
90	6	14	23	13	9	7
100	6	16	23	12	7	7
112	6	15	23	10	7	6
125	8	17	22	10	6	6

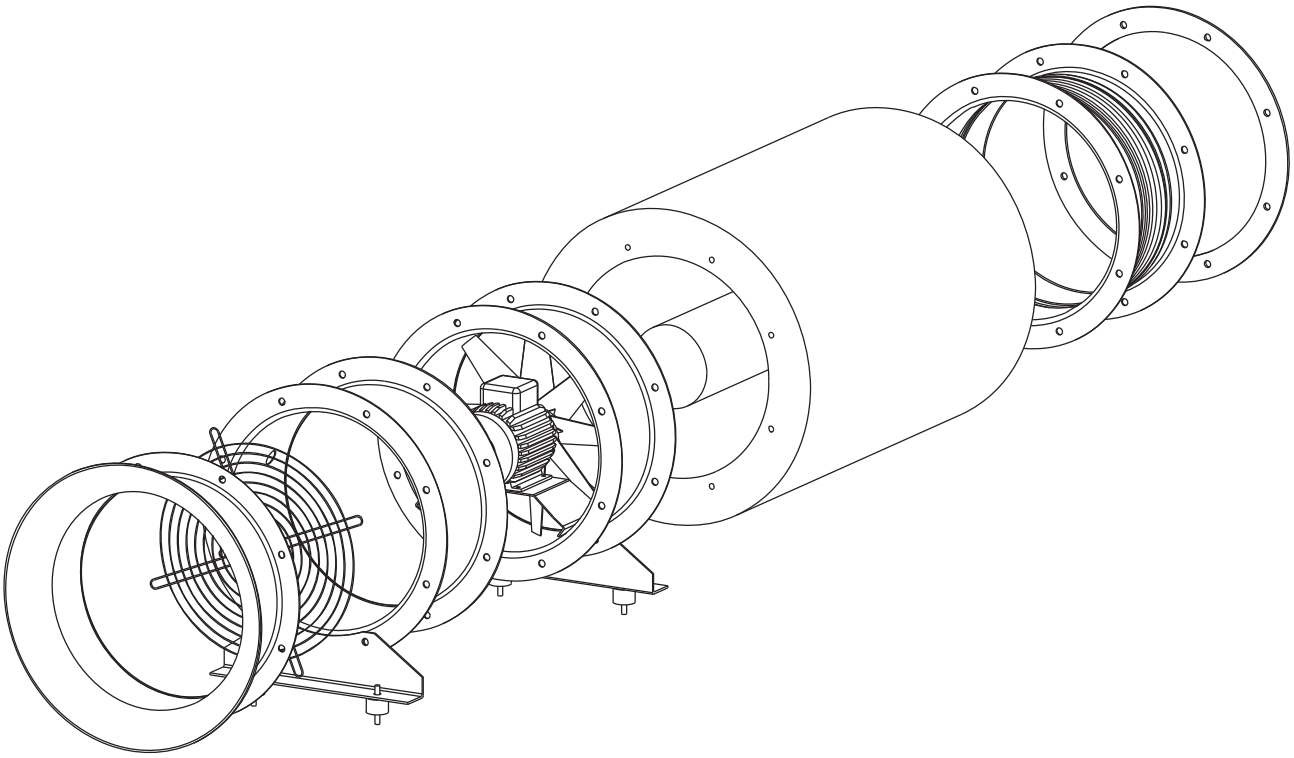
A= 2 x d b

Tip/Type CCsb	Oktava spektruma (Hz) prigušenja zvuka dB Octave spectium (Hz) of noise attenuation in dB					
	125	250	500	1K	2K	4K
31	6	7	17	32	33	22
35	2	8	19	40	39	27
40	2	9	20	37	35	23
45	3	10	23	39	36	21
50	3	10	24	38	32	18
56	2	12	27	41	35	18
63	3	11	27	37	29	15
71	5	14	29	41	32	18
80	6	16	29	35	26	15
90	7	17	30	34	20	12
100	13	28	39	47	38	19
112	14	26	36	42	24	13
125	13	25	35	37	17	11

Važno : bez čaure (CCsa) nevažan gubitak opterećenja.
Note: without pod (CCsa) loss charge irrelevant



Tip/Type	n°
CCsb 31	1
CCsb 35	2
CCsb 40	3
CCsb 45	4
CCsb 50	5
CCsb 56	6
CCsb 63	7
CCsb 71	8
CCsb 80	9
CCsb 90	10
CCsb 100	11
CCsb 112	12
CCsb 125	13



CCT

Aksijalni ventilatori na remeni pogon
Belt drive ducted axial fans

SEK. 4

OSNOVNI PODACI :

CCT serija je idealna za sušare, za izvlačenje vazduha bogatog dimom,prašinom,vlagom i za sve primene gde je neophodno imati motor van dometa strujanja.Radna temperatura je između -20°C i 60°C.

KONSTRUKCIJA :

- Kućište od čeličnog lima, nogare od metalnih cevi. Ovi delovi su zaštićeni od atmosferskih uticaja sa epoxy farbom.
- Zaštita ulaznog i izlaznog otvora po UNI9219-DIN31001 propisima.
- Aerofoil radno kolo od plastificirane smole,glavčina od livenog aluminijuma, podesiv nagibni ugao u stanju mirovanja Montiran na mono blok od livenog gvožđa,sa kugličnim ležajima.
- Izvedba 9. (verzija na remeni pogon sa motorom podržanim od strane kućišta u stanju mirovanja)Strujanje od mono bloka ka radnom kolu.
- Trofazni i monofazni asinhroni motori su izrađeni u skladu sa IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, CE kvalifikovani, IP55, motor klase F. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Ravna zaštitna rešetka (CCr)
- Fleksibilni priključak (CCga)
- Fiksirni podupirač (CCst)
- Usmerivač vazduha (CCbo)
- Prigušivač zvuka u tri veličine sa ili bez čaura (CCsa i CCsb)
- Obodi (CCf)

NA ZAHTEV :

- Performanse i diametri različiti od standarda.
- Izvedba 12 (motor fiksiran na kućište).
- Aerofoil radno kolo sa lopaticama izrađenim od livenog aluminijuma sa podesivim nagibnim uglom.
- Kućište je zaštićen od atmosferskih uticaja galvanizacijom. (dubokom)
- Verzija sa zaštitom od eksplozije , asinhronim trofaznim ili monofaznim motorom EEx-d IIB T3 izrađen po IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, IEC79 standardima sa CESI sertifikacijom, CE kvalifikovani, IP55, motor klase F (CCT-EX).

GENERAL DESCRIPTION

The CCT series is ideal for drying plants, painting, intake or exhaust of air rich of smoke, dust and humidity and for all the applications where it is necessary having the motor not lapped by the air flow. The working temperature is included between –20°C and +60°C.

CONSTRUCTION

- Casing in steel sheet with fixing flanges according to UNI ISO 6580 – EUROVENT1/2 standard. Protected against atmospheric agents by epoxy paint.
- Impeller with aerofoil profile blades in plastic resins and die-cast aluminium hub. Adjustable pitch angle in still position. Mounted on a cast iron mono-block, with ball bearings.
- Execution 9 (belt drive version with motor supported by the case in position 0), airflow from mono-block to impeller.
- Asynchronous three-phase or single-phase motor according to international standards IEC34 - IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC, CE marked, B3, IP55, class F. S1 service (continuous working at constant load)

ACCESSORIES

- Flat protection guard (CCr).
- Flexible connection (CCga).
- Fixing brackets (CCst).
- Inlet cone (CCbo).
- Silencers with or without pod in three different lengths (CCsa and CCsb).
- Counter flanges (CCf).

UPON REQUEST

- Performances and diameters different from standard.
- Execution 12, with motor fixed on basement.
- Aerofoil profile impeller, completely in die-cast aluminium and variable pitch angle.
- Casing protected against atmospheric agents by hot-dip galvanizing.
- Explosion proof version, asynchronous three-phase or single-phase motor EEx-d IIB T3 to international standards IEC34-IEC72 and 89/392 EEC - 89/336 EEC-73/23 EEC, IEC79 , with CESI certificate and CE marked. IP55, class F (CCT-EX) .

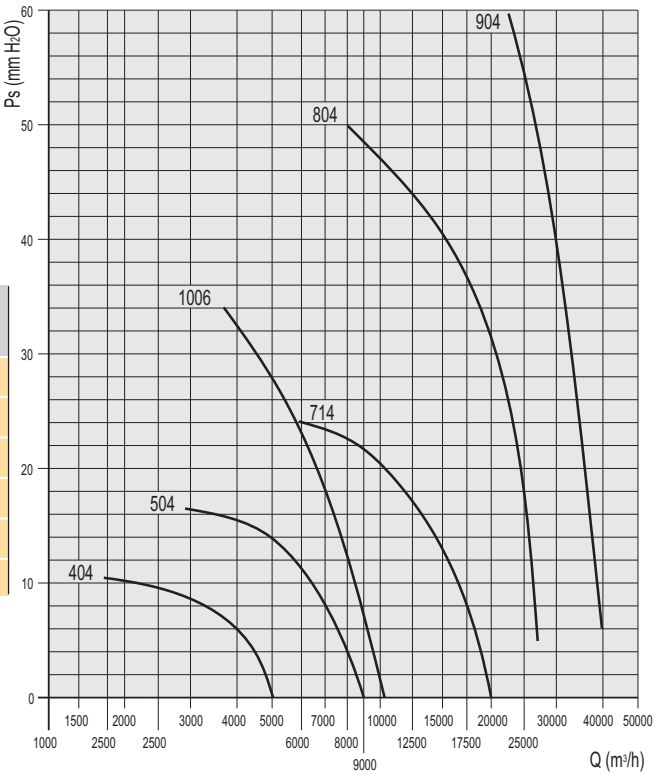
PERFORMANSE / PERFORMANCE CCT

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

Važno : Grafikon prikazuje samo standardne izvedbe prenosnom vrednošću 1:1. U tabeli se vide i drugi parametri (prečnik, rmp, snaga, kontaktirajte naš tehnički servis).

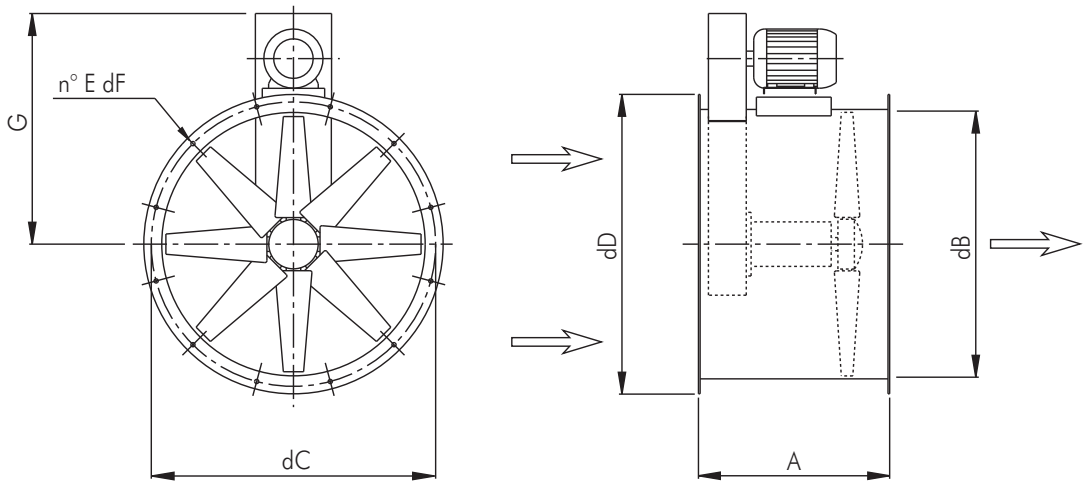
Note: the table lists the standard models with transmission rate 1:1. For other demands (diameters, rpm, performances, contact our technical service).

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CCT	404	T	4	0,37	1,5	55/F	71	62
CCT	504	T	4	0,75	2,5	55/F	80	68
CCT	714	T	4	3	6,7	55/F	100L	78
CCT	804	T	4	5,5	13	55/F	132S	82
CCT	904	T	4	7,5	16	55/F	132M	87
CCT	1006	T	6	4	11	55/F	132M	81



SEK. 4

DIMENZIJE / DIMENSIONS CCT



Tip/Type	A	dB	dC	dD	E	dF	G	Kg (*)
CCT 404	400	405	450	496	8	10	410	50
CCT 504	500	505	560	598	12	12	600	60
CCT 714	500	710	770	810	16	12	700	70
CCT 804	650	808	860	910	16	12	760	140
CCT 904	650	900	970	1030	16	16	900	195
CCT 1006	750	1000	1070	1130	16	16	1000	230

Dimenzije u mm/Dimensions in mm - (*) Indicativo/Približno

CCP

Mobilni aksijalni ventilatori
Portable ducted axial fans

SEK. 4

OSNOVNI PODACI :

CCP serija je dizajnirana za situacije gde je neophodno obezbediti izbacivanje vazduha ili vazdušnu zavesu; ovo se može desiti u specifičnim situacijama, na primer pri stvaranju scenskih efekata ili za hlađenje osoba koji rade kraj izvora toplote .U suštini je veoma jednostavno uperiti i pomeriti CCP ventilator u najrazličitijim situacijama. Radna temperatura je od –10°C do +50°C pri kontinuiranom radu.

KONSTRUKCIJA :

- Kućište od čeličnog lima, nogare od metalnih cevi. Ovi delovi su zaštićeni od atmosferskih uticaja sa epoxy farbom.Kod rukohvata-točkići za podešavanje nagiba kućišta.
- Zaštita ulaznog i izlaznog otvora po UNI9219-DIN31001 propisima.
- Aerofoil radno kolo sa lopaticama od techno-polymer-a ,glavčina od livenog aluminijuma,podesiv nagibni ugao u stanju mirovanja.
- Izvedba 4. (radno kolo direktno vezano na kraj osovine motora),strujanje od motora ka radnom kolu.
- Trofazni i monofazni asinhroni motori su izrađeni u skladu sa IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC standardima, CE kvalifikovani, IP55, motor klase F. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

NA ZAHTEV :

- Radno kolo sa lopaticama od livenog aluminijuma ,sa podesivim nagibnim uglom.

GENERAL DESCRIPTION

The CCP series is designed for situations where it is necessary having air throws or air curtains; this can happen in particular situations, for instance, to create scenic effects or to cool people working near to heat sources (mancooler).
In fact it is easily possible to orient and to move the CCP fan in the most desired situation. Working temperature from –10°C to +50°C in continuous service.

CONSTRUCTION

- Casing in steel sheet and support stand in tubular metal, protected against the atmospheric agents with epoxy paint. Side hand- wheels for the orientation of the throw.
- Protection guards in inlet and outlet manufactured according to rules UNI9219-DIN31001.
- Aerofoil profile impeller with blades in techno-polymer and die cast aluminium hub. Variable pitch angle in stand position.
- Execution 4 (with impeller direct coupled on the shaft end) and air flow from motor to impeller.
- Asynchronous three-phase or single-phase motor according to international standards IEC34 - IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC, CE marked, B3, IP55, class F. S1 service (continuous working at constant load)

UPON REQUEST

- Impellers completely in die-cast aluminium, with variable pitch angle.

PERFORMANSE / PERFORMANCE CCP

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

Napomena: u ovom katalogu se nalazi izbor performansi ostvarljiv sa serijom CC, koji su sposobni da odgovore većini zahteva i izabrani su na osnovu odnosa cene / performanse i vremena dostave. Na zahtev, naša tehnička služba je u mogućnosti da projektuje nekoliko različitih konfiguracija i instalacija, zasnovanu na klijentovim željama.

Note: in this catalogue , a selection only of the performances obtainable with the CC series is shown, able to solve several demands and chosen to combine cost/ performances and delivery time. Upon request, our technical service is able to design several different configurations

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CCP	354	T	4	0,12	0,52	55/F	63	57
CCP	354	M	4	0,12	1,1	55/F	63	57
CCP	454	T	4	0,37	1,2	55/F	71	65
CCP	454	M	4	0,37	2,9	55/F	71	65
CCP	634	T	4	1.1	2,8	55/F	90S	73

DIAGRAMI BRZINE VAZDUHA / AIR VELOCITY DIAGRAMS

Objašnjenje dijagrama:
-Horizontalna osovina prikazuje izbacivanje vazduha.
-Vertikalna osovina prikazuje domet vazdušnog strujanja, u funkciji izbacivanja.
-Brzina strujanja je između A i H tačke velika.

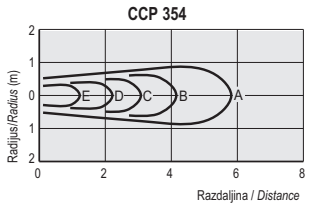
Primer:CCP634 na 8 metara
-Brzina strujanja na osovini biće 4,2 m/s (daljina 8m, radijus "0", kriva C).
- Na 1m od osovine brzina je 2,5 m/s (daljina 8m, radijus "1", kriva A)

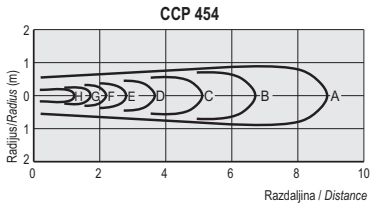
Reading of the curves:
3 The horizontal axis shows the air throw.
3 The vertical axis shows the radius of the air flow in function of the throw.
3 The air speed is highlighted on the curves with letters between A and H.

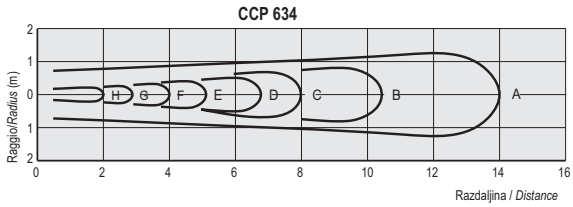
Example: the CCP 634 at 8 meters;
3 On the axis of the flow the speed will be of 4,2 m/S (distance " 8 "m, radius "0" m, curve C),
3 In the radius of 1 meter from the axis of the flow the speed will be of 2,5 m/s (distance "8" m, radius "1" m, curve A).

KRIVE CURVES	Brzina vazduha (m/s) Air speed (m/s)
A	2,5
B	3,3
C	4,2
D	5
E	5,8
F	6,7
G	7,5
H	8,3

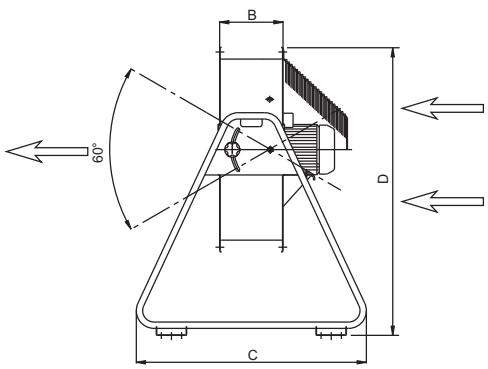
SEK.4

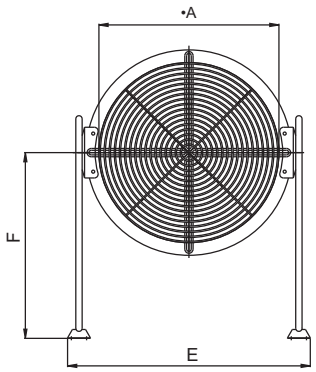






DIMENZIJE / DIMENSIONS CCP





Tip/Type	A	dB	C	D	E	F	Kg
CCP 354	355	200	630	810	595	587	24
CCP 454	455	230	630	860	705	587	32
CCP 634	635	250	874	1093	880	728	47

Dimenzije u mm/Dimensions in mm

CC-B

Aksijalni ventilatori sa mogućnošću dva cevna izvoda
Biforcated axial fans

SEK.4

OSNOVNI PODACI :

Serija CC-B je dizajnirana za transport vrućeg dima,pare,vazduha visokog stepena vlažnosti,vazduha sa većim česticama prašine,ulja-gde motor mora totalno biti odvojen od strujanja.
CC-B serija je namenjena izvlačenju vazduha iz(profesionalnih kuhinja,farbara, topionica....)itd.Lako se ugrađuju u (kanalni-cevni sistem),i lako se održavaju.Kućište je standardno sa dva oboda,i dozvoljava ugradnju oba duž kanalnog-cevnog sistema ili sa oba kraja.Pogodni su za transport vazduha do temperature od maksimalnih 200°C kontinualnog rada.

KONSTRUKCIJA :

- Kućište je izrađeno od nerđajućeg čelika sa obodima na oba kraja. Na zahtev sa, sa spoljnom terminalnom kutijom.
- Aerofolično radno kolo izrađeno od livenog aluminijuma, sa podesivim nagibnim uglom u stanju mirovanja. Glavčina izrađena od legura aluminijuma; direktno spoljena na motor.
- Trofazni ili monofazni asinhroni motori, IP55, motor klase F, 50 Hz.

DODATNI DELOVI :

- Spoljašnja terminalna kutija.
- Zaštitne rešetke.
- Fleksibilni priključci.
- Montirne nogare.
- Usmerivač vazduha.
- Prigušivač zvuka.
- Kontra obodi.

NA ZAHTEV :

- Performanse saglasne sa specifikacijama kupca.
- Specijalni napon ili frekvencija.
- Motor sa zaštitom od eksplozije Eex-d IIB T3 sa CESI sertifikacijom.

GENERAL DESCRIPTION

The Bifurcated CCB is designed for conveying hot smokes, fumes and vapours, fluids with high humidity and/or saturated by grease, oil or particles, where the motor has to be totally out of the stream.
CCB fan is dedicated to exhausting from professional kitchens, painting booths, fournaces, foundries, cooling/evaporative towers, etc.
Easy installation (in-line with ducting) and easy maintenance.
The casing is double ended with standard flanges, allowing its installation either along the ducting or at both ends. Suitable for air up to 200°C continuous running.

CONSTRUCTION

- Stainless steel casing, flanged at both ends, with outer terminal box on request.
- Aerofoil impeller in die cast aluminium, with pitch angle adjustable in still position; hub in solid aluminium alloy; directly coupled to motor.
- Asynchronous motor, three or single-phase, IP55, Class F, 50 Hz.

ACCESSORIES

- Outer terminal box.
- Safety grid.
- Flex connections.
- Mounting feet.
- Inlet cone.
- Silencers.
- Counterflanges.

UPON REQUEST

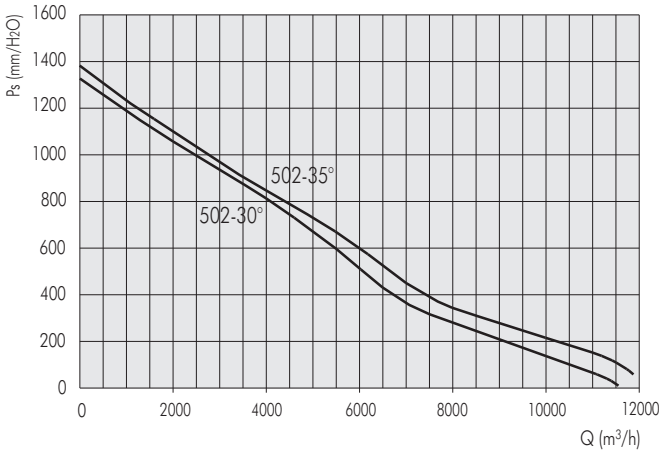
- Performances according to customer spec's
- Special voltage or frequence.
- Explosion-proof motor Eex-d IIB T3 with CESI certificate.

PERFORMANSE / PERFORMANCE CC-B

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

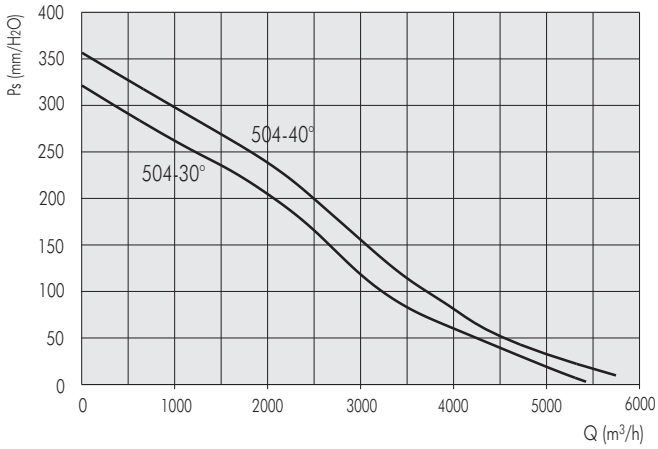
CCB 502

Tip	Model	Alim.	Poli	Pm (kW)	In max (A)	IP/CL	Gr motore (H)	Lp dB(A)
CCB	502-30°	T	2	4	8,1	55/F	100	92
CCB	502-35°	T	2	4	8,1	55/F	100	93



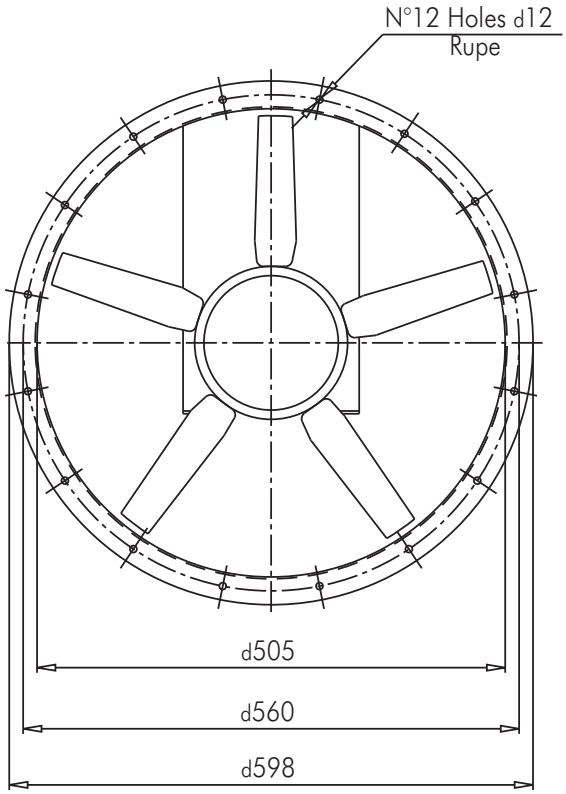
CCB 504

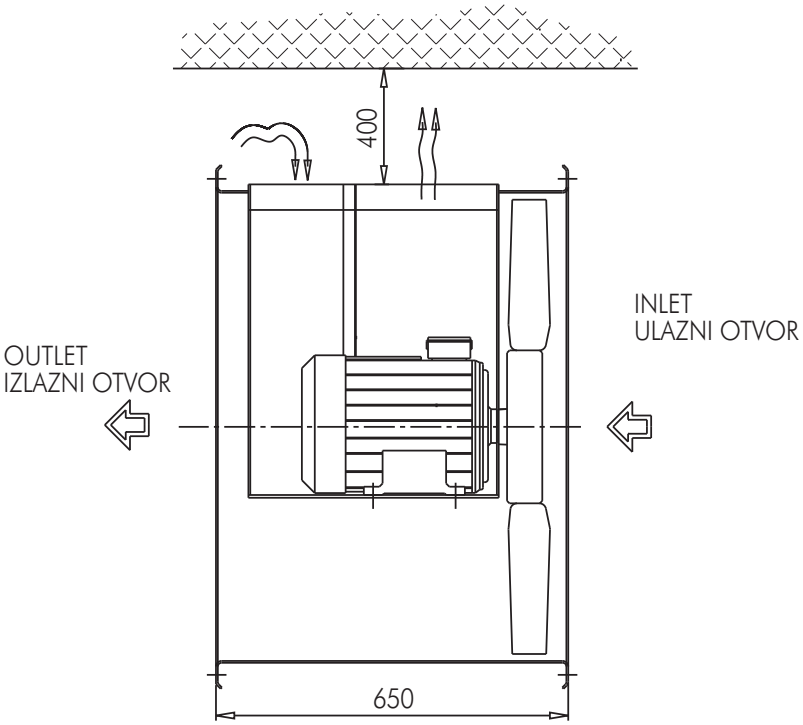
Tip	Model	Alim.	Poli	Pm (kW)	In max (A)	IP/CL	Gr motore (H)	Lp dB(A)
CCB	504-30°	T	4	0,75	2,3	55/F	80	76
CCB	504-40°	T	4	0,75	2,3	55/F	80	77



SEK. **4**

DIMENZIJE / DIMENSIONS CC-B





LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 3 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip /Type	Model /Model	Voltaža / Voltage
	CC	634/A	T

Primer/Example:	Tip/Type	Model/Model	Voltaža/Voltage
	CCT	634/A	T

Primer/Example:	Tip/Type	Model/Model	Voltaža/Voltage
	CCP	454	T

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E-mail: info@avit.co.yu www.avit.co.yu

Centrifugalni ventilatori malih dimenzija
Small size centrifugal fans

5

DIC str. 2.5

Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama

Small size forward curved blade centrifugal fans

AL str. 7.5

Centrifugalni ventilatori sa unapred zakrivljenim lopaticama

Forward curved blade centrifugal fans

F str.13.5

Centrifugalni ventilatori izrađeni od livenog aluminijuma

Radial blade centrifugal fans in aluminium

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SMALL SIZE FORWARD CURVED BLADE AND RADIAL CENTRIFUGAL FANS IN ALUMINIUM — SEK. 5

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IN LINE ACOUSTIC CENTRIFUGAL FANS AND HEAT RECUPERATOR — SEK. 13

DIC

Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama
Small size forward curved blade centrifugal fans

SEK. 5

OSNOVNI PODACI :

Centrifugalni ventilatori DIC serije su dizajnirani za transport čistog vazduha, dima bez sadržaja prašine do temperature ne više od 80 °C.Idealni su za industrijske pogone gde je potrebna manja količina transporta vazduha sa ograničenim pritiskom.
Motor je direktno spojen sa radnim kolom. Kućište je lako podesivo pod uglom od 45 , 180. 225 stepeni.

KONSTRUKCIJA :

- Kućište je izrađeno od čeličnog lima , zaštićen od spoljnih uticaja Epoxy smolom.
- Radno kolo sa unapred zakrivljenom lopaticom je izrađeno od galvanizovanog čeličnog lima.
- Model 5 (sa radnim kolom direktno spojenim na motor), rotacija LG 270 °. Trofazni ili jednofazni asinhroni motor u skladu sa IEC34-IEC72 I 89/392EEC – 89 / 336EEC-73 / 23EEC standardima, CE kvalifikovan B3/5, IP 55 zaštitom klase E . Jedino za modele DIC 100 i m : montirni tip motora B 14 , IP 44 klase B.

Pogodan je za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Zaštitna mreža za otvore na kućištu u skladu sa UNI9219- DIN31001 standardom.
- Zaštićen od spoljašnjih uticaja Epoxy smolom.Postolje motora izrađeno od čelika zaštićen Epoxy smolom od spoljašnjih uticaja.

NA ZAHTEV :

- DIC 100 sa trofaznim ili monofaznim asinhronim motorom u skladu sa internacionalnim standardima IEC34-IEC72 I 89/392EEC- 89/336EEC-73/23EEC,sa označenim formularom CE B3/5, IP 55 , klase F (DIC 100 MEC).
- Model otporan na koroziju sa kućištem, otvorom i kružnom lopaticom izrađenom od čelika AISI304 (DIC-INOX). Model pogodan za transport gasova temperature do maksimalnih 150 °C (DIC-AT).
- Model otporan na varnice , klase B u skladu sa tabelomNV105 ANIMA –COAER (DIC –AS).
- Model otporan na eksploziju sa trofaznim ili monofaznim asinhronim motorom tipa Eexd IIB T3 , u skladu sa internacionalnim standardima IEC34-IEC72- IEC79 I 89/392EEC-89/336EEC- 73- 23EEC sa CESI sertifikatom, CE kvalifikovan, IP 55 klase F (DIC- ATEX).

MONTAŽA :

Centrifugalni ventilatori u toku rada moraju biti povezani na cevni sistem , koji sa svojim otporom mogu ograničiti protok vazduha da bi dostigli apsorbovanu veličinu datu od strane motora.
U sistemu pravilno konstruisanu kao stanje podudarno radnoj tački.

GENERAL DESCRIPTION

The centrifugal fans of the DIC series are designed fo conveying clean air and not dusty smoke, up to the max. temperature of 80°C. They are installed in all industrial applications where small air volumes and limited pressures are required. The motor is directly coupled to the wheel. The casing is easily adjustable to desired discharge angle by 45° steps, including 180° and 225° positions.

CONSTRUCTION

- Volute in folded steel sheet, protected against the atmospheric agents by epoxy paint.
- Forward curved single inlet wheel (sirocco), in galvanized steel sheet, constant width.
- Execution 5 (with impeller direct coupled on flanged motor) , rotation LG270°. Three-phase or single-phase asynchronous motor according to IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC standards, CE marked Form B3/5, IP55, class F. Only for DIC 100 T and M: motor mounting type B14, IP44, class B. All suitable for S1 service (continuous working at constant load).

ACCESSORIES

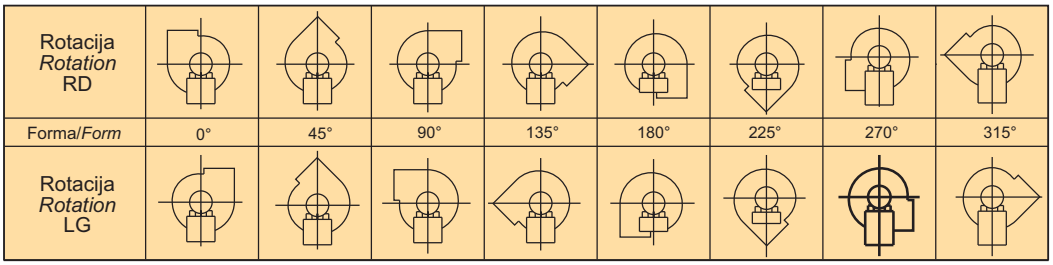
- Inlet and outlet protection guard according to UNI9219-DIN31001 standard, protected against atmospheric agents by epoxy paint.
- Motor support in steel sheet protected against atmospheric agents by epoxy paint.

UPON REQUEST

- DIC 100 with three-phase or single-phase asynchronous motor according to international standards IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC, CE marked . Form B3/5, IP55, class F (DIC 100 MEC).
- Corrosion resistant version, with case, flanges and wheel in stainless steel AISI304 (DIC-INOX) see section 10.
- Version suitable to convey hot gases, maximum 150°C (DIC-AT).
- Spark proof version, class B, according to table NV105 ANIMA-COAER (DIC-AS).
- Explosion proof version, with three-phase or single-phase asynchronous motor type EEx-d IIB T3, according to international standards IEC34-IEC72- IEC79 and 89/392EEC-89/336EEC-73/23EEC, with CESI certificate, CE marked , IP55, class F(DIC-ATEX).

INSTALLATION

The centrifugal fans with forward curved blades and radial blades must always work connected to ducts or systems, which with their resistance (for example setting shutters), can limit the air flow to reach the absorbed current values rated on the motor plate. In a system correctly projected such condition corresponds to the working point.



Važno : Standard ispuštajućeg ugla LG270° - Ispuštajući ugao 180° i 255° ne predviđa nikakvu specijalnu konstrukciju
Note: Standard discarge angles LG270° - Discharge angles 180° and 255° don't foresee any special constructions

PERFORMANSE/PERFORMANCE DIC

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

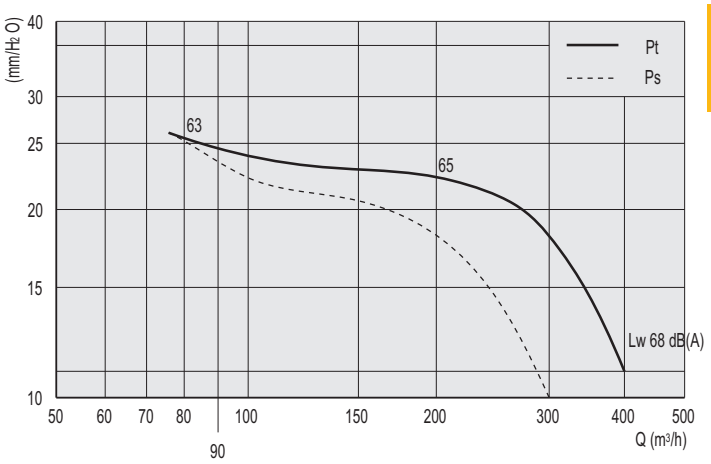
DIC 100

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC	100/2	T	2	0,05	0,17	44/B	54
DIC	100/2	M	2	0,05	0,36	44/B	54

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC	100/2	400	11	17,4	0,0064	0,0016	50

$Pd = 0{,}06218 \times (Q/22{,}98)^2$ = mm H_2O



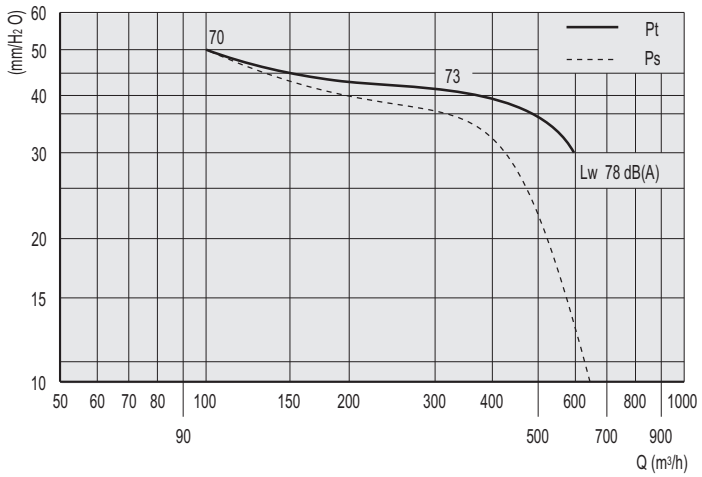
DIC 120

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC	120/2	T	2	0,25	0,78	55/F	63
DIC	120/2	M	2	0,25	1,7	55/F	63

OPERATIVNI LIMIT/OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC	120/2	600	30	16	0,0104	0,0036	63

$Pd = 0{,}06218 \times (Q/37{,}45)^2$ = mm H_2O



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

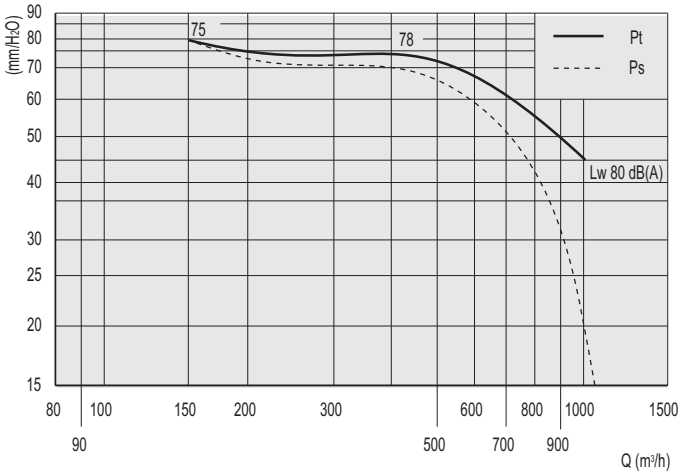
DIC 140

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC	140/2	T	2	0,37	1	55/F	68
DIC	140/2	M	2	0,37	3	55/F	68

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC	140/2	1000	45	19,9	0,014	0,0064	71

$Pd = 0,06218 \times (Q/50,13)^2 = mm\ H_2O$



SEK. 5

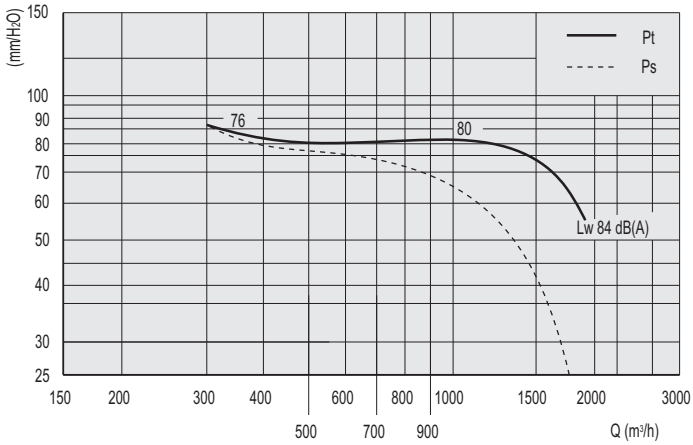
DIC 160

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC	160/2	T	2	0,75	1,9	55/F	70
DIC	160/2	M	2	0,75	5,2	55/F	70

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC	160/2	1800	55	27,4	0,018	0,0104	80

$Pd = 0,06218 \times (Q/65,61)^2 = mm\ H_2O$



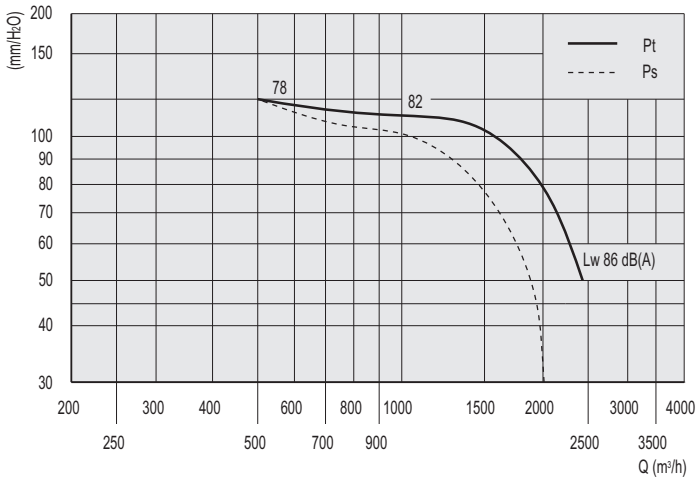
DIC 180

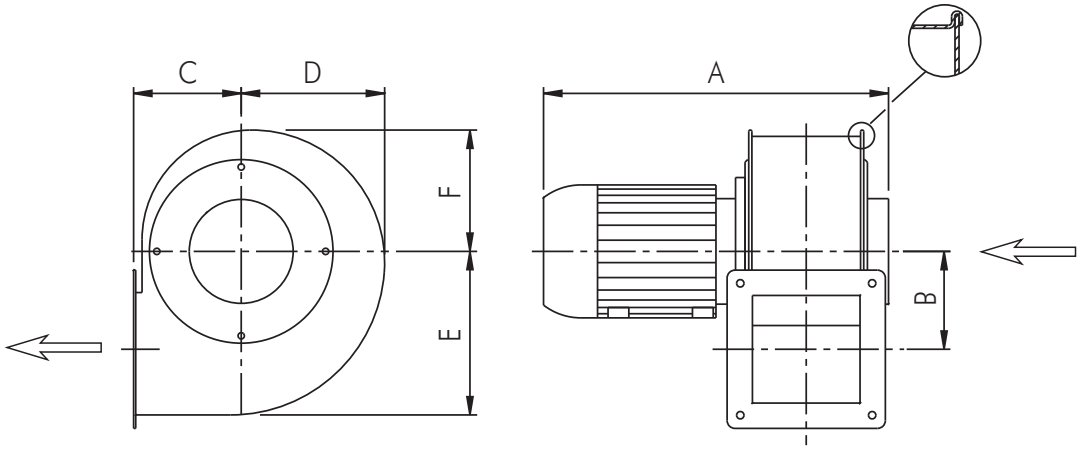
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC	180/2	T	2	1,1	2,8	55/F	72
DIC	180/2	M	2	1,1	6,2	55/F	72

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC	180/2	2400	60	30,4	0,022	0,02	80

$Pd = 0,06218 \times (Q/78,85)^2 = mm\ H_2O$

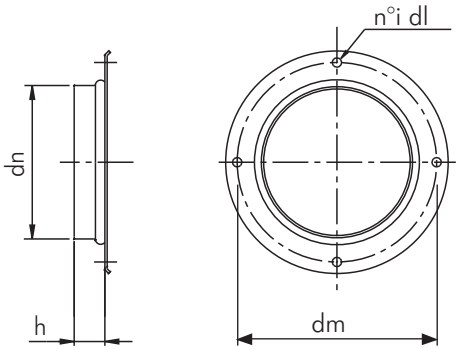




Tip/Type	A	B	C	D	E	F	Kg
DIC 100	285	82	89	112	130	99	4
DIC 120	325	97	102	137	156	116	7
DIC 140	370	115	123	158	184	136	8
DIC 160	425	132	143	175	207	148	15
DIC 180	445	140	152	200	227	171	18

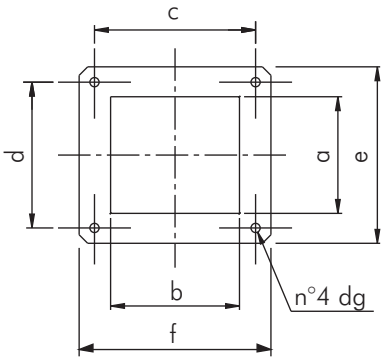
Dimenzije mm/Dimensions in mm

ULAZNI OTVOR / INLET



Tip/Type	d n	h	dm	i	dl
DIC 100	100	20	130	4	6
DIC 120	125	20	160	4	6
DIC 140	125	30	180	4	6
DIC 160	160	40	222	8	6
DIC 180	160	40	222	8	6

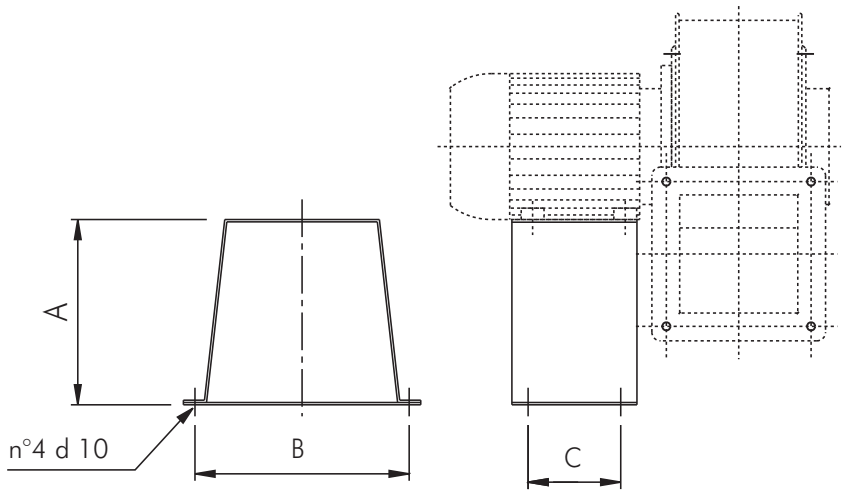
IZLAZNI OTVOR / OUTLET



Tip/Type	a	b	c	d	e	f	dg
DIC 100	76	84	105	95	115	125	6
DIC 120	102	102	125	125	150	150	7
DIC 140	118	118	148	148	175	175	8
DIC 160	135	135	165	165	195	195	8
DIC 180	148	148	180	180	210	210	8

Dimenzije u mm/Dimensions in mm

POSTOLJE MOTORA / MOTOR SUPPORT

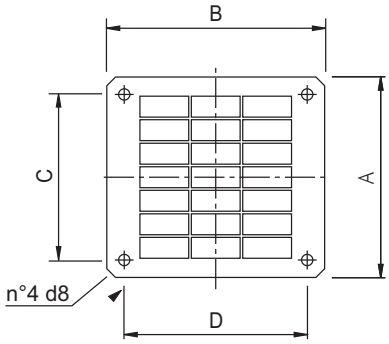


Tip/Type	A	B	C	Kg
100	120	140	71	1
120	160	185	80	1,3
140	160	185	80	2
160-180	180	230	100	2,5

Dimenzije u mm/Dimensions in mm

Važno : DIC 100 standard ne predviđa postolje motora, u slučaju potrebe iskoristiti DIC 100 MEC
Note: DIC 100 standard doesn't foresee the motor support, in case of necessity use DIC 100 MEC.

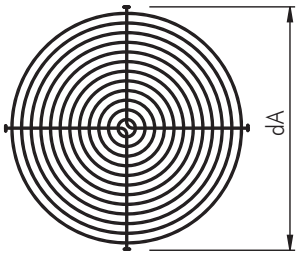
REŠETKA IZLAZNOG OTVORA/OUTLET GUARD



Tip/Type	A	B	C	D	Kg
100	115	125	95	105	0,06
120	150	150	125	125	0,12
140	175	175	148	148	0,13
160	195	195	165	165	0,15
180	210	210	180	180	0,2

Dimenzije u mm/Dimensions in mm

REŠETKA ULAZNOG OTVORA/INLET GUARD



Tip/Type	dA	Kg
100	100	0,04
120-140	125	0,06
160-180	160	0,07

Dimenzije u mm/Dimensions in mm

AL

Centrifugalni ventilatori sa unapred zakrivljenim lopaticama
Forward curved blade centrifugal fans

OSNOVNI PODACI :

AL serija ventilatora je idealna za kućne potrebe i industrijske pogone i to za ventilaciju, grejanje i održavanje stanja vazduha.
Mogu da transportuju čist vazduh i dim bez čestica prašine do maksimalne temperature od 80 °C.Serije su bazirane na osam veličina sa diametrom lopatica od 200 do 450 mm.Sve veličine su dostupne sa promenjivim uglom od 45 ° usmerivo ka 180 ° i 225 ° ,što zahteva specijalnu konstrukciju.

KONSTRUKCIJA :

- Kućište je izrađeno od čelika, zaštićeno od spoljašnjih uticaja Epoxy smolom.
- Ulazni otvor , unapred zakrivljena lopatica, izrađena je od galvanizovanog čelika tipa 200 AL 315.
U čeliku sa varenom lopaticom prefarban Epoxy smolom tipa 355 AL 450.
- Izvedba 4 (sa radnim kolom direktno povezanim na motor B3) standardnom rotacijom lg270°.
- Trofazni ili jednofazni asinhroni motor u skladu sa IEC34-IEC72 I 89/392EEC – 89 / 336EEC-73 / 23EEC standardima, CE kvalifikovan, B/3, IP 55 klase E.
Pogodan je za S1 režim (neprekidan rad pri stalnom opterećeju).

DODATNI DELOVI :

- Zaštitna mreža za otvore na kućištu u skladu sa UNI9219DIN31001standardom.
- Zaštićen od spoljašnjih uticaja Epoxy smolom.
- Zaobljeni unutrašnji adapter izrađen u čeliku i zaštićen od spoljašnjih uticaja Epoxy smolom.

NA ZAHTEV :

- Modeli sa monofaznim asinhronim motorom u skladu sa internacionalnim standardima IEC34-IEC72 I 89/336EEC- 72/23EEC, CE kvalifikovan . Montirnim tipom B3, IP 55 klase F.
- Model otporan na varnice klase C , u skladu sa tabelom NV105 ANIMA –COAER (AL – AS).
- Model otporan na eksploziju klase C, sa trofaznim ili monofaznim asinhronim motorom tip Eex- d IIB T3, u skladu sa internacionalnim normama IEC34-IEC72-IEC79 i89/392EEC- 89/ 336EEC-73/23EEC sa CESI sertifikatom ,CE kvalifikovan , IP 55 klase F (AL – ATEX).

MONTAŽA :

Centrifugalni ventilatori u toku rada moraju biti povezani na cevni sistem , koji sa svojim otporom mogu ograničiti protok vazduha da bi dostigli apsorbovanu veličinu datu od strane motora.
U sistemu pravilno konstruisanu kao stanje podudarno radnoj tački.

GENERAL DESCRIPTION

The fans of the AL series find their main application in commercial and industrial ventilation plants, heating and airconditioning. They can convey clean air and light smoke with maximum temperature of 80 °C. The series is based on 8 sizes with impeller diameter from 200 to 450 mm. All sizes are available with adjustable discharge angle at 45° steps, excluding orientations 180° and 225° which require a special construction.

CONSTRUCTION

- Volute in folded steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet, single width, forward curved blade wheel (sirocco), manufactured in galvanized steel sheet from type 200 al 315, in steel sheet with welded blade epoxy paint from type 355 al 450.
- Execution 4 (with impeller directly coupled to a pad mounted B3 motor), standard rotation LG270°.
- Three-phase or single-phase asynchronous motor according to IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC standards, CE marked. Form B3, IP55, class F. Suitable for S1 service (continuous working at constant load).

ACCESSORIES

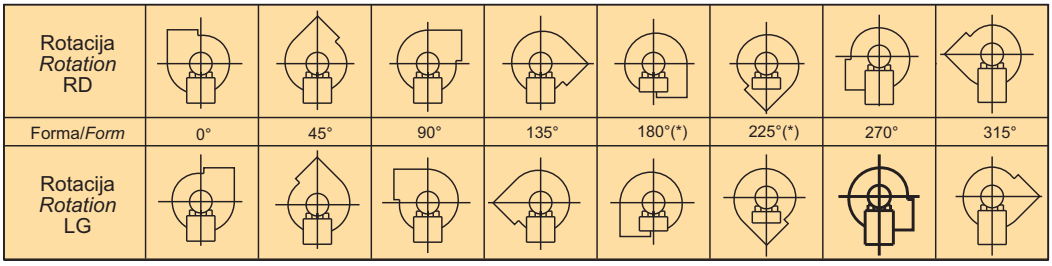
- Inlet and outlet protection guard manufactured according to UNI9219-DIN31001 standard and protected against atmospheric agents.
- Round inlet adapter, in steel sheet protected against atmospheric agents.

UPON REQUEST

- Version with single-phase asynchronous motor according to international standards IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC, CE marked . Mounting type B3, IP55, class F.
- Spark proof version, class C, according to table NV105 ANIMA-COAER (AL-AS).
- Explosion proof version, with three-phase or single-phase asynchronous motor type EEx-d IIB T3, according to international norms IEC34-IEC72- IEC79 and 89/392EEC-89/336EEC-73/23EEC, with CESI certificate and marked CE. IP55, class F (AL-ATEX).

INSTALLATION

The centrifugal fans with forward curved blades and radial blades must always work connected to ducts or systems, which with their resistance (for example setting shutters), can limit the air flow to reach the absorbed current values rated on the motor plate. In a system correctly projected such condition corresponds to the working point.



Važno : Standardni ugao ispuštanja LG270° / Note: Standard discharge angles LG270°
(*) Zahteva specijalnu konstrukciju/Request special contruction

PERFORMANSE/PERFORMANCE AL

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

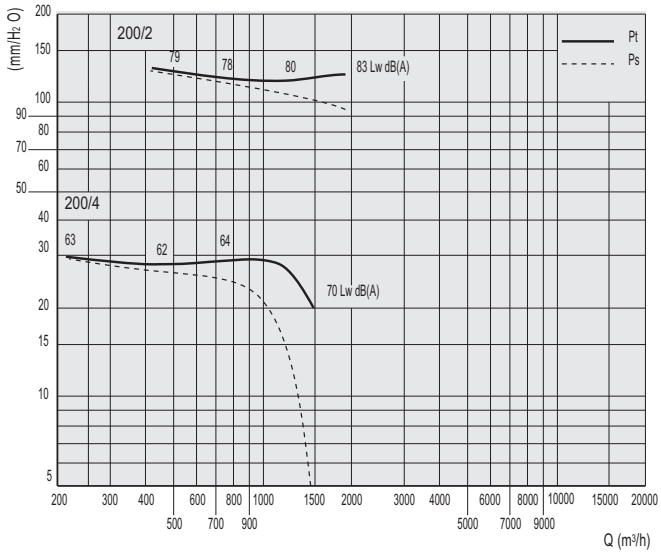
AL 200

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	200/2	T	2	1,1	2,8	55/F	75
AL	200/4	T	4	0,25	0,96	55/F	58

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	200/2	1800	116	20,6	0,0243	0,02	80
AL	200/4	1500	20	17,1	0,0243	0,02	71

$Pd = 0,06218 \times (Q/87,48)^2$ = mm H_2O



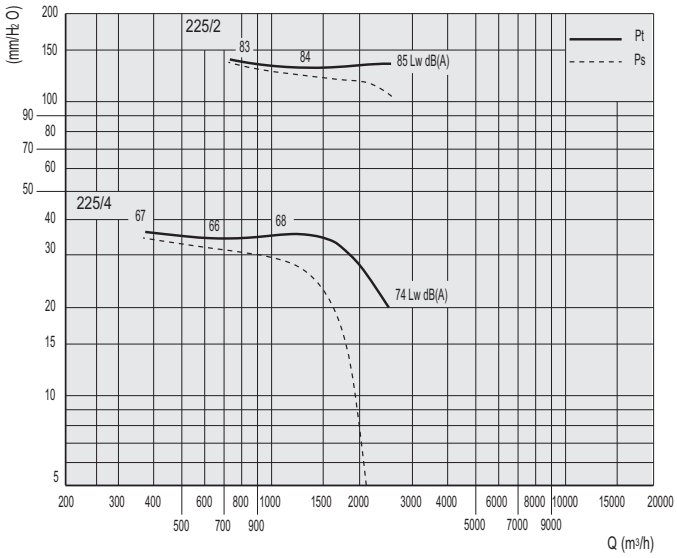
AL 225

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	225/2	T	2	2,2	5,1	55/F	77
AL	225/4	T	4	0,55	1,6	55/F	64

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^2/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	225/2	2500	130	22,4	0,0310	0,032	90L
AL	225/4	2500	20	22,4	0,0310	0,032	80

$Pd = 0,06218 \times (Q/111,6)^2$ = mm H_2O



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

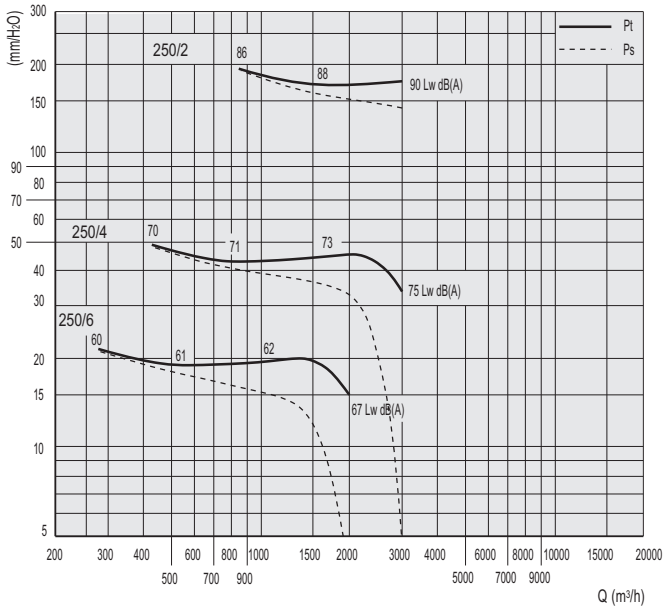
AL 250

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	250/2	T	2	3	6	55/F	80
AL	250/4	T	4	0,75	2	55/F	65
AL	250/6	T	6	0,37	1,2	55/F	56

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	250/2	3000	175	21,6	0,0385	0,072	100L
AL	250/4	3000	33	21,6	0,0385	0,072	80
AL	250/6	2000	15	14,4	0,0385	0,072	80

$Pd = 0,06218 \times (Q/138,6)^2$ = mm H_2O



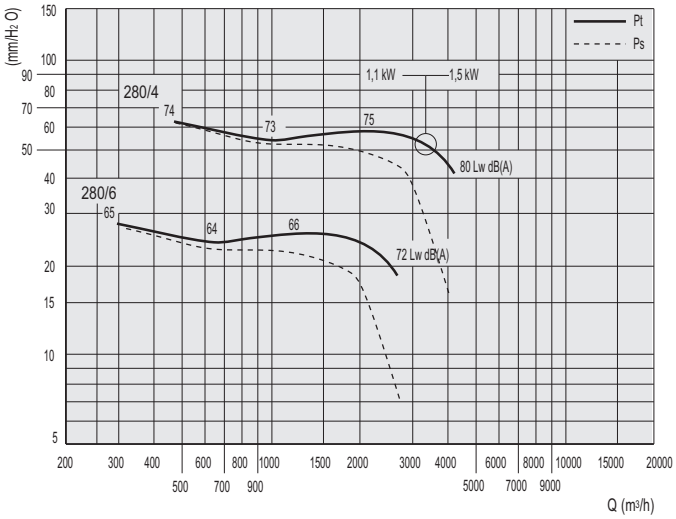
AL 280

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	280/4A	T	4	1,5	3,7	55/F	68
AL	280/4B	T	4	1,1	2,8	55/F	67
AL	280/6	T	6	0,75	2,5	55/F	59

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	280/4A	4200	42	23	0,0507	0,12	90L
AL	280/4B	3500	55	19,2	0,0507	0,12	90S
AL	280/6	2800	18	15,3	0,0507	0,12	90S

$Pd = 0,06218 \times (Q/182,52)^2$ = mm H_2O



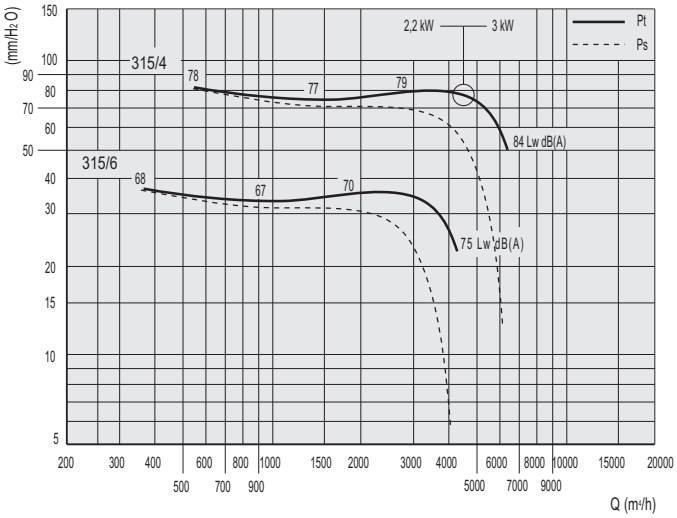
AL 315

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	315/4A	T	4	3	6,7	55/F	73
AL	315/4B	T	4	2,2	5,3	55/F	72
AL	315/6	T	6	1,1	3,4	55/F	63

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	315/4A	6500	55	28	0,0645	0,2	100L
AL	315/4B	4500	76	19,4	0,0645	0,2	100L
AL	315/6	4300	24	18,5	0,0645	0,2	90L

$Pd = 0,06218 \times (Q/232,2)^2$ = mm H_2O



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

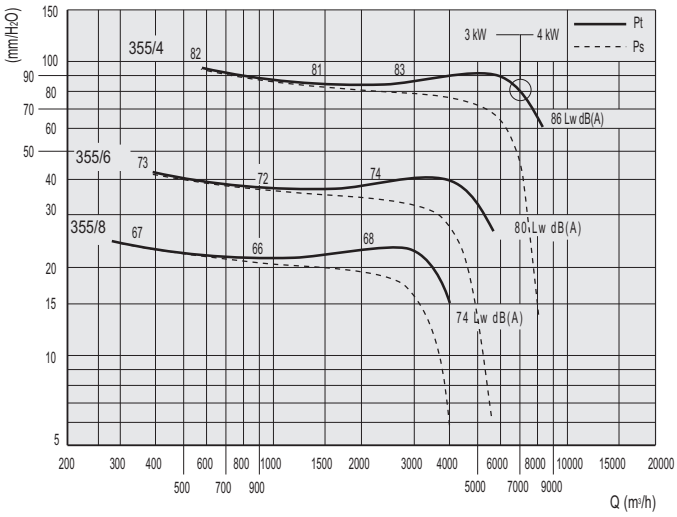
AL 355

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	355/4A	T	4	4	9,4	55/F	76
AL	355/4B	T	4	3	6,7	55/F	75
AL	355/6	T	6	1,5	4,2	55/F	67
AL	355/8	T	8	0,75	2,6	55/F	61

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	355/4A	8500	60	28,9	0,0816	0,8	112M
AL	355/4B	7000	80	23,8	0,0816	0,8	100L
AL	355/6	5700	27	19,4	0,0816	0,8	100L
AL	355/8	4250	15	14,5	0,0816	0,8	100L

$Pd = 0,06218 \times (Q/293,76)^2 = mm\ H_2O$



SEK. 5

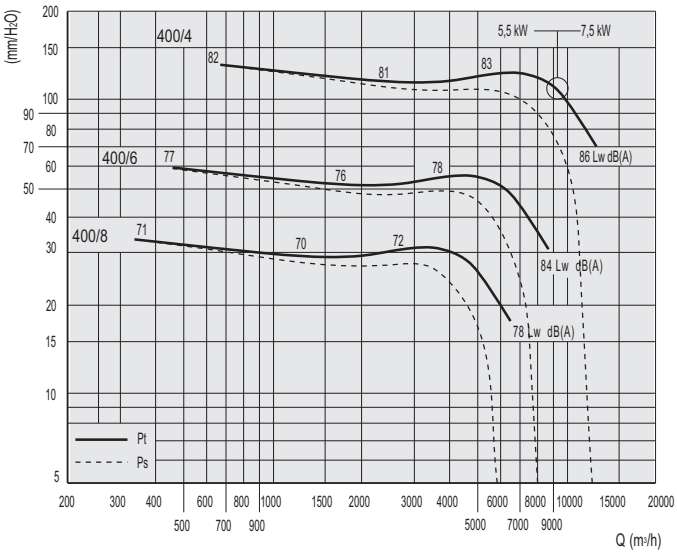
AL 400

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	400/4A	T	4	7,5	15,4	55/F	81
AL	400/4B	T	4	5,5	12	55/F	80
AL	400/6	T	6	2,2	5,3	55/F	71
AL	400/8	T	8	1,1	4	55/F	65

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	400/4A	12500	72	33,4	0,104	1,4	132M
AL	400/4B	9500	110	25,4	0,104	1,4	132S
AL	400/6	8300	32	22,2	0,104	1,4	112M
AL	400/8	6250	18	16,7	0,104	1,4	100L

$Pd = 0,06218 \times (Q/374,22)^2 = mm\ H_2O$



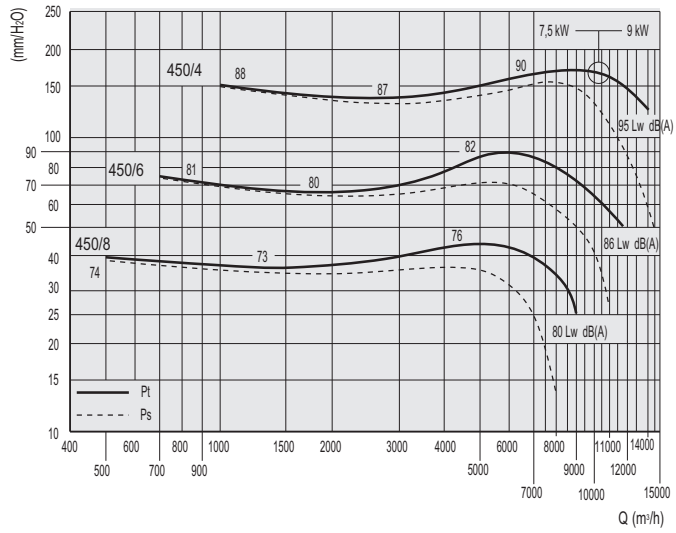
AL 450

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
AL	450/4A	T	4	9	17,3	55/F	79
AL	450/4B	T	4	7,5	15,4	55/F	78
AL	450/6	T	6	4	10	55/F	71
AL	450/8	T	8	2,2	6,8	55/F	66

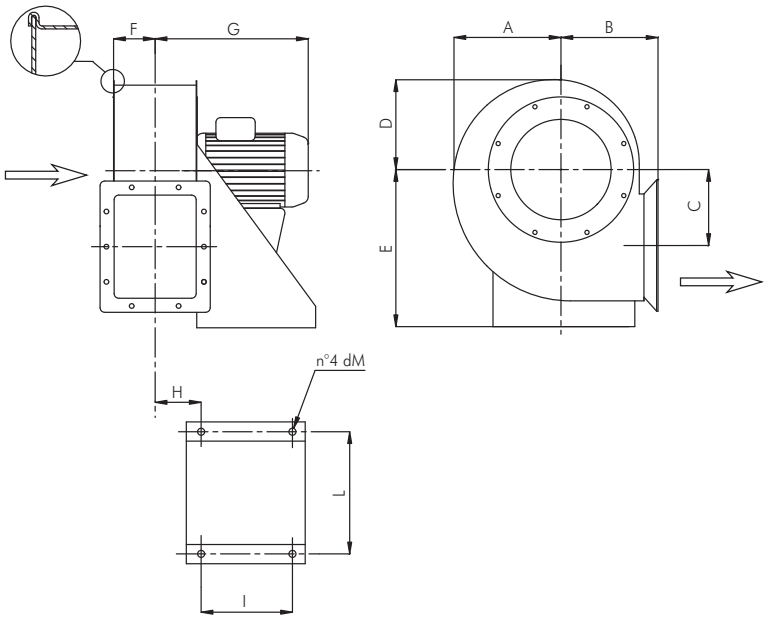
OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Tipe	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
AL	450/4A	13500	120	29	0,130	2,8	132M
AL	450/4B	10500	170	22,6	0,130	2,8	132M
AL	450/6	12000	50	25,8	0,130	2,8	132M
AL	450/8	9000	28	19,4	0,130	2,8	132S

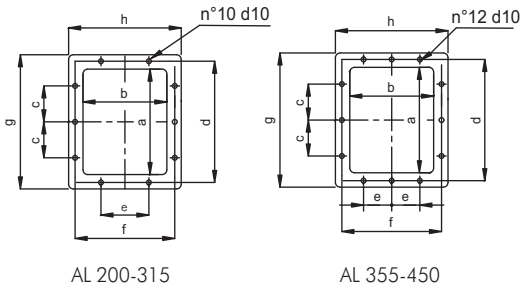
$Pd = 0,06218 \times (Q/464,40)^2 = mm\ H_2O$



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

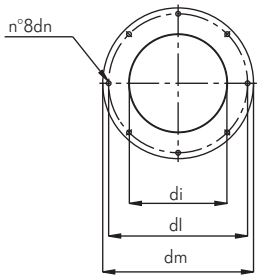


OBRUČ IZLAZNOG OTVORA/OUTLET



AL 200-315 AL 355-450

OBRUČ ULAZNOG OTVORA/INLET



SEK. 5

Tip/Type	A	B	C	D	E	F	G	H	I	L	dM	Kg
AL 200/2	183	173	120	156	280	70	340	100	140	218	12	20
AL 200/4	"	"	"	"	"	"	315	"	"	"	"	17
AL 225/2	210	190	142	175	310	80	380	110	140	218	12	29
AL 225/4	"	"	"	"	"	"	350	"	"	"	"	22
AL 250/2	231	207	162	193	335	90	440	120	205	270	12	39
AL 250/4	"	"	"	"	"	"	360	"	"	"	"	25
AL 250/6	"	"	"	"	"	"	360	"	"	"	"	21
AL 280/4	257	227	170	216	365	100	390	130	205	270	12	34
AL 280/4	"	"	"	"	"	"	420	"	"	"	"	37
AL 280/6	"	"	"	"	"	"	390	"	"	"	"	34
AL 315/4	288	250	192	244	405	110	460	140	205	319	12	48
AL 315/4	"	"	"	"	"	"	460	"	"	"	"	51
AL 315/6	"	"	"	"	"	"	430	"	"	"	"	42
AL 355/4	321	272	212	270	445	123	470	153	245	354	15	59
AL 355/4	"	"	"	"	"	"	490	"	"	"	"	67
AL 355/6	"	"	"	"	"	"	470	"	"	"	"	63
AL 355/8	"	"	"	"	"	"	470	"	"	"	"	53
AL 400/4	358	300	235	301	505	138	540	168	245	370	15	117
AL 400/4	"	"	"	"	"	"	600	"	"	"	"	131
AL 400/6	"	"	"	"	"	"	510	"	"	"	"	86
AL 400/8	"	"	"	"	"	"	490	"	"	"	"	80
AL 455/4	406	334	267	337	560	153	590	183	340	439	15	153
AL 455/4	"	"	"	"	"	"	590	"	"	"	"	143
AL 455/6	"	"	"	"	"	"	590	"	"	"	"	137
AL 455/8	"	"	"	"	"	"	550	"	"	"	"	124

Dimenzije u mm/Dimensions in mm

OBRUČ IZLAZNOG OTVORA/OUTLET

Tip/Type	a	b	c	d	e	f	g	h
AL 200	180	135	75	213	100	168	240	195
AL 225	200	155	75	233	100	188	260	215
AL 250	220	175	75	253	100	208	280	235
AL 280	260	195	100	293	125	228	320	255
AL 315	300	215	100	333	150	248	360	275
AL 355	340	240	125	373	100	273	400	300
AL 400	385	270	125	425	100	310	465	350
AL 455	430	300	150	470	100	340	510	380

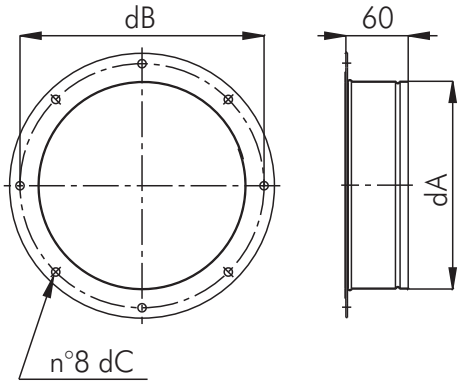
Dimenzije u mm/Dimensions in mm

OBRUČ ULAZNOG OTVORA/INLET

Tip/Type	di	dl	dm	dn
AL 200	166	235	255	M6
AL 225	189	260	280	M6
AL 250	212	290	310	M6
AL 280	242	310	340	M8
AL 315	277	335	375	M8
AL 355	304	395	425	M8
AL 400	354	445	465	M8
AL 455	404	490	520	M8

Dimenzije u mm/Dimensions in mm

CEVNI ULAZNI ADAPTER / ROUND INLET ADAPTER

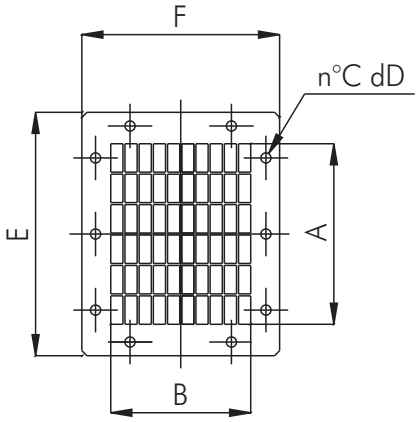


Tip/Type	dA	dB	dC	Kg
200	200	235	8	0,5
225	200	260	8	0,6
250	250	290	8	0,7
280	250	310	10	0,8
315	315	355	10	1
355	350	395	10	1
400	400	445	10	1,2
455	450	490	10	1,3

Dimenzije u mm/Dimensions in mm

SEK. 5

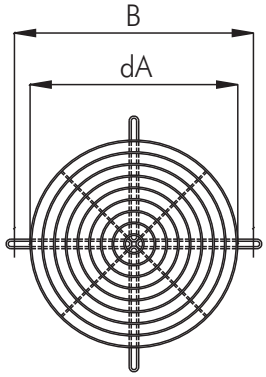
ZAŠTITA ULAZNOG OTVORA / INLET GUARD



Tip/Type	A	B	C	dD	E	F	Kg
200	178	138	10	10	240	195	0,2
225	208	166	10	10	260	215	0,3
250	238	180	10	10	280	235	0,3
280	268	208	10	10	320	255	0,3
315	298	222	10	10	360	275	0,4
355	358	236	12	10	400	300	0,6
400	388	292	12	10	465	350	0,7
455	448	320	12	10	510	380	0,8

Dimenzije u mm/Dimensions in mm

ZAŠTITA IZLAZNOG OTVORA / OUTLET GUARD

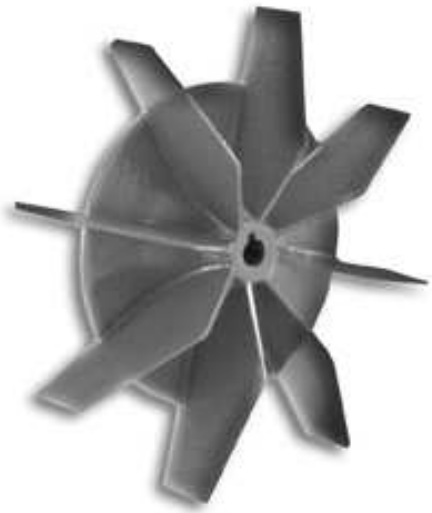


Tip/Type	dA	B	Kg
200	257	235	0,4
225	257	260	0,4
250	257	290	0,4
280	317	310	0,6
315	317	335	0,6
355	357	395	0,8
400	397	445	0,9
455	457	490	1,1

Dimenzije un mm/Dimensions in mm

F

Centrifugalni ventilatori izrađeni od livenog aluminijuma
Radial blade centrifugal fans in aluminium construction



OSNOVNI PODACI :

F serija ventilatora je dizajnirana za pogone kao što su : kovačnice, kotlarnice, laboratorije...., za transport čistog vazduha , kao i za transport slabe sadržine dima, gasova od varenja.... temperature do maksimalno 80 °C.
Nivo buke je smanjen zahvaljujući livenom jednodelnom kućištu.
Serija F se smatra otpornom na varnice tipa A u skladu sa tabelom NV105 ANIMA – COAER.

KONSTRUKCIJA :

- Kućište je izrađeno od aluminijuma livenog pod pritiskom.
Fiksirni deo integrisan kućištu sa promenom položaja do 270°.
- Radialno radno kolo sa lopaticama od livenog aluminijuma.
- Trofazni ili monofazni asinhroni motor u skladu sa IEC34- IEC72 I 89/392EEC - 89/336EEC -73/23EEC standardima,CE kvalifikovan,montirni tip B3/5, IP 55 klase F. Pogodan je za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Zaštitna mreža za otvore na kućištu u skladu sa UNI9219- DIN31001 standardom.
- Zaštićen od spoljašnjih uticaja Epoxy smolom.

NA ZAHTEV :

- Model za transport vrelog dima , maksimalne temperature do 150 °C (F- AT).
- Model otporan na eksploziju klase C, sa trofaznim ili monofaznim asinhronim motorom tipa Eex- d IIB T3, u skladu sa internacionalnim normama IEC34-IEC72- IEC79 i 89/ 392EEC- 89/ 336EEC- 73/23EEC sa CESI sertifikatom ,CE kvalifikovan, IP 55 klase F (F– ATEX).

GENERAL DESCRIPTION

The F series is particularly designed for air supply of forges, furnaces, air curtains, burners, little air blades, exhaust of welding smoke, etc.. This series is suitable for dusty air (not abrasive) with maximum temperature of 80°C. The noise level is particularly reduced thanks to the thickness of the one-piece casting. The series F can be considered a spark proof construction type "A" according to the table NV105 ANIMA-COAER.

CONSTRUCTION

- Volute in die-cast aluminium. Fixing feet integral to the casing, with orientation RD 270°.
- Single inlet, open blade, radial impeller, in die-cast aluminium.
- Execution 5 (with impeller directly coupled to a flanged motor), with orientation RD 270°.
- Three-phase or single-phase asynchronous motor according to IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC standards, CE marked. . Mounting type B3/5, IP55, class F. Suitable for S1 service (continuous working at constant load).

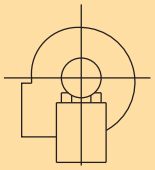
ACCESSORIES

- Inlet protection guard manufactured according to UNI9219-DIN31001 norms and protected against atmospheric agents.

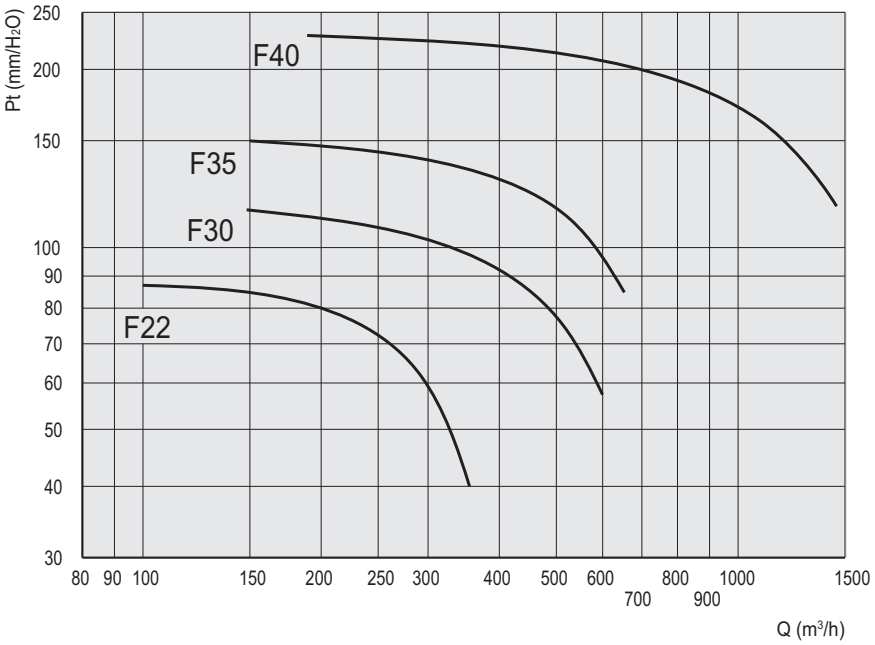
UPON REQUEST

- Version for hot smoke, maximum 150°C (F-AT).
- Explosion proof version , with three-phase or single-phase asynchronous motor type EEx-d IIB T3, according to international standards IEC34-IEC72- IEC79 and 89/392EEC-89/336EEC-73/23EEC, with CESI certificate, CE marked , IP55, class F (F-ATEX).

UGLOVI ISPUŠTANJA/DISCHARGE

Rotacija *Rotation* RD	
Forma/*Form*	270°

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



F 22

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
F	22	T	2	0,18	0,58	44/B	50
F	22	M	2	0,18	1,28	44/B	50

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
F	22	350	40	25,27	0,0145	0,06	63

$Pd = 0{,}06218 \times (Q/52{,}2)^2 = mm\ H_2O$

F 30

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
F	30	T	2	0,25	0,78	55/F	52
F	30	M	2	0,25	1,7	55/F	52

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
F	30	600	57	30,08	0,0222	0,13	63

$Pd = 0{,}06218 \times (Q/79{,}92)^2 = mm\ H_2O$

F 35

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
F	35	T	2	0,37	1	55/F	55
F	35	M	2	0,37	3	55/F	55

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
F	35	650	85	36,84	0,0201	0,18	71

$Pd = 0{,}06218 \times (Q/72{,}36)^2 = mm\ H_2O$

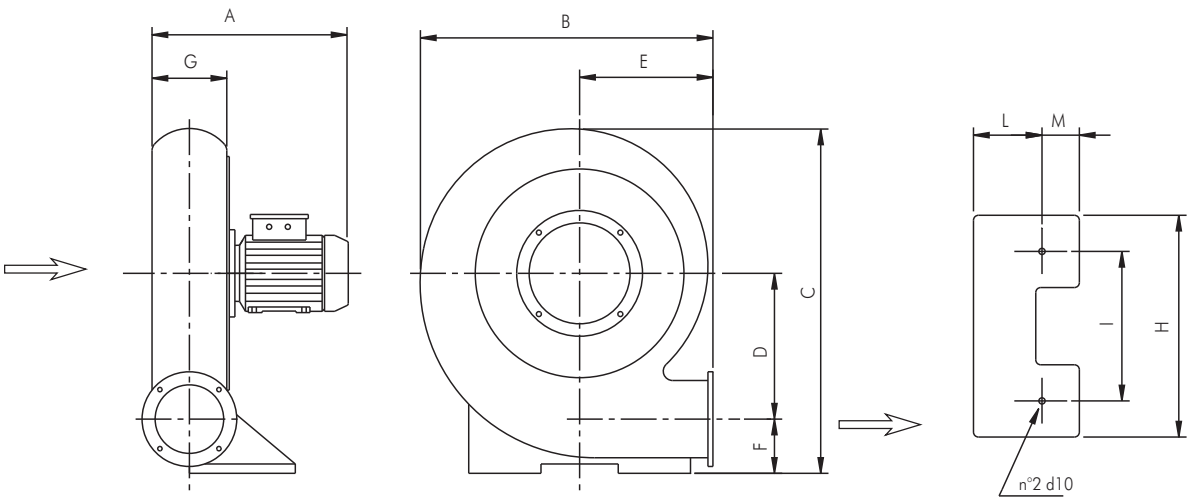
F 40

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
F	40	T	2	1,1	2,8	55/F	60
F	40	M	2	1,1	6,2	55/F	60

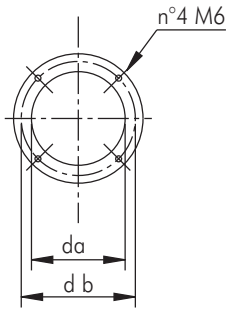
OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
F	40	1450	116	42,44	0,038	0,32	80

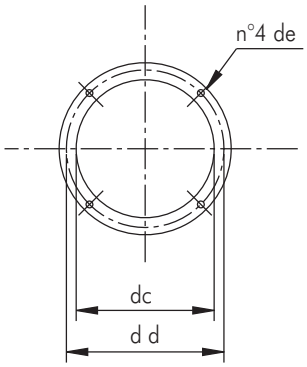
$Pd = 0{,}06218 \times (Q/136{,}8)^2 = mm\ H_2O$



IZLAZNI OTVOR / OUTLET



ULAZNI OTVOR / INLET



Tip/Type	A	B	C	D	E	F	G	H	I	L	M	da	d b	dc	d d	de	Kg
F 22	280	297	340	135	140	60	105	200	155	65	37	68	96	90	105	M6	10
F 30	300	346	400	166	152	64	128	218	173	70	50	84	96	113	128	M6	12
F 35	320	422	475	204	193	68	140	238	200	88	52	80	109	126	140	M6	15
F 40	362	470	538	221	214	85	185	356	240	110	60	110	134	162	185	M8	38

Dimenzije u mm/Dimensions in mm

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
Cl = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
Cl = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga/Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak/Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage	Rotacija / Rotation
	DIC	120/2	T	LG 270°

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage	Rotacija / Rotation
	AL	280/4	T	LG 270°

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	F	30	T

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fax (++39) 030 9913766
E-mail dynair@dynair.it - www.dynair.it
Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

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E-mail: info@avit.co.yu www.avit.co.yu

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama

Backward curved blade centrifugal fans

6

SQ

str. 2.6

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport čistog vazduha
Backward curved blade centrifugal fans for clean air

PR-L

str. 6.6

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport čistog ili delimično prljavog vazduha.
Backward curved blade centrifugal fans for clean or slightly dusty air

PS-L

str. 25.6

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport prljavog vazduha
Backward curved blade centrifugal fans for dusty air

PV-L

str. 43.6

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport prljavog vazduha
Backward curved blade centrifugal fans for dusty air

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SQ

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport čistog vazduha
Backward curved blade centrifugal fans for clean air

SEK. 6

OSNOVNI PODACI:

Pogodan je za transport čistog i delimično prljavog vazduha, temperature do maksimalnih 80 °C.Bitna karakteristika SQ serije ventilatora je da su četvorougaone konstrukcije , što omogućuje promenu položaja od (0 °- 90°-180°- 270°).
Dimenzija je redukovana zahvaljujući izostanku postolja motora.

KONSTRUKCIJA :

- Četvorougaono kućište izrađeno je od galvanizovanog čelika.
- Radno kolo sa unazad zakrivljenim lopaticama velike efikasnosti i jednim otvorom izrađeno od galvanizovanog čelika ,glavčina izrađena od pod pritiskom livenog aluminiuma.
- Izvedba 5 (sa radnim kolom direktno spoljenim na obod motora koji je podržan od strane kućišta), rotacija – promena položaja RD.
- Asinhroni trofazni ili monofazni motor u skladu sa IEC34- IEC72- 89/392 EEC- 89/336 EEC- 73/23 EEC standardima, CE kvalifikovan, IP 55 zaštitom klase F ,B5.
Pogodan je za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Spoljašnja i unutrašnja zaštitna rešetka izrađena u skladu sa UNI9219-DIN31001 standardima ,zaštićeni od spoljašnjih uticaja.

NA ZAHTEV :

- Model otporan na varnice klase B , u skladu sa tabelom NV105 ANIMA – COAER (SQ – AS).
- Model sa dve brzine (SQ- 2V)
- Model za izdvajanje dima, pogodan za transport čistog vazduha na temperaturi od 400 °C kroz 2 sata.
Pogledati u sekciji 11 (SQ – HT).

GENERAL DESCRIPTION

Suitable for conveying clean or slightly dusty air, up to the maximum temperature of 80°C. The main characteristic of the SQ series is the quadrangular construction, which allows to obtain four orientations (0°-90°-180°-270°) with the same fan. The dimensions are reduced thanks to the absence of the motor support.

CONSTRUCTION

- Volute with quadrangular sides, manufactured in galvanized steel sheet.
- Single inlet, backward curved wheel with high efficiency, manufactured in galvanized steel sheet and die-cast aluminium hub.
- Execution 5 (with impeller directly coupled to a flanged motor, supported by the case), rotation RD.
- Asynchronous three-phase or single-phase motor according to IEC34-IEC72 - 89/392 EEC - 89/336 EEC - 73/23 EEC standards, marked CE, IP55, class F, B5. Suitable for S1 service (continuous running at constant load).

ACCESSORIES

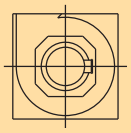
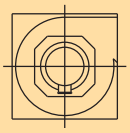
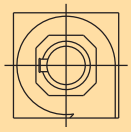
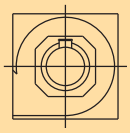
- Inlet and outlet protection guards manufactured according to UNI9219-DIN31001 standards and protected against atmospheric agents.

UPON REQUEST

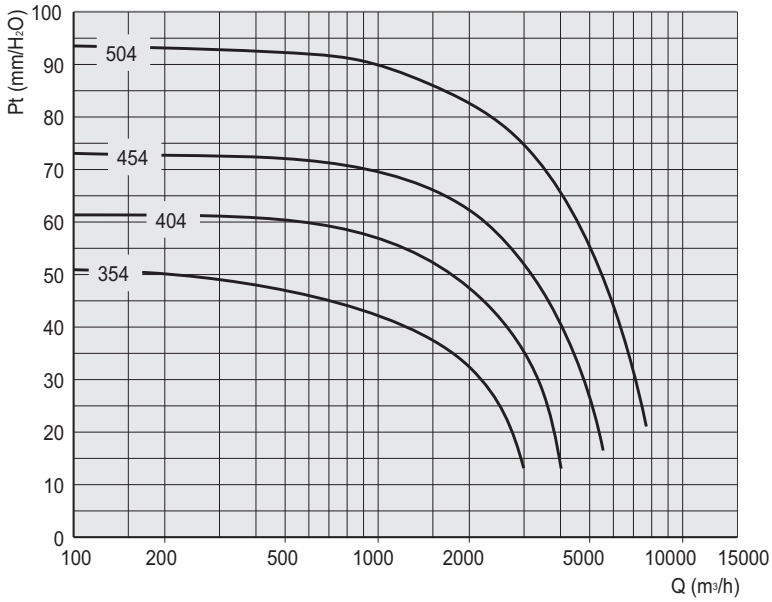
- Spark proof version, class B, according to table NV105 ANIMA-COAER (SQ-AS).
- Two speed version (SQ-2V).
- Smoke extract version, suitable for exhausting clean air with temperature of 400°C for 2 hours. See section 11 (SQ-HT).

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

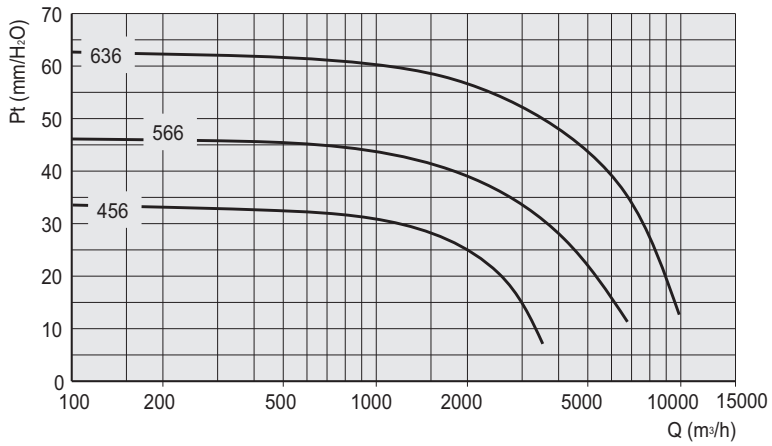
SQ

Rotacija *Rotation* RD				
Forma/*Form*	0°	90°	180°	270°

4 pola/poles



6 pola/poles



SEK.6

SQ 35

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	354	M	4	0,25	2,4	55/F	71	60
SQ	354	T	4	0,25	0,96	55/F	71	60

$Pd = 0{,}06218 \times (Q/209)^2 = mm\ H_2O$

SQ 40

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	404	M	4	0,37	2,9	55/F	71	62
SQ	404	T	4	0,37	1,2	55/F	71	62

$Pd = 0{,}06218 \times (Q/279{,}2)^2 = mm\ H_2O$

SQ 45

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	454	M	4	0,75	5,2	55/F	80	64
SQ	454	T	4	0,75	2	55/F	80	64
SQ	456	T	6	0,37	1,2	55/F	80	54

$Pd = 0{,}06218 \times (Q/343{,}4)^2 = mm\ H_2O$

SQ 50

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	504	T	4	1,1	2,8	55/F	90S	66

$Pd = 0{,}06218 \times (Q/400)^2 = mm\ H_2O$

SQ 56

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	566	T	6	0,55	1,8	55/F	80	60

$Pd = 0{,}06218 \times (Q/518{,}4)^2 = mm\ H_2O$

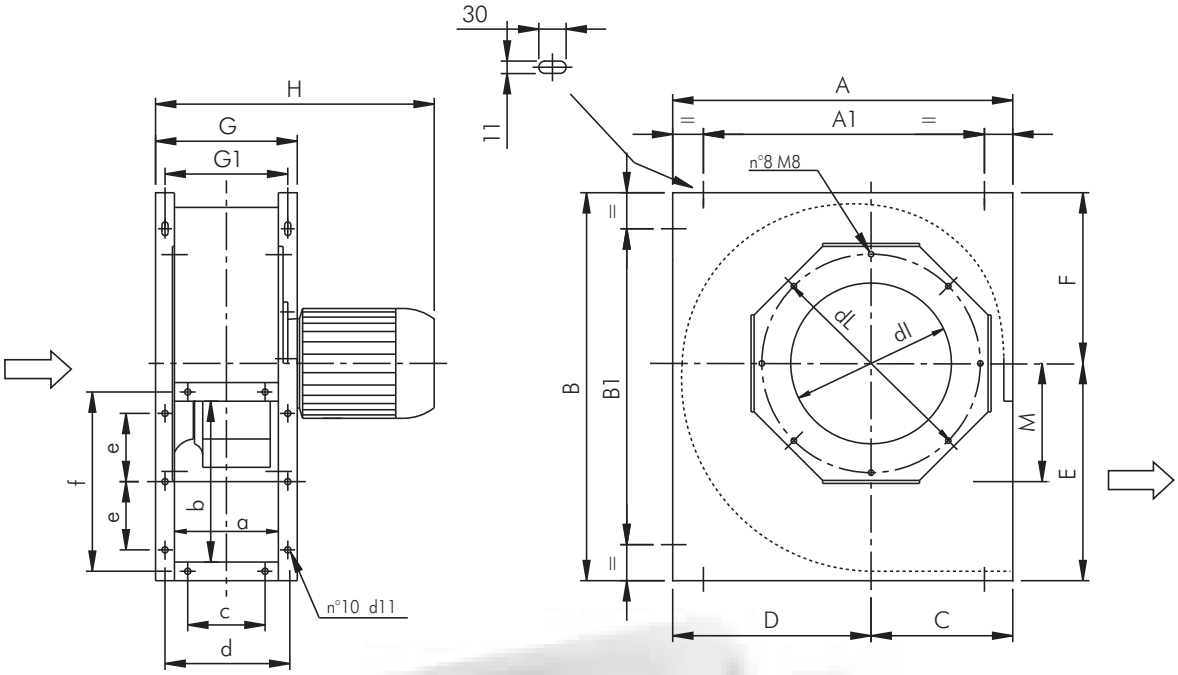
SQ 63

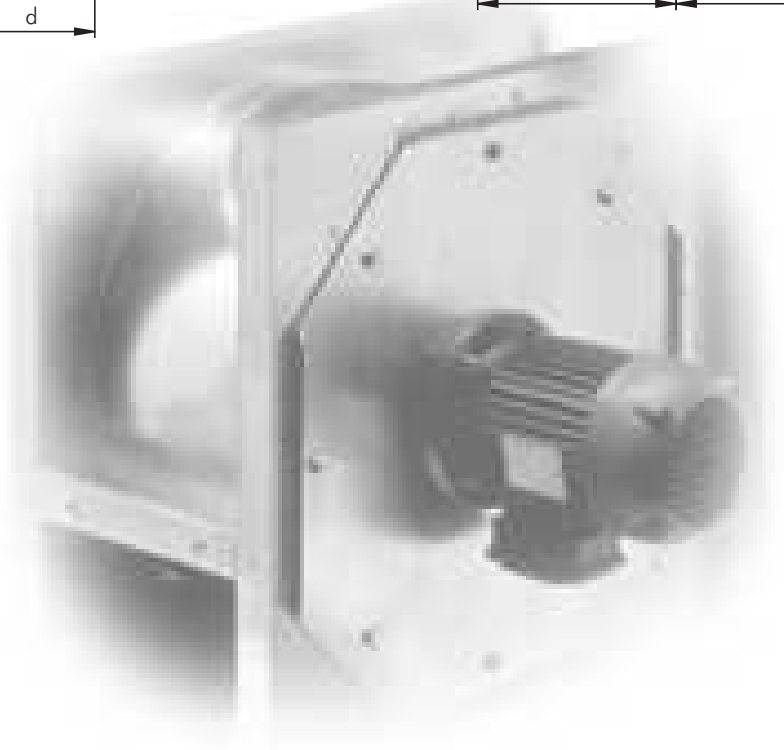
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	636	T	6	1,1	3,4	55/F	90L	63

$Pd = 0{,}06218 \times (Q/679{,}3)^2 = mm\ H_2O$

Tip/Type	A	A1	B	B1	C	D	E	F	G	H	dl	dL	M	a	b	c	d	e	f	Kg
SQ 35	620	520	650	550	295	325	370	280	285	470	230	420	178	215	315	140	250	130	350	40
SQ 40	680	580	790	690	280	400	450	340	305	490	265	450	238	235	350	160	270	140	385	50
SQ 45	740	580	880	720	305	435	490	390	335	550	285	500	261	265	382	180	300	150	417	65
SQ 50	820	660	960	800	340	480	525	435	355	610	330	555	281	285	415	200	320	160	450	82
SQ 56	890	730	1040	880	370	520	590	450	400	650	370	615	312	320	472	220	360	180	512	100
SQ 63	910	750	1100	940	410	500	640	460	450	700	435	690	333	370	532	260	410	200	572	125

Dimenzije u mm/Dimensions in mm





SEK. 6

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 3 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga/Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak/Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	SQ	504	T

Tel. (++39) 030 9913575 (5 linee r.a.)
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Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

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E-mail: info@avit.co.yu www.avit.co.yu

PR-L

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport čistog i delimično prljavog vazduha

Backward curved blade centrifugal fans for clean or slightly dusty air

OSNOVNI PODACI :

Ventilatori PR- L serije su našli svoju primenu u stambenim i industrijskim pogonima za : ventilaciju, grejanje, prečišćavanje-filtraciju vazduha.Pogodni su za: pekare,staklenike,silose, kotlarnice.... PR- L ventilatori služe za transport čistog ili delimično prljavog vazduha , pri maksimalnoj temperaturi do 80 °C u standardnoj verziji , i 300 °C u specijalno konstruisanoj verziji.Serija podrazumeva verziju na direktan pogon (izvedba 4.) i verziju na remeni pogon (izvedba 1,9,12).

KONSTRUKCIJA :

- Kućište je izrađeno od čelika , zaštićeno od spoljašnjih uticaja Epoxy smolom.
- Aerodinamično oblikovana spoljna kupa je izrađena od čelika, zaštićena od spoljašnjih uticaja Epoxy smolom.
- Radno kolo sa unazad zakrivljenim lopaticama izrađeno od čelika i premazano Epoxy smolom.
Za veću brzinu predviđena je verzija 3.
- Mono blok sa kugličnim ležajima- izvedba 1-9-12, izrađen od livenog gvožđa,tako dizajniran radi boljeg samo podmazivanja.
- Trofazni asinhroni motor u skladu sa IEC34- IEC72- 89/392 EEC- 89/336 EEC- 73/23 EEC standardima, označenim formularom CE, IP 55 zaštitom klase E. Pogodan je za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Odvodni kanal kondenzata
- Kontrolna vrata
- Suprotan bok ulaznog otvora
- Suprotan bok izlaznog otvora
- Zaštita ulaznog otvora
- Ulazne fleksibilne veze
- Izlazne fleksibilne veze
- Kontrola lopatice ulaznog otvora
- Spoljašnji progušivač
- Antivibracioni okvir
- Remeni pogon za izvedbu 1-9-12, uključujući remenicu, kaiš i postolje motora.
- Štitnik kaiša motora.
- Osnovni horizontalni okvir za izvedbu 12
- Okretna potpora motora za izvedbu 9.

NA ZAHTEV :

- Model za transport vrelog gasa do temperature maksimalno 150°C. (PR-I / AT es 4)
- Model za transport vrelog gasa do temperature maksimalno 300°C. (PR-I / AT es 1-12)
- Model otporan na koroziju , izrađen sa kućištem od čelika,ulazni otvor i lopatice od nerđajućeg čelika AISI304 (PR-L / INOXA- A)
- Model otporan na varnice klase C u skladu sa tabelom NV105 ANIMA – COAER (PR-L / AS)
- Model otporan na eksploziju sa trofaznim ili monofaznim asinhronim motorom Eex- d IIB T3, u skladu sa internacionalnim standardima IEC34-IEC72 – IEC79 I 89/392 EEC – 89/336 EEC – 73/23 EEC , sa CESI sertifikatom,CE kvalifikovan, IP 55 zaštitom klase F (PR- L /ATEX)

GENERAL DESCRIPTION

The fans of the PR-L series find their main application in commercial and industrial plants of airconditioning, ventilation, heating and filtering; they can be used as well in industrial processing (baker ovens, spray booths, driers, boilers, silos, cooling systems, etc.). PR-L fans can convey clean or slightly dusty air with max. temperature of 80°C in standard configuration and 300°C in special construction. The series foresees direct drive version (execution 4) and belt drive version (execution 1, 9 and 12).

CONSTRUCTION

- Volute in steel sheet , protected against atmospheric agents by epoxy paint.
- Aerodynamically shaped inlet cone in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet backward curved wheel with high efficiency, manufactured in steel sheet and epoxy painted. For higher speed, versions in class 3 are foreseen.
- Mono-block support with ball bearings, for execution 1 - 9 - 12, in cast iron, designed for easy lubrication.
- Three-phase asynchronous motor according to IEC34-IEC72 - 89/392 EEC - 89/336 EEC - 73/23 EEC standards, marked CE, IP55, class F. Suitable for S1 service (continuos running at constant load).

ACCESSORIES

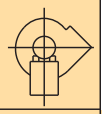
- Condensation drain hole.
- Inspection door.
- Inlet counter-flange.
- Outlet counter-flange.
- Inlet protection guard.
- Inlet flexible connection.
- Outlet flexible connection.
- Inlet vane control.
- Outlet damper.
- Antivibration mounts.
- Belt drive kit for execution 1-9-12, including pulleys, belts and motor slides. Belt protection guard.
- Baseframe for execution 12.
- Swing motor support for execution 9.

UPON REQUEST

- High temperature version suitable for conveying hot gases, max 150°C (PR-L/AT es. 4).
- High temperature version suitable for conveying hot gases, max 300°C (PR-L/AT es. 1-12).
- Corrosion resistant version, manufactured with casing, inlet side and impeller in stainless steel AISI304 (PR-L/INOX-A).
- Spark proof version, class C, according to table NV105 ANIMA-COAER (PR-L/AS).
- Explosion proof version, with asynchronous three-phase or single-phase motor
EEx -d IIB T3, according to international standards IEC34-IEC72 - IEC79 and 89/392 EEC-89/336EEC-73/23 EEC, with CESI certificate and marked CE, IP55, class F (PR-L/ATEX).

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

PR-L

Rotacija Rotation RD								
Forma-Form	0	45	90	135	180(*)	225(*)	270	315
Rotacija Rotation LG								
Visina-Height	E1				E2		E3	

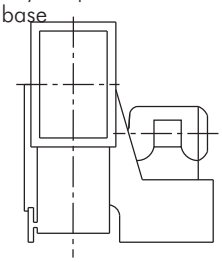
Važno: Standardna orijentacija LG270°/Standard orientation LG270°
(*) Zahteva specijalnu konstrukciju / Request special construction

IZVEDBE / EXECUTIONS

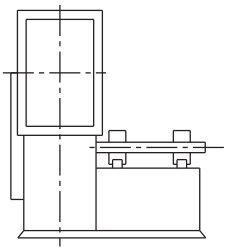
PR-L

4: Radno kolo direktno spoljeno na motor fiksirano od strane nosača motora.

4: Impeller directly coupled to the motor supported by the motor support base.

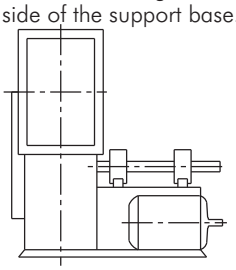


1: Aranžman za remeni pogon sa radnim kolom povezanim na osovinu, fiksiran od strane postolja motora.
1: Arrangement for belt drive with impeller directly coupled to the support shaft carried by the motor support base.

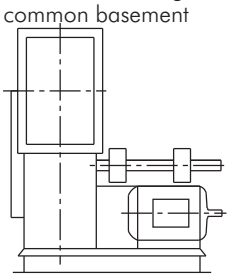


9: Isti slučaj kao kod primera 1. sa aranžmanom za motor montiranog sa strane i na postolje ventilatora.

9: same as execution 1 with arrangement for the motor assembled on the side of the support base.



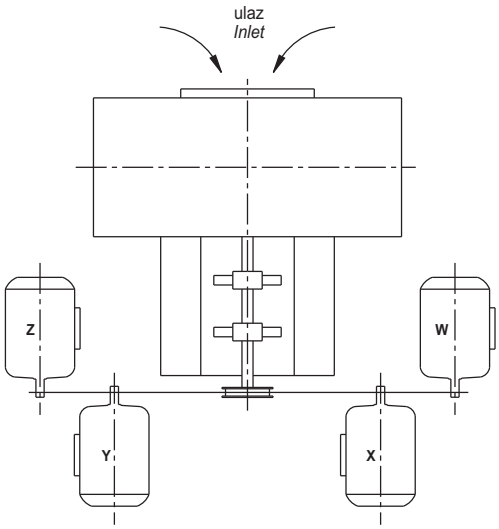
12: Isti slučaj kao kod primera 1. sa aranžmanom za lopaticu i motor montirane na donji deo postolja ventilatora
12: same as execution 1 with arrangement for fan and motor mounted on common basement



SEK.6

POZICIJA MOTORA / MOTOR POSITION

PR-L



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 31 (aranžman 4/arrangement 4)

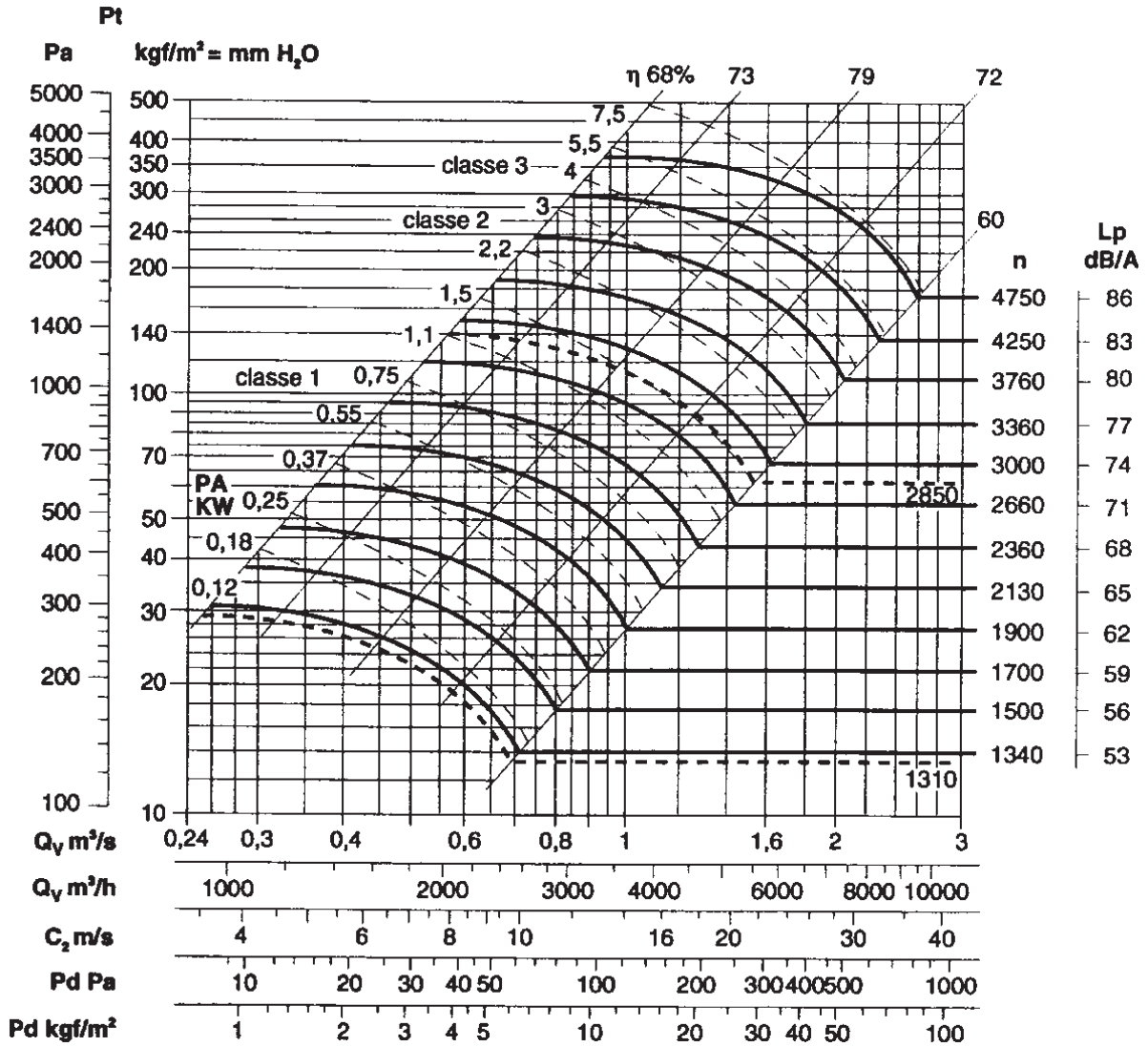
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	314	T	4	0,18	0,65	55/F	57
PR-L	312	T	2	2,2	5,1	55/F	76

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	314	2700	-	0,074	0,32	63
PR-L	312	5400	-	0,074	0,32	90

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	3100	3950	-	Standard
90°C - 200°C Es. 1-9-12	2800	3500	4500	vis.temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	2500	3150	4000	vis. temperatura/High temperature (PR-L-AT)



SEK. 6

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 35 (aranžman 4/arrangement 4)

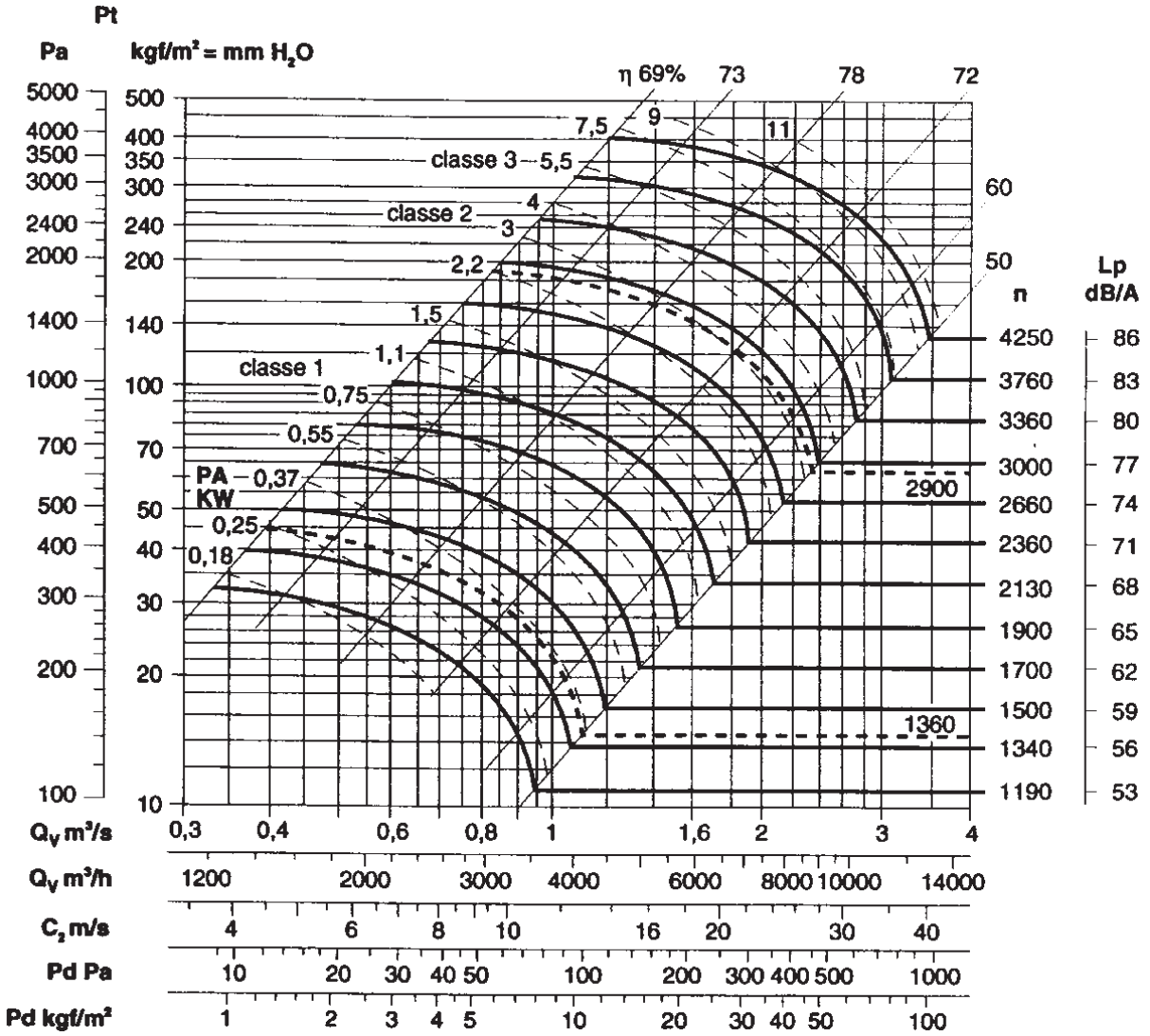
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	354	T	4	0,37	1,2	55/F	60
PR-L	352	T	2	3	6,0	55/F	79

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	354	3850	11,6	0,092	0,52	71
PR-L	352	7650	23,0	0,092	0,52	100

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	2800	3500	4520	Standard
90°C - 200°C Es. 1-9-12	2500	3150	4000	vis.temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	2250	2800	3520	vis.temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 40 (aranžman 4/arrangement 4)

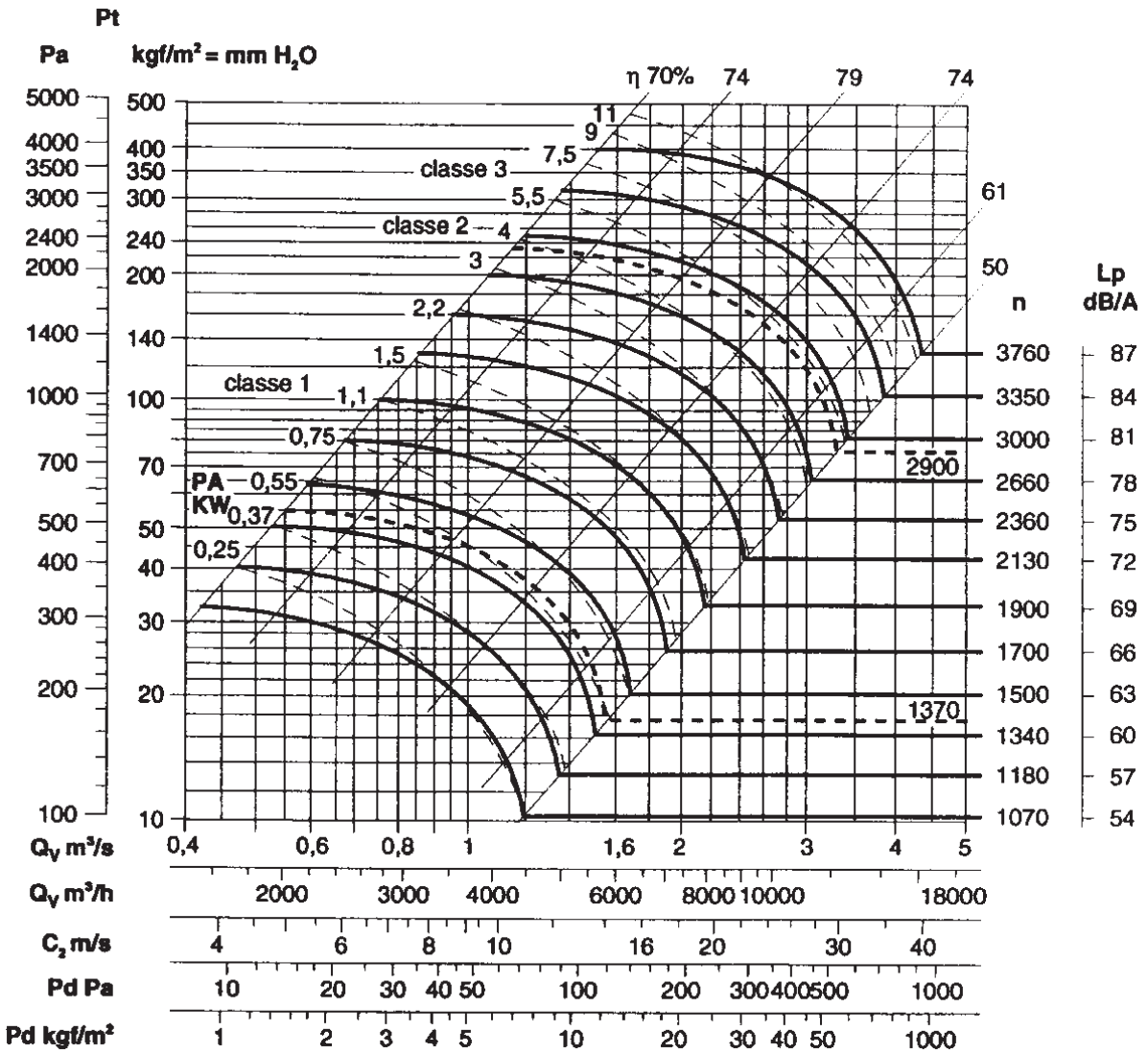
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	404	T	4	0,55	1,6	55/F	64
PR-L	402	T	2	5,5	11,6	55/F	84

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	404	5400	12,9	0,116	1,1	80
PR-L	402	12000	28,7	0,116	1,1	132

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	2840	3150	4000	Standard
90°C - 200°C Es. 1-9-12	2250	2800	3550	vis.temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	2000	2480	3170	vis.temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 45 (aranžman 4/arrangement 4)

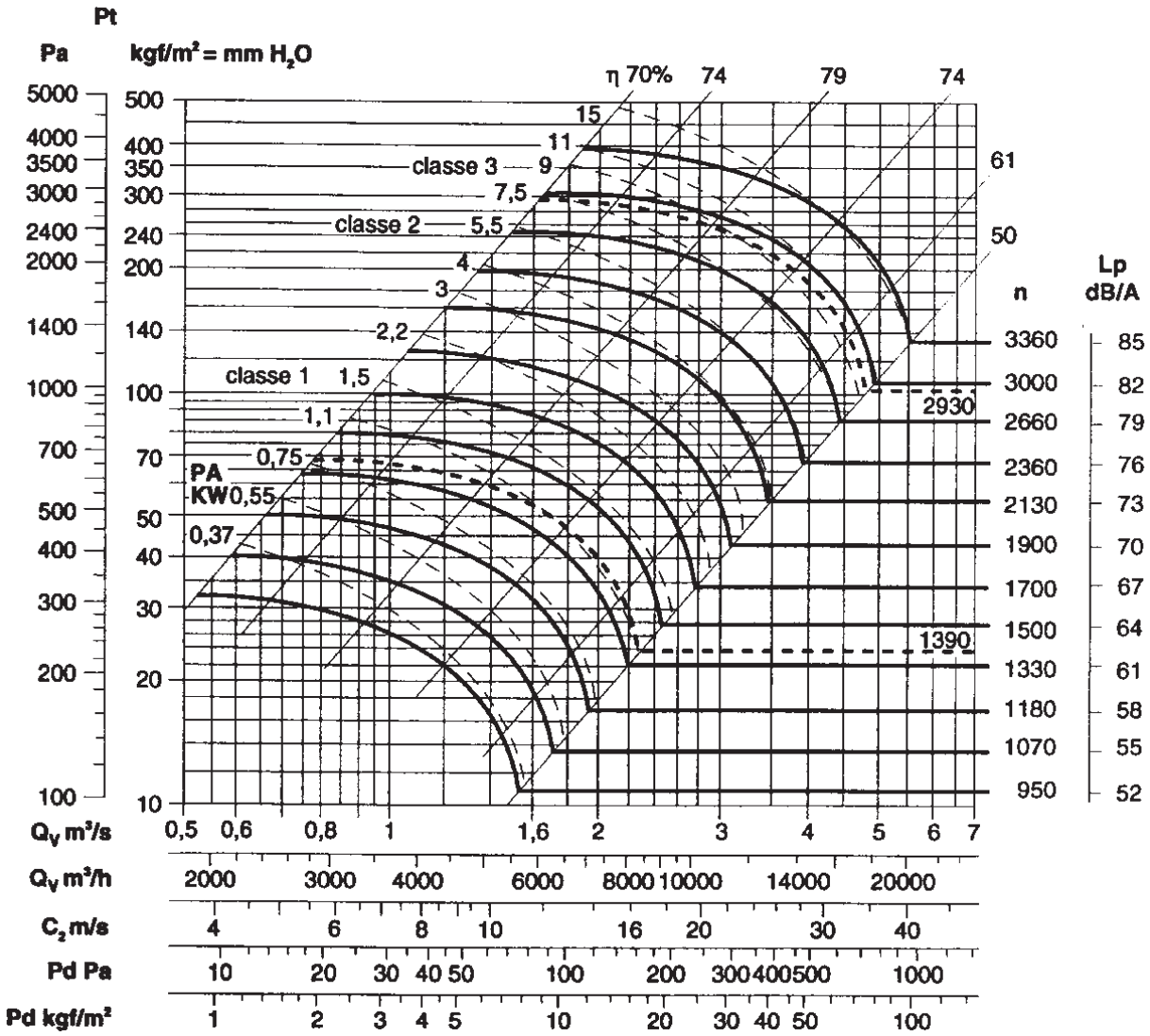
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	454	T	4	1,1	2,8	55/F	67
PR-L	452	T	2	11,0	22	55/F	88

OPERATIVNI LIMIT/OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	454	014,	50,1	461,9	90	PR
L452	170	0032,	30,1	461,9	160	

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	2200	2800	3500	Standard
90°C - 200°C Es. 1-9-12	2000	2500	3150	vis. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	1780	2250	2800	vis. temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 50 (aranžman 4/arrangement 4)

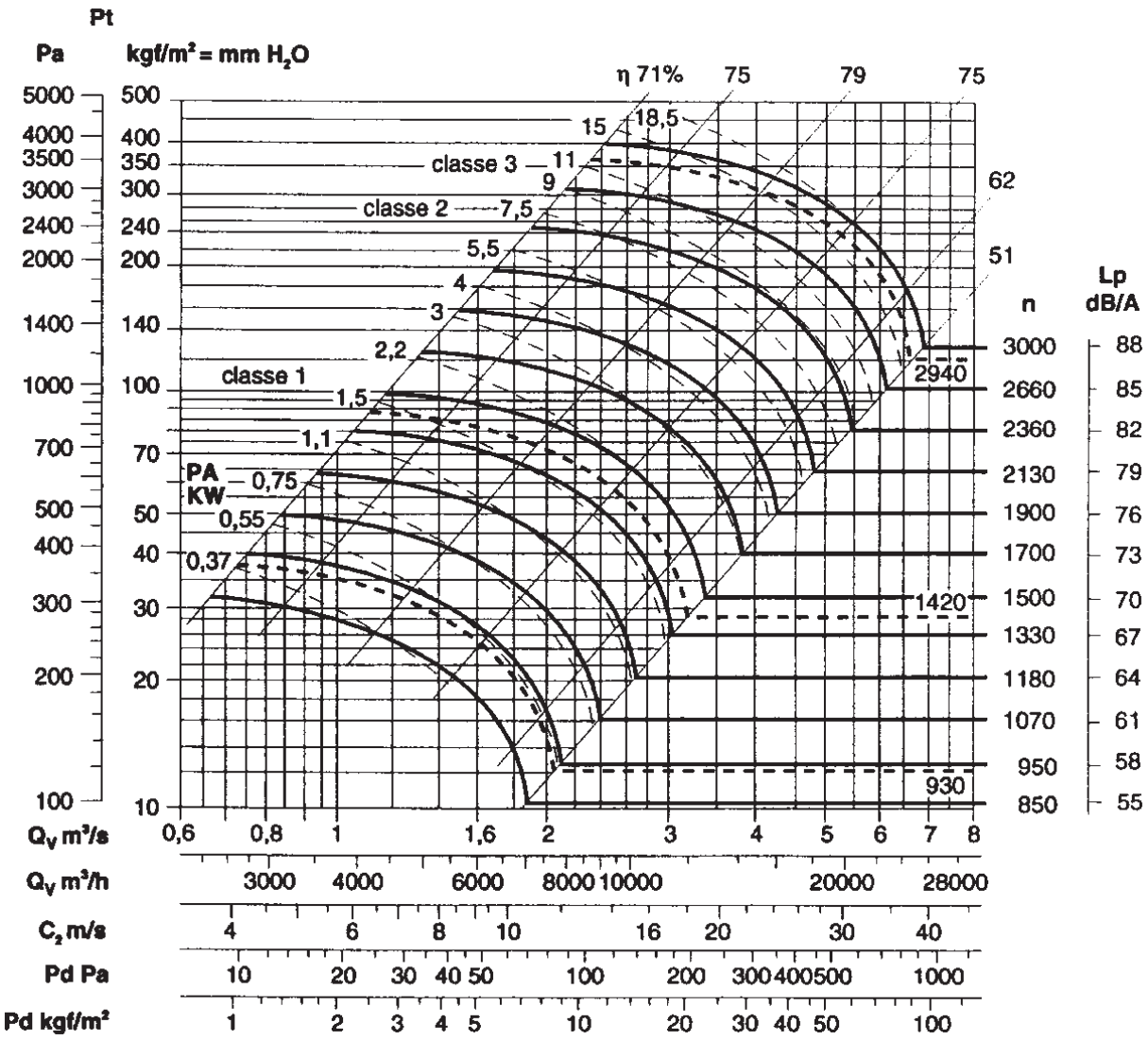
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	506	T	6	0,55	1,8	55/F	59
PR-L	504	T	4	2,2	5,3	55/F	71
PR-L	502	T	2	18,5	34	55/F	92

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	506	6850	10,4	0,183	3,1	80
PR-L	504	10800	16,4	0,183	3,1	100
PR-L	502	24200	36,7	0,183	3,1	160

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	2050	2500	3120	Standard
90°C - 200°C Es. 1-9-12	1800	2250	2800	vis. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	1580	2000	2500	vis. temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 56 (aranžman 4/arrangement 4)

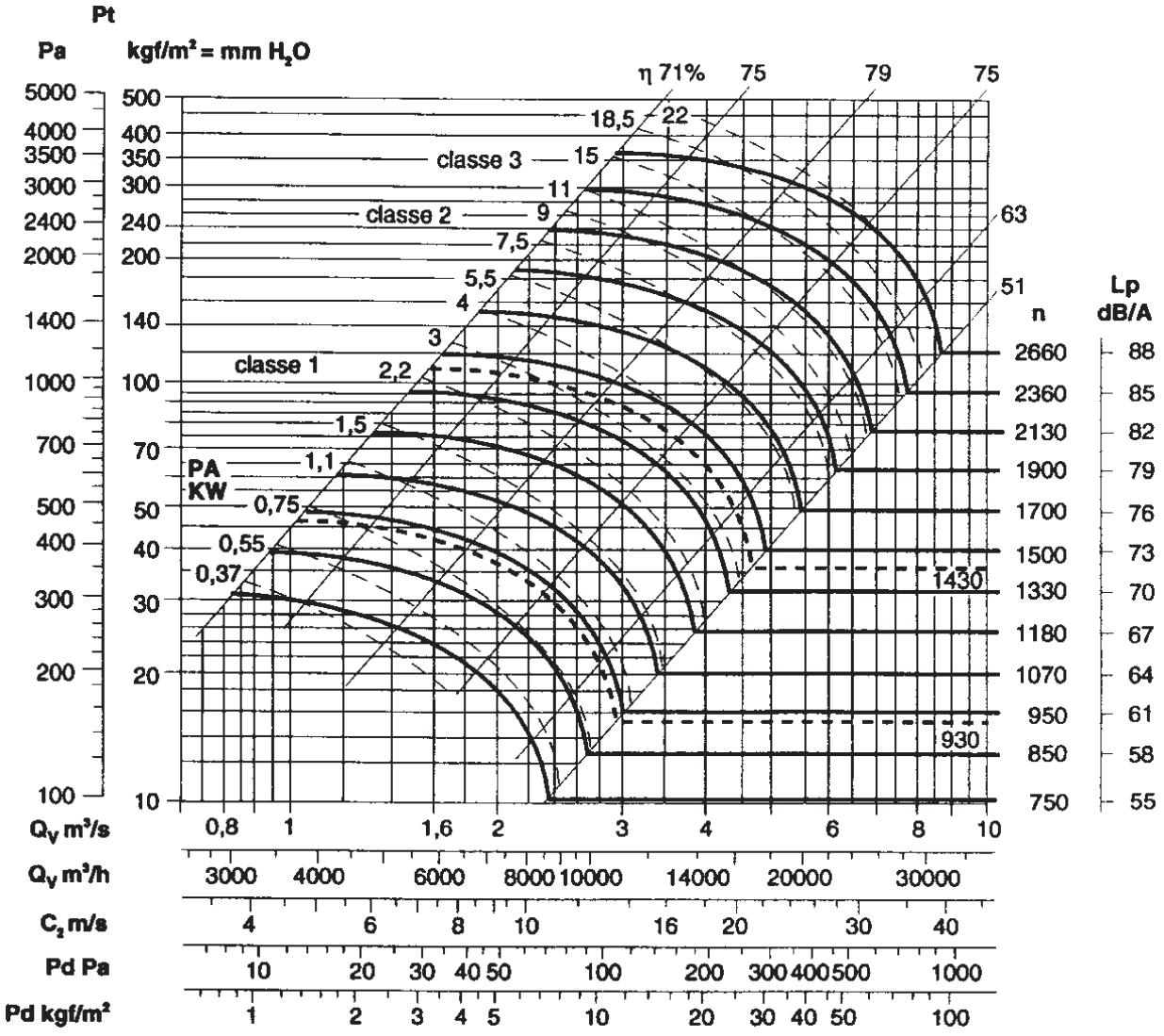
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	566	T	6	1,1	3,4	55/F	62
PR-L	564	T	4	4,0	9,4	55/F	74

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	566	9500	11,5	0,230	5,5	90
PR-L	564	17000	20,5	0,230	5,5	112

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	1850	2250	2800	Standard
90°C - 200°C Es. 1-9-12	1600	2000	2500	vis. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	1400	1800	2200	vis. temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 63 (aranžman 4/arrangement 4)

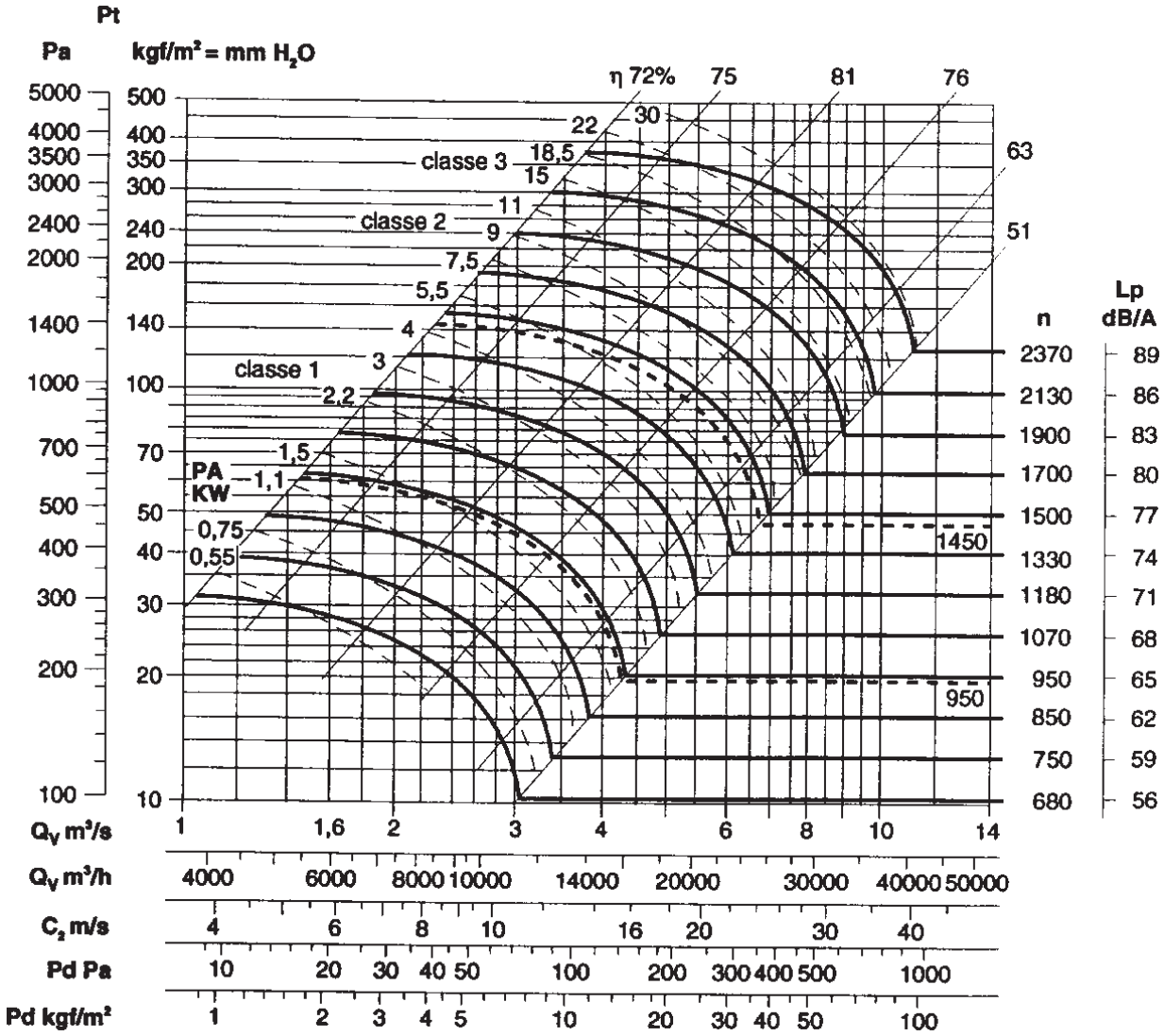
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	636	T	6	2,2	5,3	55/F	68
PR-L	634	T	4	7,5	15,4	55/F	78

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	636	15300	14,7	0,289	8,7	112
PR-L	634	24200	23,2	0,289	8,7	132

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	1600	2000	2500	Standard
90°C - 200°C Es. 1-9-12	1390	1800	2270	vis.. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	1250	1600	2000	vis.. temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 71 (aranžman 4/arrangement 4)

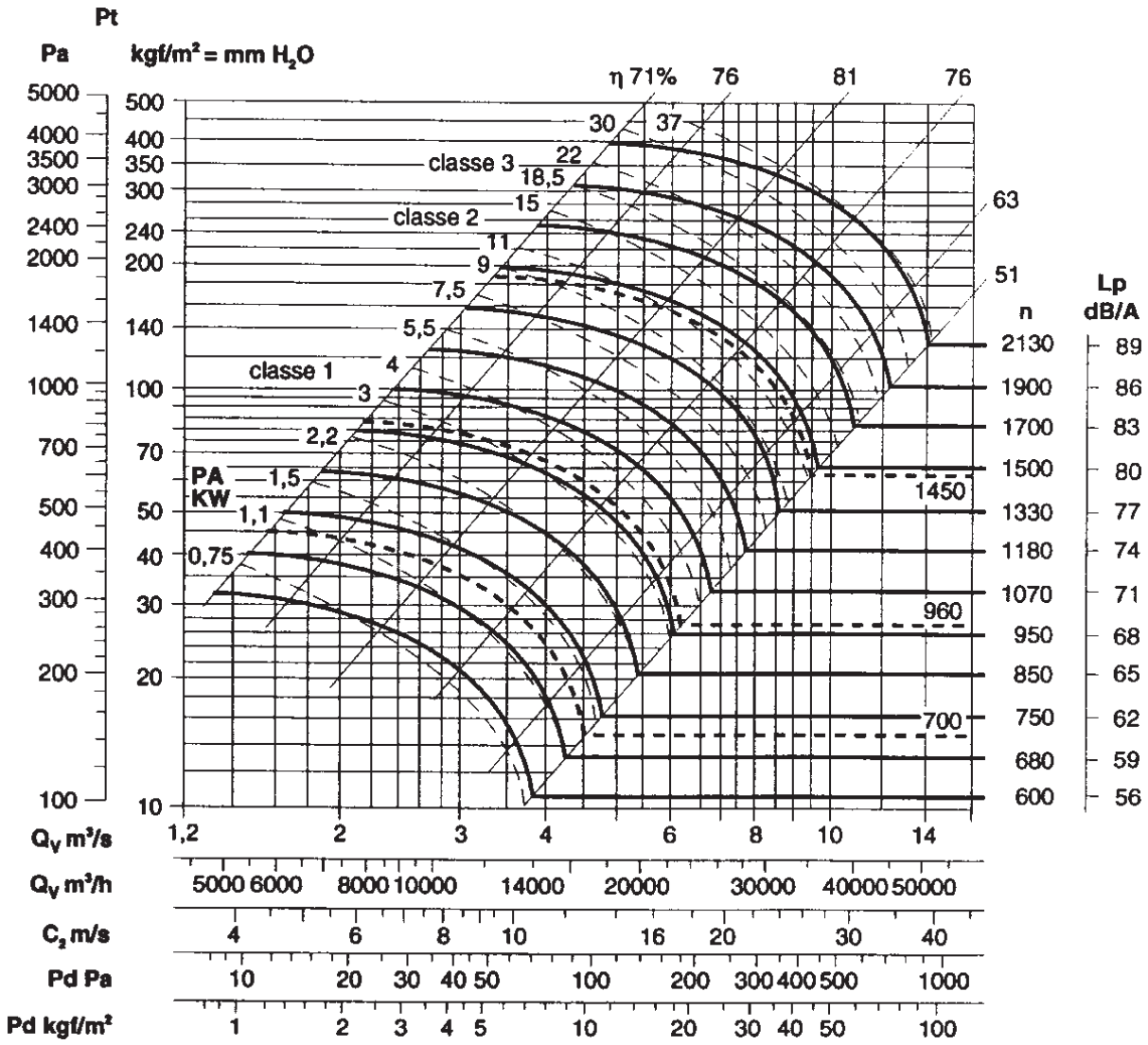
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	716	T	6	4,0	10,0	55/F	72
PR-L	714	T	4	15	29,0	55/F	82

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	716	21600	16,5	0,362	15,5	132
PR-L	714	34200	26,2	0,362	15,5	160

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	1450	1800	2250	Standard
90°C - 200°C Es. 1-9-12	1250	1600	2000	vis. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	1120	1410	1810	vis. temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 80 (aranžman 4/arrangement 4)

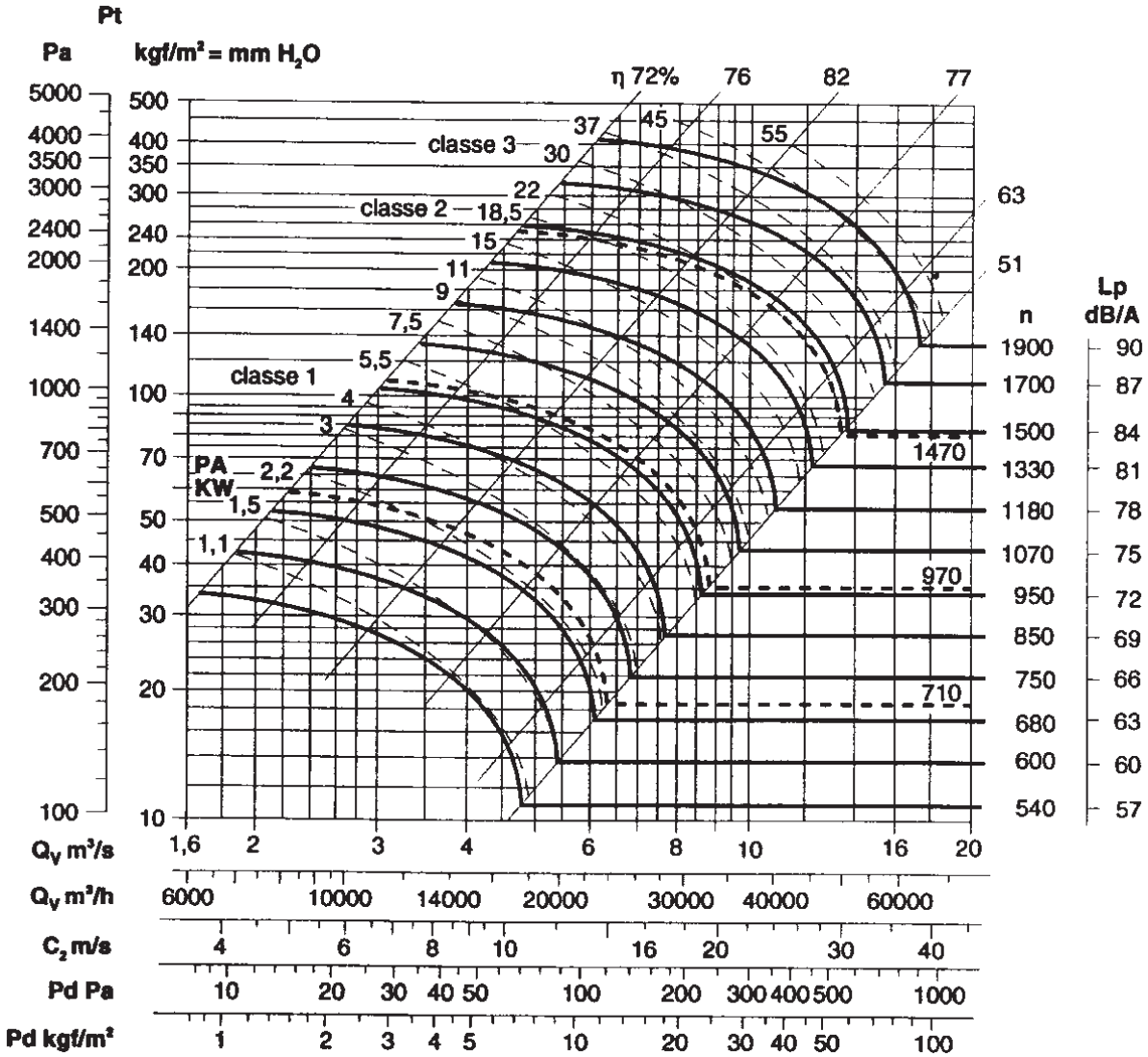
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	806	T	6	7,5	17,0	55/F	75
PR-L	804	T	4	22	42,0	55/F	85

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	806	30600	18,7	0,455	27	160
PR-L	804	47500	28,9	0,455	27	180

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	1240	1600	2000	Standard
90°C - 200°C Es. 1-9-12	1120	1400	1790	vis. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	1000	1240	1600	vis. temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 90 (aranžman 4/arrangement 4)

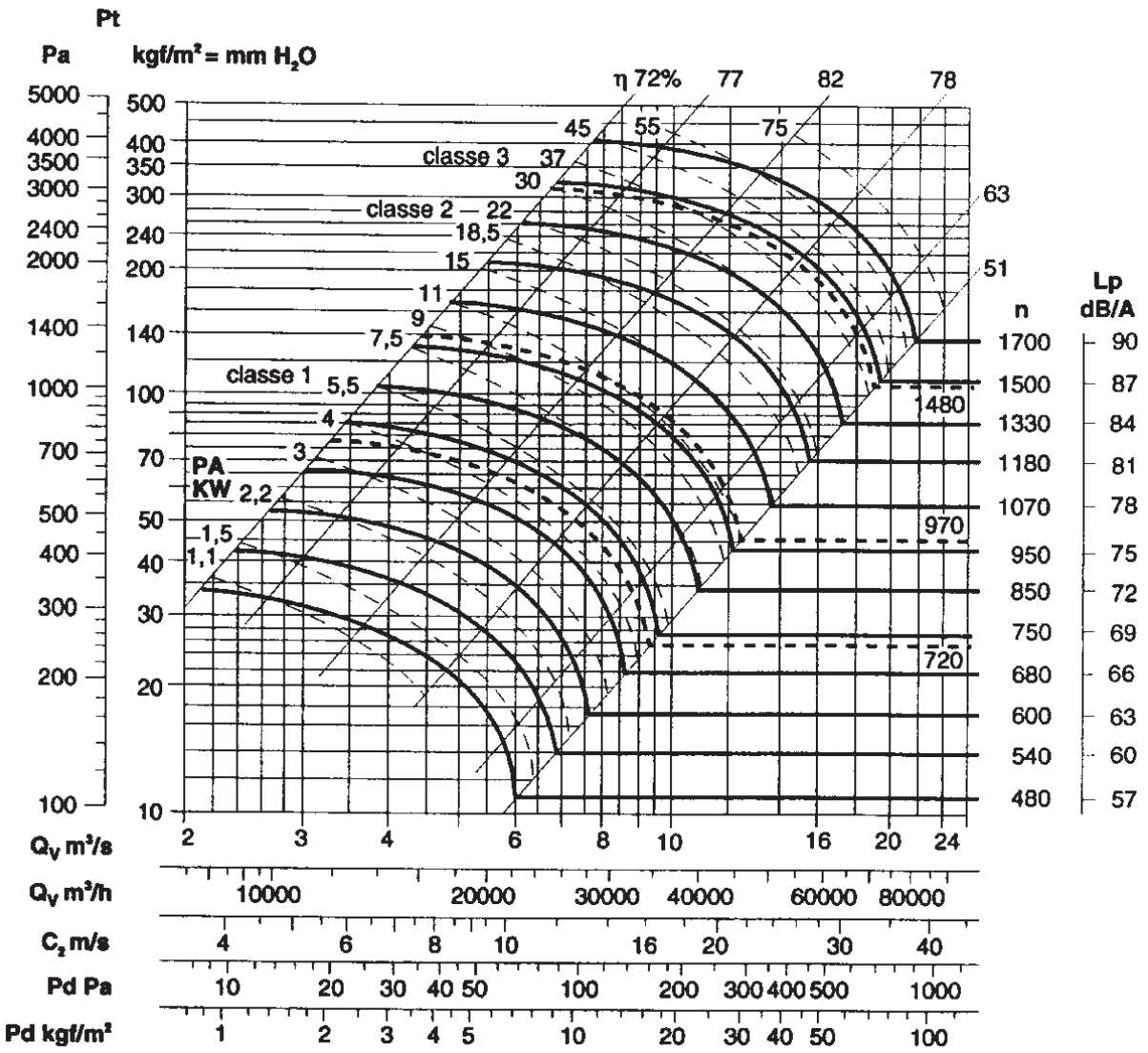
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	906	T	6	15	30,0	55/F	78
PR-L	904	T	4	45	82,6	55/F	88

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	906	42500	20,6	0,573	43	180
PR-L	904	68500	33,2	0,573	43	225

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	1130	1400	1810	Standard
90°C - 200°C Es. 1-9-12	1000	1250	1600	vis. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	910	1120	1400	vis. temperatura/High temperature (PR-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PR-L 100 (aranžman 4/arrangement 4)

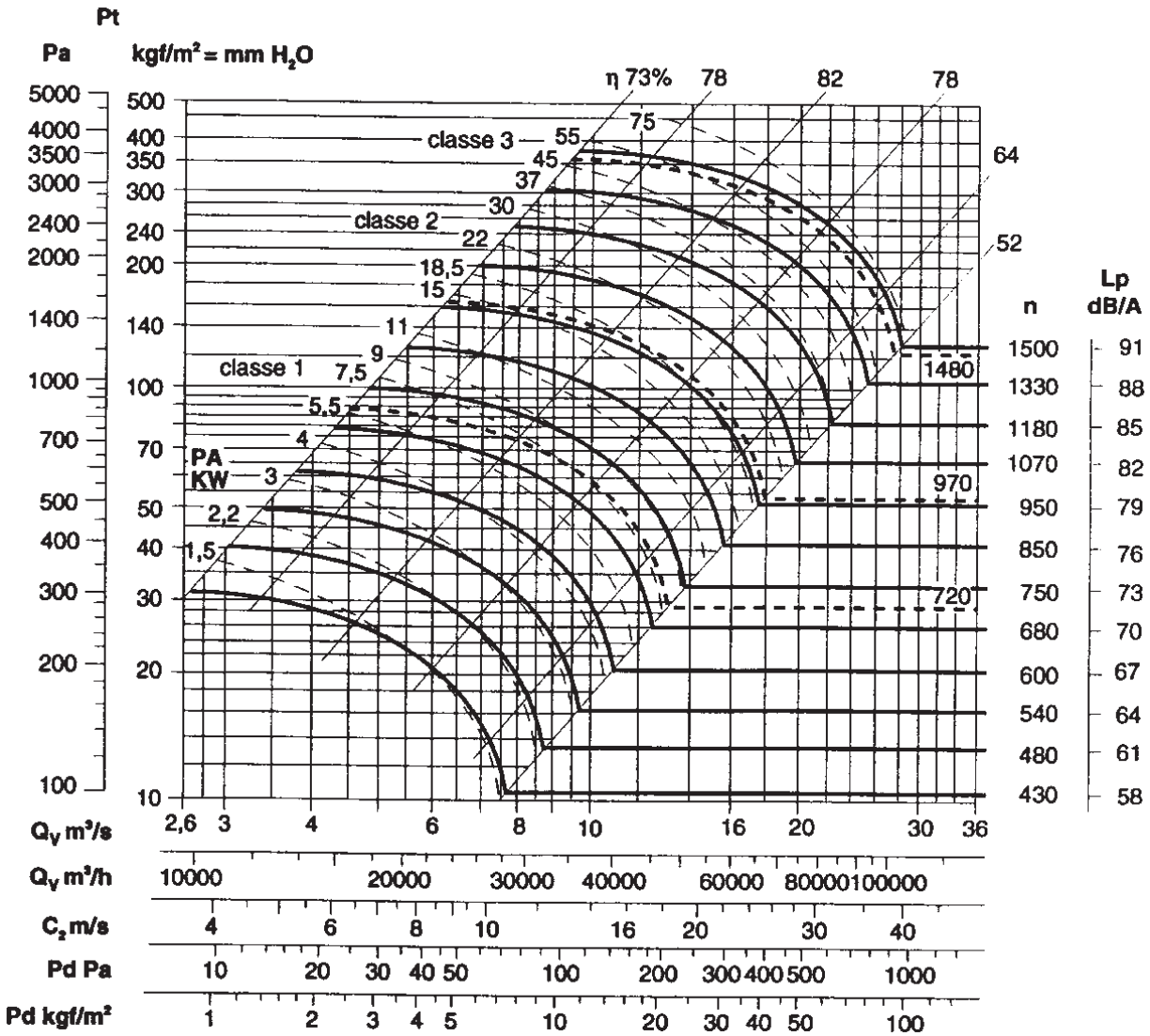
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-L	1006	T	6	22	42,5	55/F	82
PR-L	1004	T	4	75	127	55/F	93

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-L	1006	61000	23,5	0,720	78	200
PR-L	1004	95400	36,8	0,720	78	280

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm klase/class 1	rpm klase/class 2	rpm klase/class 3	Konstrukcija Construction
0°C - 90° C	1000	1240	1600	Standard
90°C - 200°C Es. 1-9-12	900	1120	1400	vis. temperatura/High temperature (PR-L-AT)
200°C - 300° C Es. 1-9-12	800	1000	1240	vis. temperatura/High temperature (PR-L-AT)

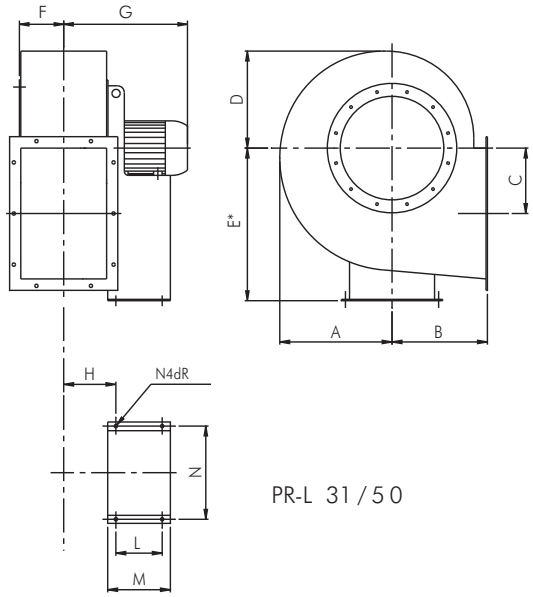


ARANŽMAN 4/ ARRANGEMENT 4

Tip/Type	A	B	C	D	E* E1 0°+135°	E* E2 180°+225°	E* E3 270°+315°	F
PR-L 31	302	225	196	258	400	225	400	117
PR-L 35	345	255	216	290	450	255	450	130
PR-L 40	370	285	245	315	500	285	500	147
PR-L 45	495	320	275	355	560	320	560	163
PR-L 50	472	360	303	400	600	360	600	183
PR-L 56	540	400	332	456	670	400	670	205
PR-L 63	602	450	373	510	755	450	750	230
PR-L 71	660	500	427	566	850	500	850	257
PR-L 80	752	560	478	640	950	560	950	287
PR-L 90	840	630	538	720	850	630	1060	322
PR-L 100	946	710	607	813	950	710	1180	360

Dimenzije u mm/Dimensions in mm

Važno : Videti uglove ispuštanja na str. 7 sez. 6
See discharge angle schedule pag. 7 sez. 6

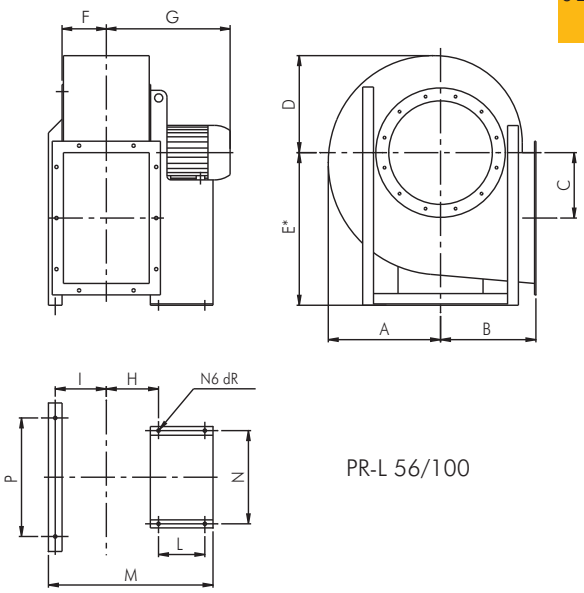


PR-L 31 / 50

SEK. 6

Tip/Type	Pol/Poles	G	H	I	L	M	N	P	dR	kg
PR-L 31	2	384	172	-	133	205	234	-	10	52
"	4	300	162	-	86	145	184	-	10	42
PR-L 35	2	468	161	-	197	250	289	-	12	80
"	4	338	176	-	121	180	203	-	10	65
PR-L 40	2	546	187	-	237	300	337	-	12	108
"	4	374	192	-	121	180	203	-	10	75
PR-L 45	2	700	215	-	337	415	395	-	14	160
"	4	430	220	-	133	205	234	-	10	94
PR-L 50	2	719	235	-	337	415	395	-	14	196
"	4	521	215	-	197	250	289	-	12	129
"	6	411	230	-	121	180	203	-	10	116
PR-L 56	4	542	236	232	197	711	289	632	12	146
"	6	472	261	232	133	666	234	632	10	133
PR-L 63	4	629	271	256	237	810	337	702	12	204
"	6	567	271	256	197	760	289	702	12	179
PR-L 71	4	792	319	287	316	988	772	772	20	326
"	6	656	319	287	201	873	772	772	20	286
PR-L 80	4	918	350	318	361	1095	862	862	20	418
"	6	843	350	318	316	1050	862	862	20	368
PR-L 90	4	1009	379	352	441	1258	962	962	20	650
"	6	932	379	352	361	1178	962	962	20	499
PR-L 100	4	1048	413	390	590	1505	1056	1056	20	941
"	6	971	413	390	400	1315	1056	1056	20	716

Dimenzije u mm/Dimensions in mm

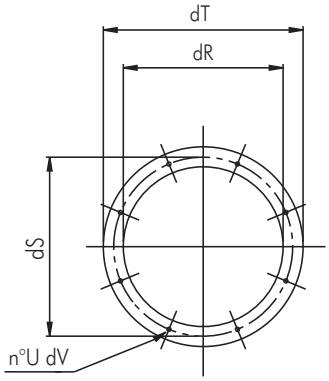


PR-L 56/100

VAŽNO :PR- L 56/80 dozvoljava modifikaciju ispusnog ugla
PR- L 90/100 ne dozvoljava modifikaciju ispusnog ugla

Note: PR-L 56/80 allow the modification of discharge angle
PR-L 90/100 do not allow the modification of discharge angle

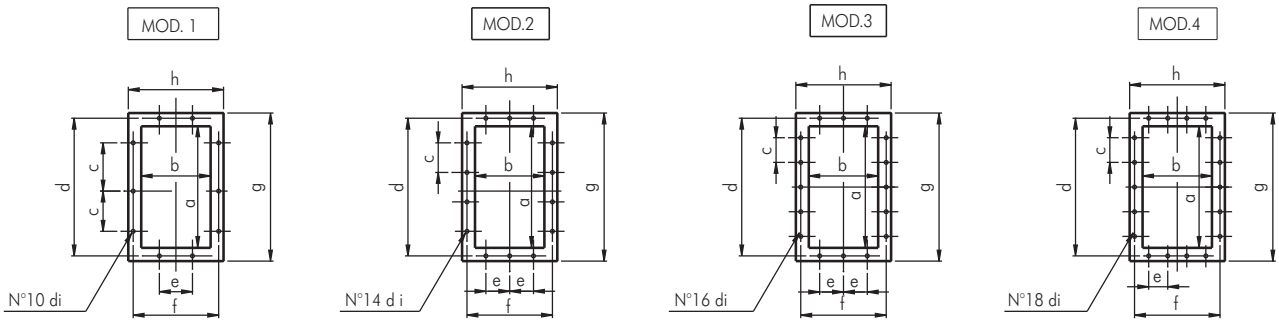
ULAZNI OTVOR / INLET



Tip/Type	dR	dS	dT	U	dV
31	320	366	400	8	10
35	360	405	440	8	10
40	405	448	485	8	10
45	455	497	535	8	10
50	505	551	585	8	10
56	565	629	665	16	10
63	635	698	735	16	12
71	715	775	815	16	12
80	805	861	905	16	12
90	905	958	1005	16	12
100	1007	1067	1107	16	12

Dimenzije u mm/Dimensions in mm

IZLAZNI OTVOR / OUTLET



Tip/Type	a	b	c	d	e	f	g	h	di	MOD.
31	322	229	125	366	125	273	402	309	12	1
35	361	256	125	405	125	300	441	336	12	1
40	404	288	125	448	125	332	484	368	12	2
45	453	322	125	497	125	366	533	402	12	2
50	507	361	125	551	125	405	587	441	12	2
56	569	404	160	629	160	464	669	504	14	2
63	638	453	160	698	160	513	738	553	14	2
71	715	507	160	775	160	567	815	607	14	3
80	801	569	200	871	200	639	921	689	14	2
90	898	638	200	968	200	708	1018	758	14	4
100	1007	715	200	1077	200	785	1127	835	14	4

Dimenzije u mm/Dimensions in mm

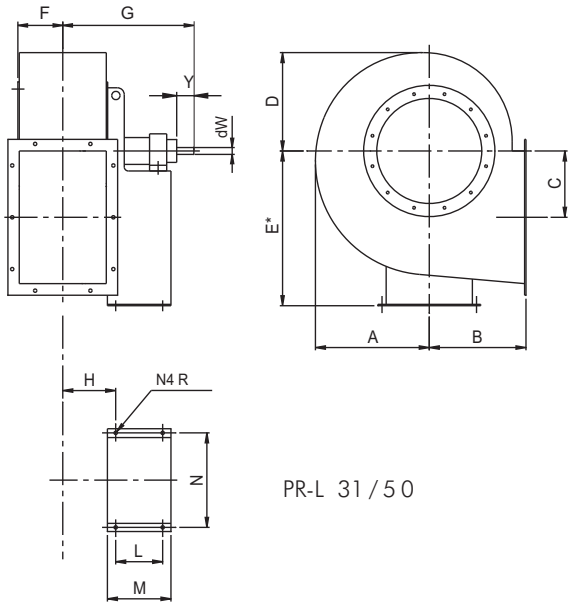
ARANŽMAN 1/ ARRANGEMENT

Tip/Type	A	B	C	D	E* E1 0°+135°	E2 180°+225°	E3 270°+315°	F	G
PR-L 31	302	225	196	258	400	225	400	117	527
PR-L 35	345	255	216	290	450	255	450	130	686
PR-L 40	370	285	245	315	500	285	500	147	722
PR-L 45	495	320	275	355	560	320	560	163	739
PR-L 50	472	360	303	400	600	360	600	183	864
PR-L 56	540	400	332	456	670	400	670	205	922
PR-L 63	602	450	373	510	755	450	750	230	953
PR-L 71	660	500	427	566	850	500	850	257	1026
PR-L 80	752	560	478	640	950	560	950	287	1057
PR-L 90	840	630	538	720	850	630	1060	322	1092
PR-L 100	946	710	607	813	950	710	1180	360	1252

Dimenzije u mm/Dimensions in mm

Važno : Videti uglove ispuštanja na str. 7 sez. 6

See discharge angle schedule pag. 7 sez. 6

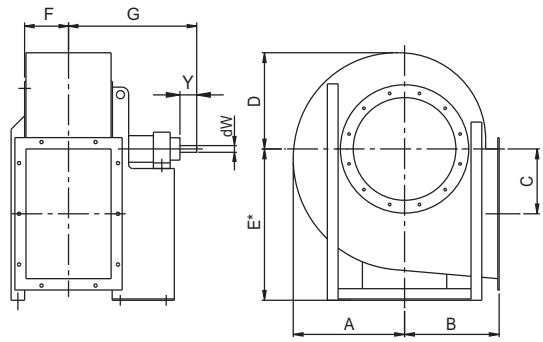


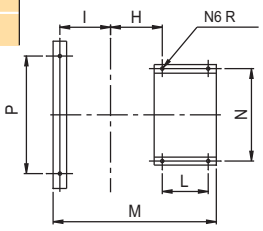
PR-L 31/50

SEK.6

Tip/Type	H	I	L	M	N	P	dR	Osovina/Shaft dW	Y	kg
PR-L 31	157	-	284	347	288	-	12	24	50	46
PR-L 35	181	-	407	485	355	-	14	28	60	72
PR-L 40	197	-	407	485	355	-	14	38	80	85
PR-L 45	215	-	407	485	355	-	14	38	80	100
PR-L 50	235	-	477	560	364	-	17	42	110	142
PR-L 56	256	232	477	1021	632	632	17	48	110	178
PR-L 63	280	257	477	1070	702	702	17	48	110	230
PR-L 71	313	287	551	1217	772	772	19	48	110	280
PR-L 80	344	318	551	1299	862	862	19	55	110	352
PR-L 90	379	352	551	1360	962	962	19	55	110	435
PR-L 100	412	391	607	1522	1056	1056	19	65	140	570

Dimenzije u mm/Dimensions in mm

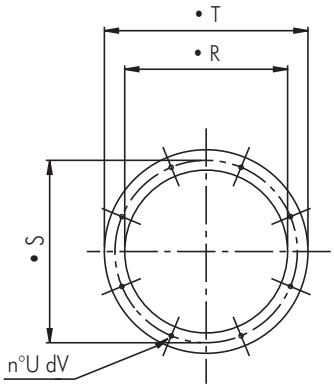




PR-L 56/100

VAŽNO: PR-L 31/80 dozvoljava modifikaciju ispusnog ugla
PR-L 90/100 ne dozvoljava modifikaciju ispusnog ugla
Note: PR-L 31/80 allow the modification of discharge angle
PR-L 90/100 do not allow the modification of discharge angle

ULAZNI OTVOR / INLET

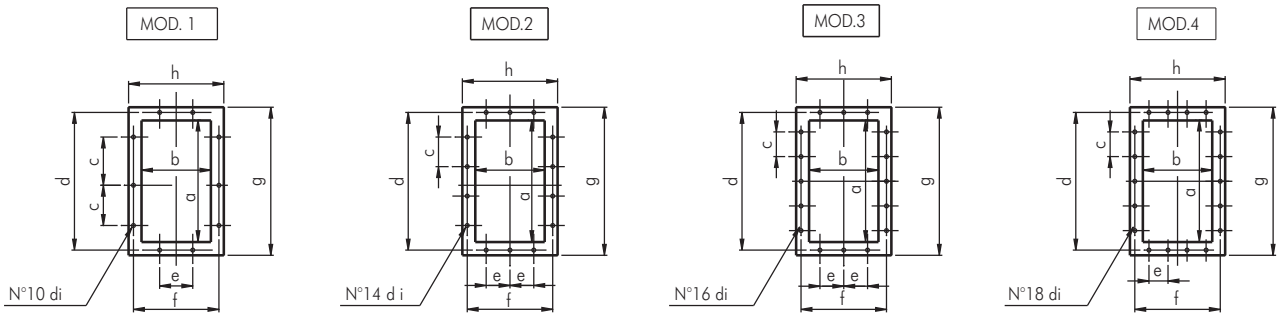


Tip/Type	dR	dS	dT	U	dV
31	320	366	400	8	10
35	360	405	440	8	10
40	405	448	485	8	10
45	455	497	535	8	10
50	505	551	585	8	10
56	565	629	665	16	10
63	635	698	735	16	12
71	715	775	815	16	12
80	805	861	905	16	12
90	905	958	1005	16	12
100	1007	1067	1107	16	12

Dimenzije u mm/Dimensions in mm

SEK. 6

IZLAZNI OTVOR / OUTLET



Tip/Type	a	b	c	d	e	f	g	h	di	MOD.
31	322	229	125	366	125	273	402	309	12	1
35	361	256	125	405	125	300	441	336	12	1
40	404	288	125	448	125	332	484	368	12	2
45	453	322	125	497	125	366	533	402	12	2
50	507	361	125	551	125	405	587	441	12	2
56	569	404	160	629	160	464	669	504	14	2
63	638	453	160	698	160	513	738	553	14	2
71	715	507	160	775	160	567	815	607	14	3
80	801	569	200	871	200	639	921	689	14	2
90	898	638	200	968	200	708	1018	758	14	4
100	1007	715	200	1077	200	785	1127	835	14	4

Dimenzije u mm/Dimensions in mm

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

SEK. 6

Snaga/Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak/Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

ARANŽMAN 1 / ARRANGEMENT 1

Primer / Example:	Tip / Type	Model / Model	Ispuštanje / Discharge	Ugao / Angle	rpm	Aranžman / Arrangement
	PR-L	50	LG	270°	1250	Es.1

ARANŽMAN / 4

Primer / Example:	Tip / Type	Mode l/ Model	Voltaža / Voltage	Ispuštanje / Discharge	Ugao / Angle	Aranžman / Arrangement
	PR-L	504	T	LG	270°	Es.4

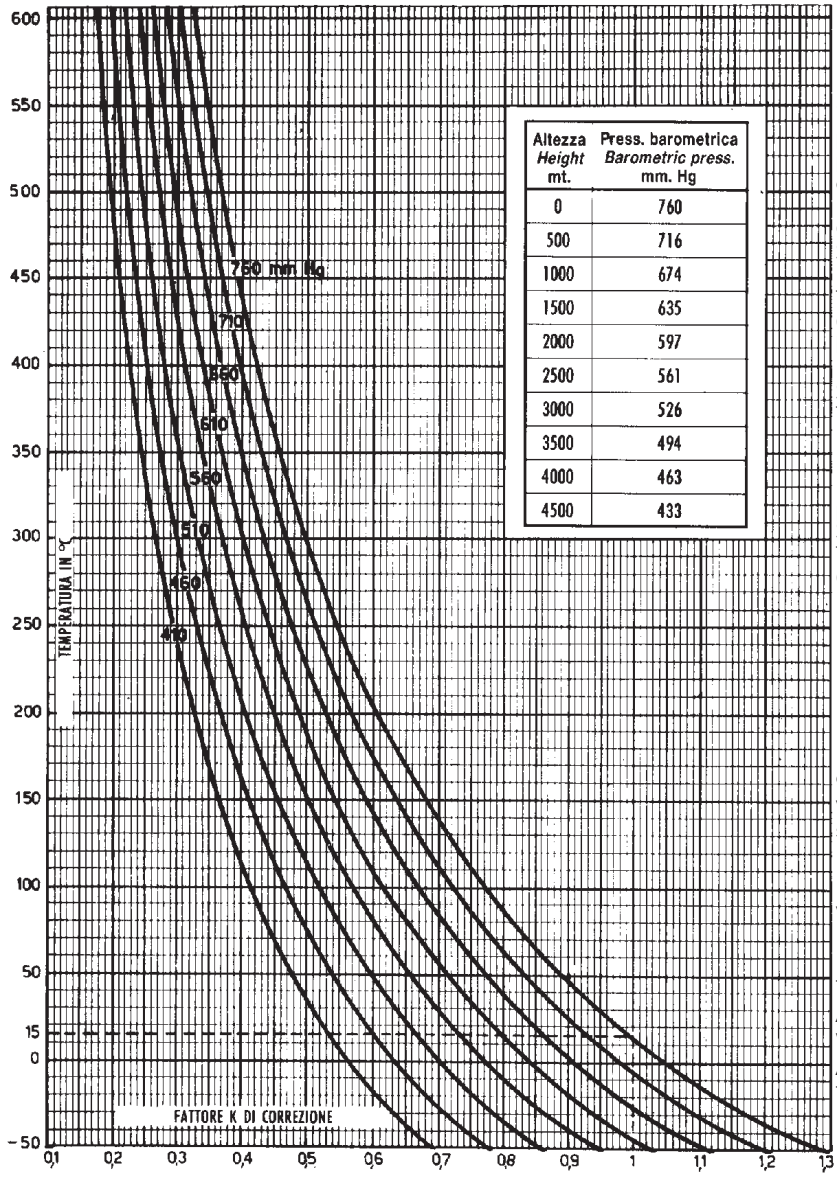
ARANŽMAN / 9 i 12

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage	Ispuštanje / Discharge	Ugao / Angle	Pozicija motora / Motor position	rpm	Aranžman / Arrangement
	PR-L	56	T	LG	270°	Z	1000 rpm	Es.9

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama
Backward curved blade centrifugal fans

Popravljiv faktor "K" za definisanje gustine vazduha u stanju različitog od standarda (15°C, 760 mm. Hg)

"K" correcting factor to define air density in conditions differing from standard (15°C, 760 mm. Hg)



Altezza *Height* mt.	Press. barometrica *Barometric press.* mm. Hg
0	760
500	716
1000	674
1500	635
2000	597
2500	561
3000	526
3500	494
4000	463
4500	433

PRIMER :

Kako izabrati PR- L ventilator sposoban da izduva vazduh pri temperaturi od 100 °C, sa protokom vazduha 9000 m3/h, sa totalnim pritiskom od 90 mm ,na nadmorskoj visini od 950 m.
Iz k faktor diagrama : F = 0.7.
Odnosi se na podatke date diagramom :
Snabdevanje vazduhom: Q = 9000 m3/h
(nepromenjena postojeći volumetrični protok)
Totalni pritisak : 90/0.7 = 128 mm
Gustina vazduha : 1.22 * 0.7 = 0.854 kg/m3
Izabrali smo : PR- L 56 :
Snabdevanje vazduhom : Q = 9000 m3/h
Totalni pritisak : Ht = 128 mm wg.
Brzina ventilatora : 1650 rpm
Ulazna snaga : Pv = 4 KW
Prilikom aktivnog rada PR- L 56 ventilator prati sledeće rezultate :
Snabdevanje vazduhom : Q = 9000 m3/h
Totalni pritisak : Ht = 128*0.7 = 90 mm
Gustina vazduha = 0.854 kg/m3
Brzina ventilatora :1650 rpm
Ulazna snaga : Pv = 4*0.7 = 2.8 KW

EXAMPLE:

How to select a PR-L fan able to exhaust air at 100° C, with 9000 m³/h delivery, 90 mm. w.g. total pressure, placed at 950 m. on sea level.
From k factor diagram: F = 0,7.
Referring given data to diagram conditions, we have:
Dedlivery: Q = 9000 m³/h (unchanged, being volumetric delivery).
Total pressure: 90/0,7 = 128 mm.
Air density: 1,22x0,7 = 0,854 kg/m³.
We select PR-L 56:
Air delivery Q = 9000 m³/h.
Total pressure Ht = 128 mm wg.
Fan speed: 1650 r.p.m.
Input power Pv = 4KW.
At real working conditions, the PR-L 56 fan will performas follows:
Air delivery Q = 9000 m³/h.
Total pressure Ht = 128x0,7 = 90 mm.
Air density = 0,854 kg/m³.
Fan speed: 1650 rpm.
Input power Pv = 4x0,7 = 2,8 KW

PS-L

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport prljavog vazduha

Backward curved blade centrifugal fans for dusty air

OSNOVNI PODACI:

Ventilatori PS- L serije su našli svoju primenu u industrijskim pogonima za ventilaciju,grejanje i čišćenje-filtraciju vazduha, takođe mogu biti deo same proizvodnje u (drvnoj i hemijskoj industriji, mlinama, rudnicima itd).
Koristi se za transport veoma prljavog vazduha i ne abrazivnog dima sa maksimalnom temperaturom do 90°C u standardnoj izvedbi i do 300 °C u specijalnoj.
Serije predviđaju verziju sa direktnim prenosom (izvedba 4.) i verziju sa remenim prenosom (izvedba 1. , 9. i 12.)

KONSTRUKCIJA :

- Kućište je izrađeno od čelika , zaštićeno od spoljašnjih utica Epoxy smolom.
- Aerodinamično oblikovana spoljna kupa je izrađena od čelika, zaštićena od spoljnih uticaja Epoxy smolom.
- Radno kolo sa unazad zakrivljenim lopaticama, jednim otvorom je izrađeno od čelika i premazano Epoxy smolom.
- Mono blok sa kugličnim ležajima- izvedba 1-9-12, izrađen od livenog gvožđa,tako dizajniran radi boljeg samo podmazivanja.
- Trofazni asinhroni motor u skladu sa IEC34- IEC72- 89/392 EEC- 89/336 EEC- 73/23 EEC standardima,CE kvalifikovan, IP 55 zaštitom klase E.

Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Odvodni kanal kondenzata
- Kontrolna vrata
- Suprotan bok ulaznog otvora
- Suprotan bok izlaznog otvora
- Zaštita ulaznog otvora
- Ulazne fleksibilne veze
- Izlazne fleksibilne veze
- Kontrola lopatice ulaznog otvora
- Spoljašnji prigušivač
- Antivibracioni okvir
- Remeni pogon za izvedbu 1- 9-12 ,uključujući remenicu, remen i postolje motora.
- Štitnik remena motora.
- Osnovni horizontalni okvir za izvedbu 12
- Okretna potpora motora za izvedbu 9.

NA ZAHTEV :

- Model za transport vrelog gasa do temperature maksimalno 300°C. (PS-I / AT es 4)
- Model otporan na koroziju izrađen sa kućištem ,udubljenim delom i lopaticama od čelika AISI304 (PS- L / INOX-A)
- Model otporan na varnice klase C u skladu sa tabelom NV105 ANIMA – COAER (PS-L / AS)
- Model otporan na eksploziju sa trofaznim ili monofaznim asinhronim motorom Eex-d IIB T3, u skladu sa internacionalnim standardima IEC34-IEC72 – IEC79 I 89/392 EEC – 89/336 EEC – 73/23 EEC , sa CESI sertifikatom,CE kvalifikovan, IP 55 zaštitom klase F (PS- L /ATEX)

GENERAL DESCRIPTION

Fans of PS-L series find their main application in industrial plants of conditioning, ventilation, heating and filtering; they can also be used as part of manufacturing process (wood industry, chemical industry, mills, mines, foundries, etc.). They can convey very dusty air and not abrasive smoke, with max. temperature of 90°C in the standard configuration and 300°C in special version. The series foresees direct drive version (execution 4) and belt drive version (execution 1,9 and 12).

CONSTRUCTION

- Volute in steel sheet , protected against atmospheric agents by epoxy paint.
- Aerodynamically shaped inlet cone in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet backward curved wheel with high efficiency, manufactured in epoxy painted steel sheet.
- Mono-block support for bearings, for execution 1 - 9 - 12, in cast iron, designed for easy lubrication operations.
- Three-phase asynchronous motor according to IEC34-IEC72 - 89/392 EEC - 89/336 EEC - 73/23 EEC Standards, marked CE, IP55, class F. Suitable for S1 service (continuos working at constant load).

ACCESSORIES

- Condensation drain hole.
- Inspection door.
- Inlet counter-flange.
- Outlet counter-flange.
- Inlet protection guard.
- Inlet flexible connection.
- Outlet flexible connection.
- Inlet vane control.
- Outlet damper.
- Antivibration mounts.
- Belt drive kit for execution 1-9-12, with pulleys, belts and motor slides. Protection guard for belts.
- Horizontal baseframe for exec. 12.
- Swing motor support for exec. 9.

UPON REQUEST

- High temperature version suitable for conveying hot gases, max 300°C (PS-L/AT).
- Corrosion resistant version, manufactured with casing, inlet side disc and impeller in stainless steel AISI304 (PS-L/INOX-A).
- Spark proof version, class C, according to table NV105 ANIMA-COAER (PS-L/AS).
- Explosion proof version, with asynchronous three-phase or single-phase motor EEx -d IIB T3, according to international standards IEC34-IEC72 - IEC79 and 89/392 EEC-89/336EEC-73/23 EEC, with CESI certificate and marked CE, IP55, class F (PS-L/ATEX).

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

PS-L

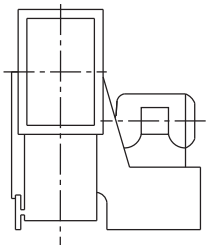
Rotacija Rotation RD								
Forma-Form	0	45	90	135	180(*)	225(*)	270	315
Rotacija Rotation LG								
Visina-Height	E1				E2		E3	

Važno: Standardna orijentacija LG270°/Standard orientation LG270°
(*) Zahteva specijalnu konstrukciju / Request special construction

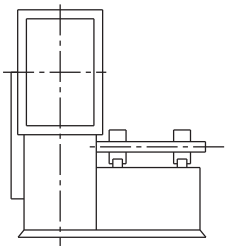
IZVEDBA / EXECUTIONS

PS-L

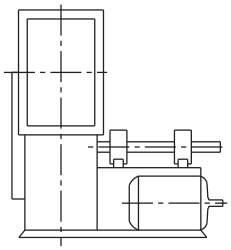
4: Radno kolo direktno spoljeno na motor , fiksirano od strane nosača motora.
4: Impeller directly coupled to the motor supported by the motor support base



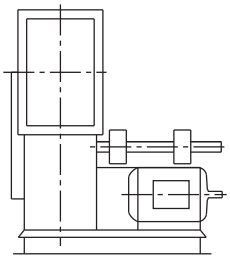
1: Aranžman za remeni pogon sa radnim kolom povezanim na osovinu, fiksiran od strane postolja motora.
1: Arrangement for belt drive with impeller directly coupled to the support shaft carried by the motor support base.



9: Isti slučaj kao kod primera 1. sa aranžmanom za motor montiranog sa strane i na postolje ventilatora.
9: same as execution 1 with arrangement for the motor assembled on the side of the support base.



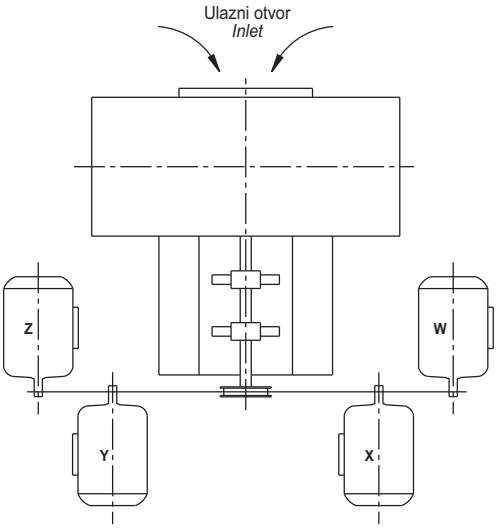
12: Isti slučaj kao kod primera 1. sa aranžmanom za radno kolo i motor montirane na donji deo postolja ventilatora.
12: same as execution 1 with arrangement for fan and motor mounted on common basement



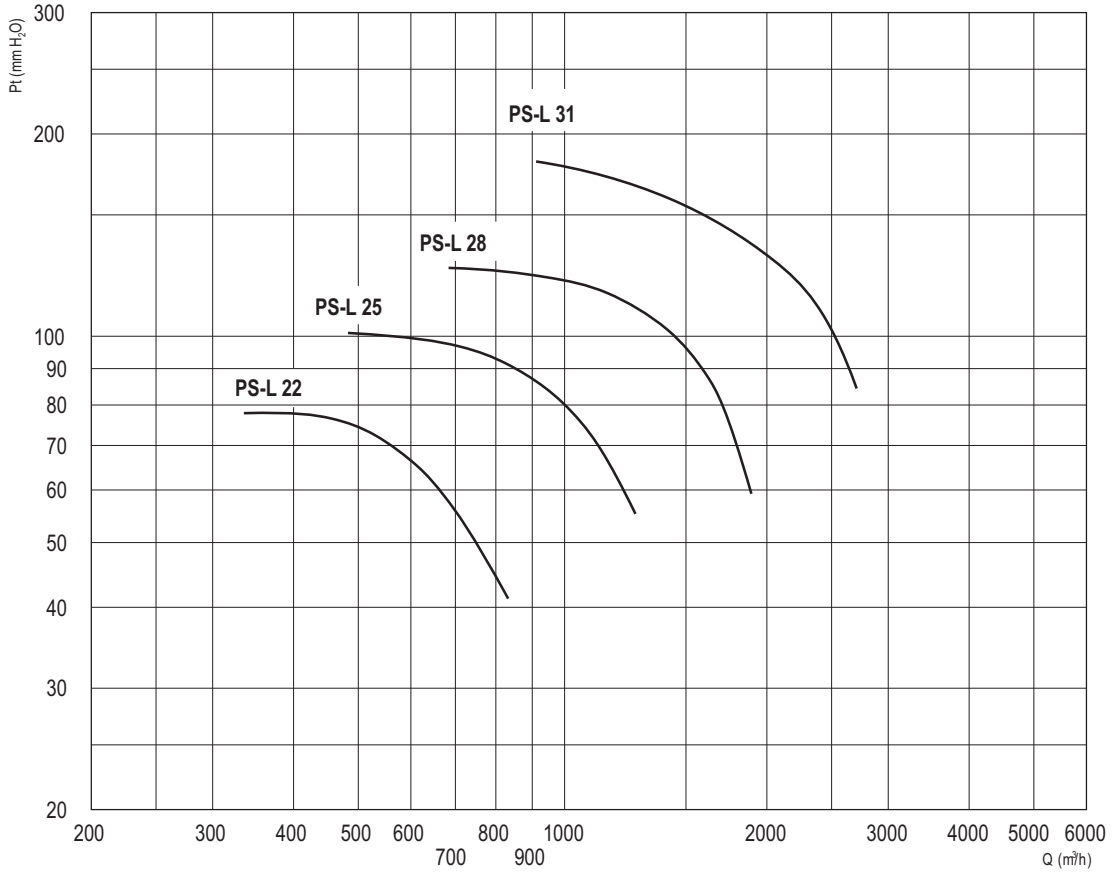
SEK. 6

POZICIJA MOTORA / MOTOR POSITION

PS-L



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



PS-L 22 (aranžman 4/ arrangement 4)

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	222	T	2	0,18	0,5	55/F	64

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	222	830	19,2	0,012	0,08	63

$Pd = 0,06218 \times (Q/45,3)^2 = mm\ H_2O$

PS-L 25 (aranžman 4/ arrangement 4)

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	252	T	2	0,37	1,2	55/F	67

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	252	1.330	12,3	0,03	0,10	71

$Pd = 0,06218 \times (Q/72,5)^2 = mm\ H_2O$

PS-L 28 (aranžman 4/ arrangement 4)

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	282	T	2	0,75	1,9	55/F	70

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	282	1.900	13,9	0,038	0,16	80

$Pd = 0,06218 \times (Q/90)^2 = mm\ H_2O$

PS-L 31 (aranžman 4/ arrangement 4)

Tio Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	312	T	2	1,5	3,5	55/F	73

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	312	2.700	18,8	0,04	0,21	90

$Pd = 0,06218 \times (Q/112,9)^2 = mm\ H_2O$

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 35 (aranžman 4/arrangement 4)

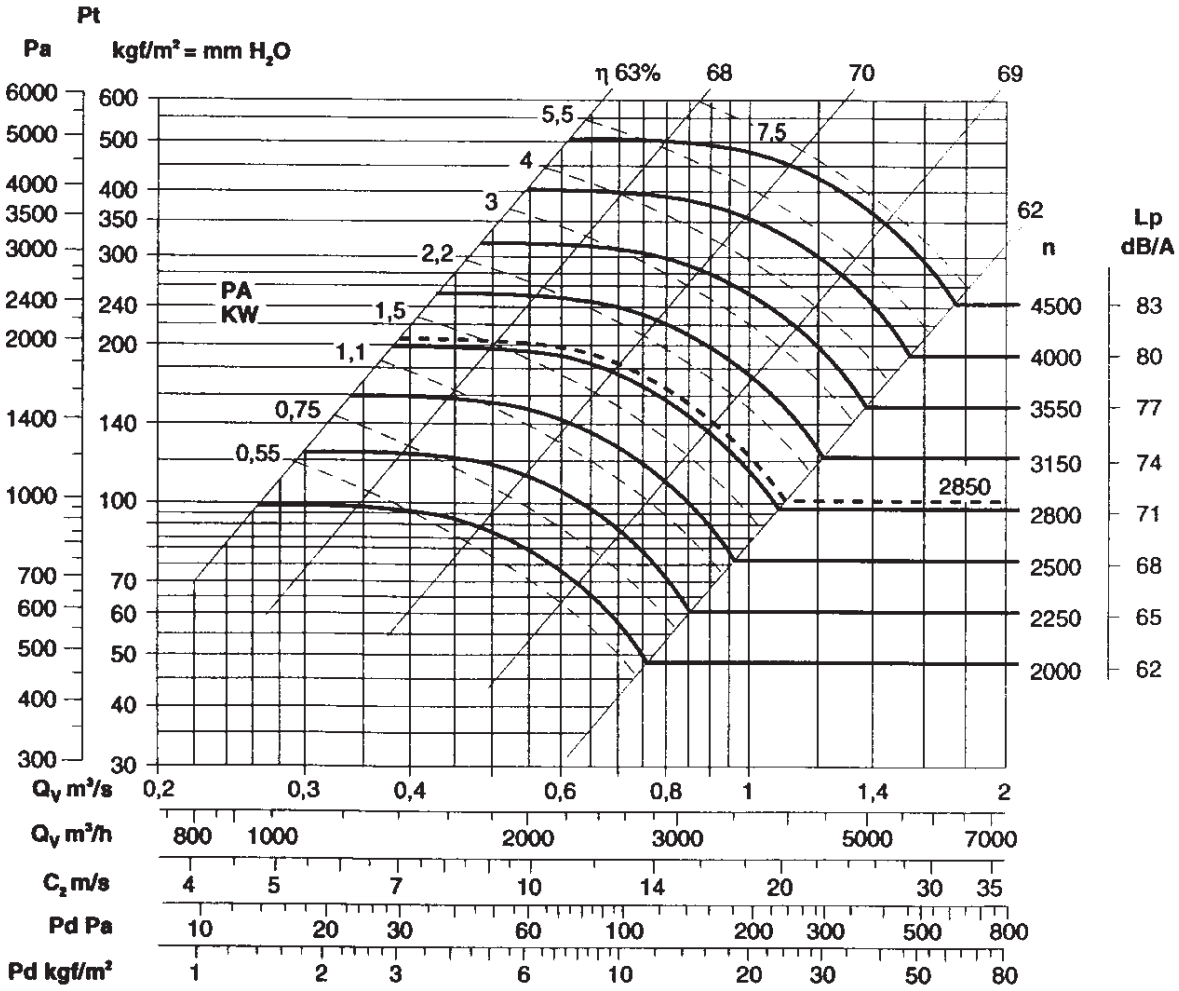
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	352	T	2	2,2	5,1	55/F	78

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	352	3850	17,8	0,06	0,5	90

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	4000	Standard
100°C - 200°C	3550	vis.temperatura/High temperature (PS-L-AT)
200°C - 300° C	3150	vis.temperatura/High temperature (PS-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 40 (aranžman 4/arrangement 4)

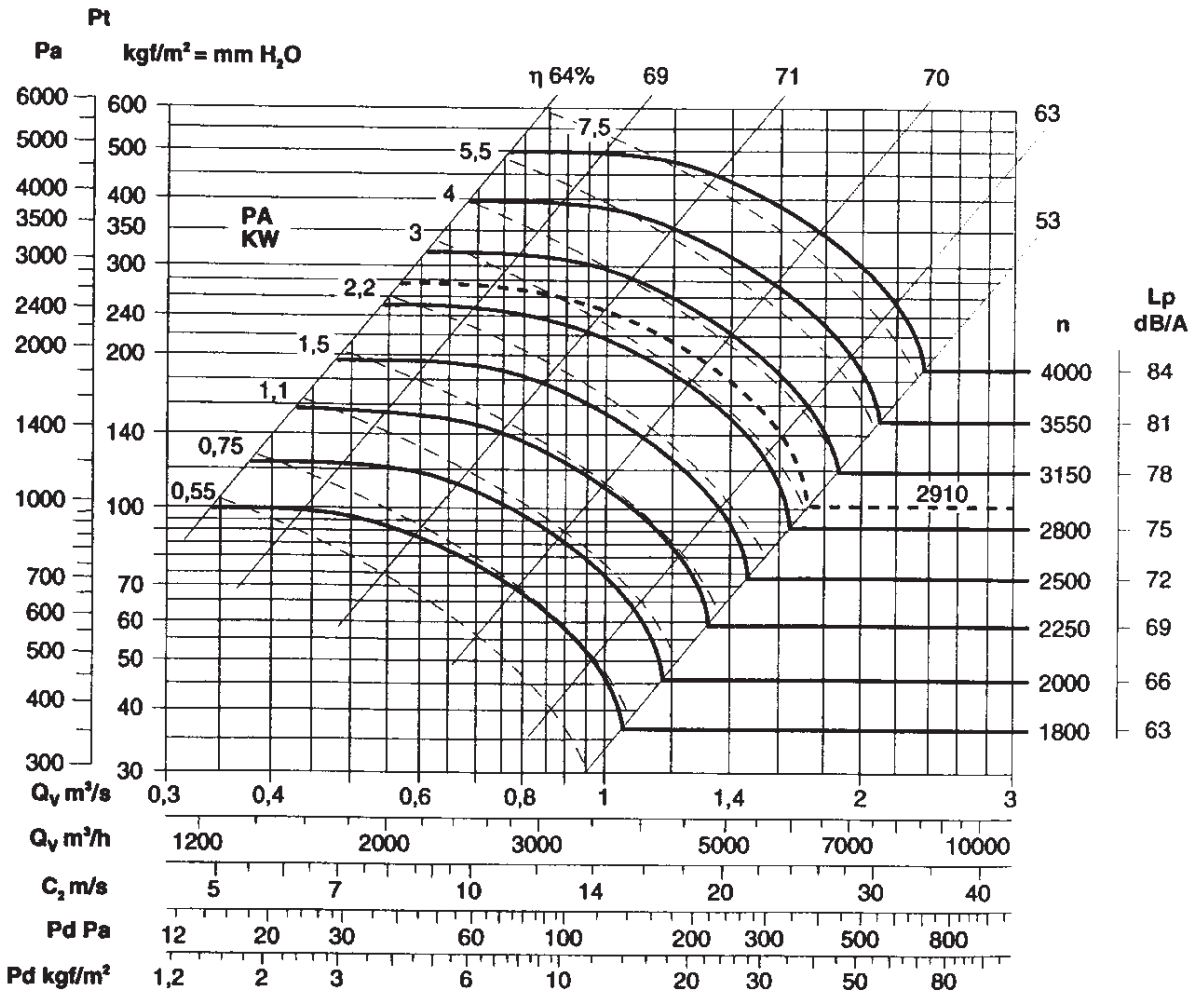
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	402	T	2	4	8,5	55/F	81

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	402	6150	24,4	0,07	0,8	112

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	3550	Standard
100°C - 200°C	3150	vis. temperatura/High temperature (PS-L-AT)
200°C - 300° C	2800	vis. temperatura/High temperature (PS-L-AT)



SEK. 6

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 45 (aranžman 4/ arrangement 4)

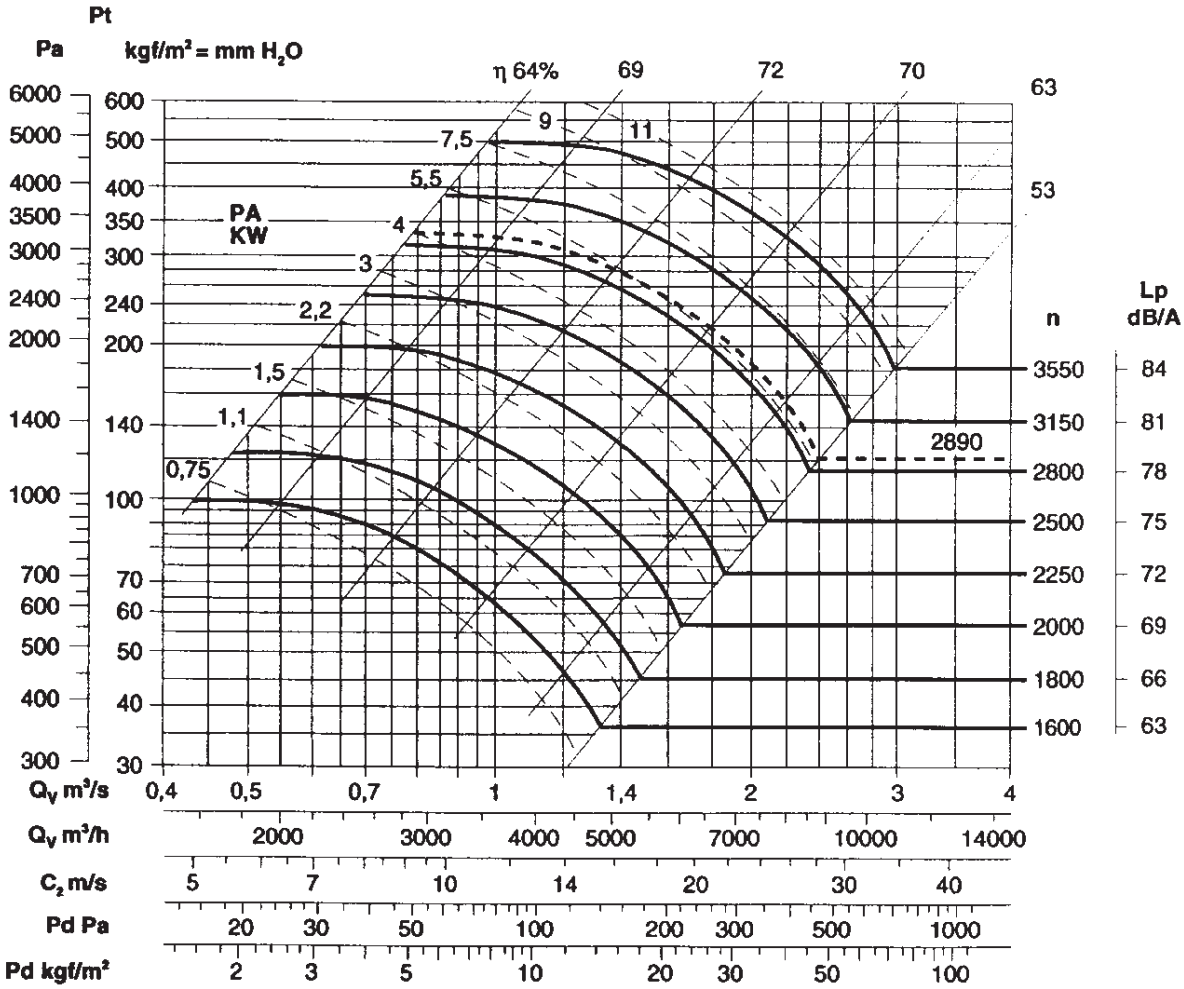
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	452	T	2	7,5	15,3	55/F	85

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	452	8500	26,2	0,09	1,4	132

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	3150	Standard
100°C - 200°C	2800	vis.temperatura/High temperature (PS-L-AT)
200°C - 300° C	2500	vis.temperatura/High temperature (PS-L-AT)



SEK. 6

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 50 (aranžman 4/ arrangement 4)

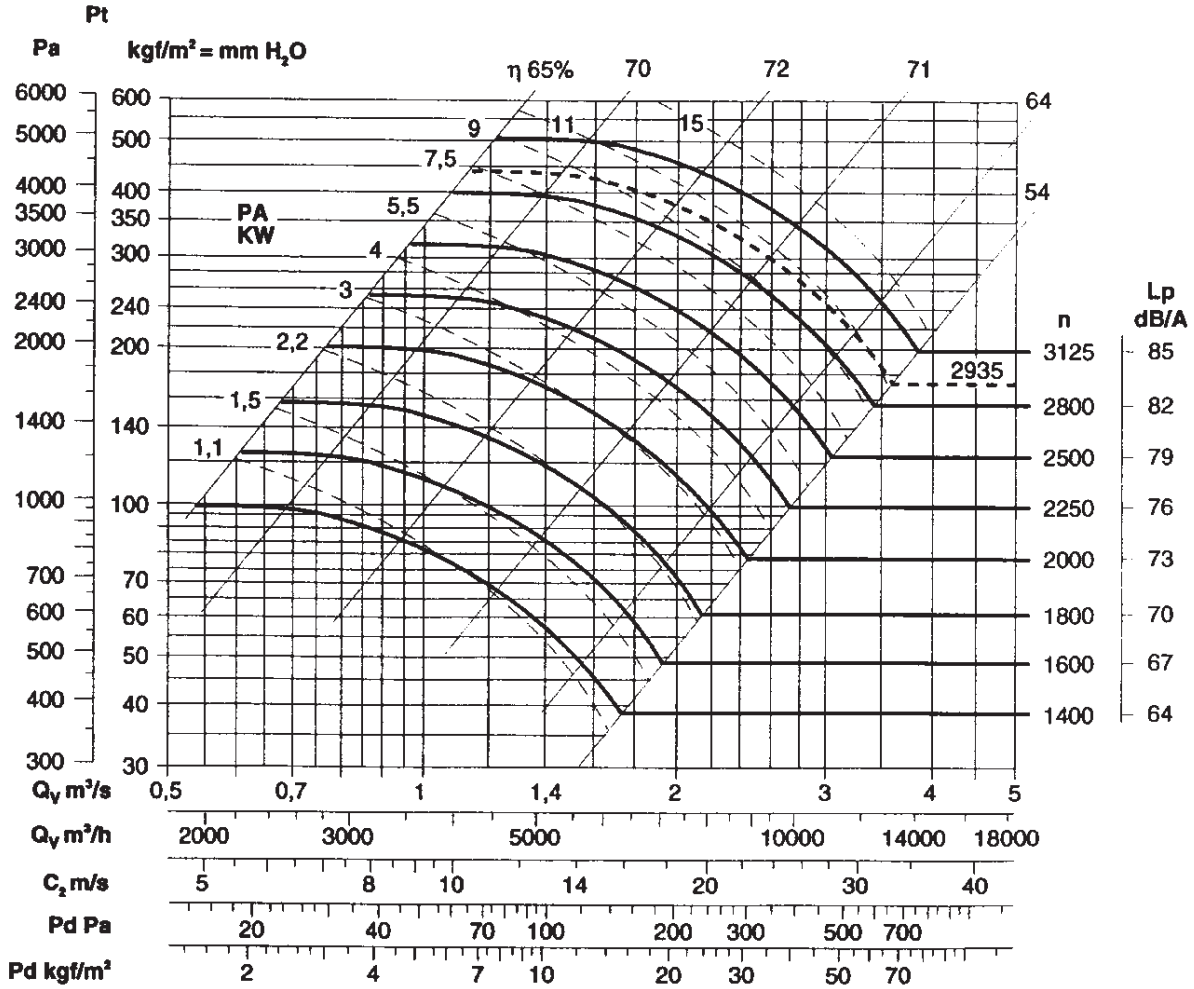
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	502	T	2	15	29	55/F	89
PS-L	504	T	4	1,5	3,7	55/F	69

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	502	12000	30,2	0,11	2,6	160
PS-L	504	5400	13,6	0,11	2,6	90

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	2800	Standard
100°C - 200°C	2500	vis.temperatura/High temperature (PS-L-AT)
200°C - 300° C	2250	vis.temperatura/High temperature (PS-L-AT)



SEK.6

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 56 (aranžman 4/arrangement 4)

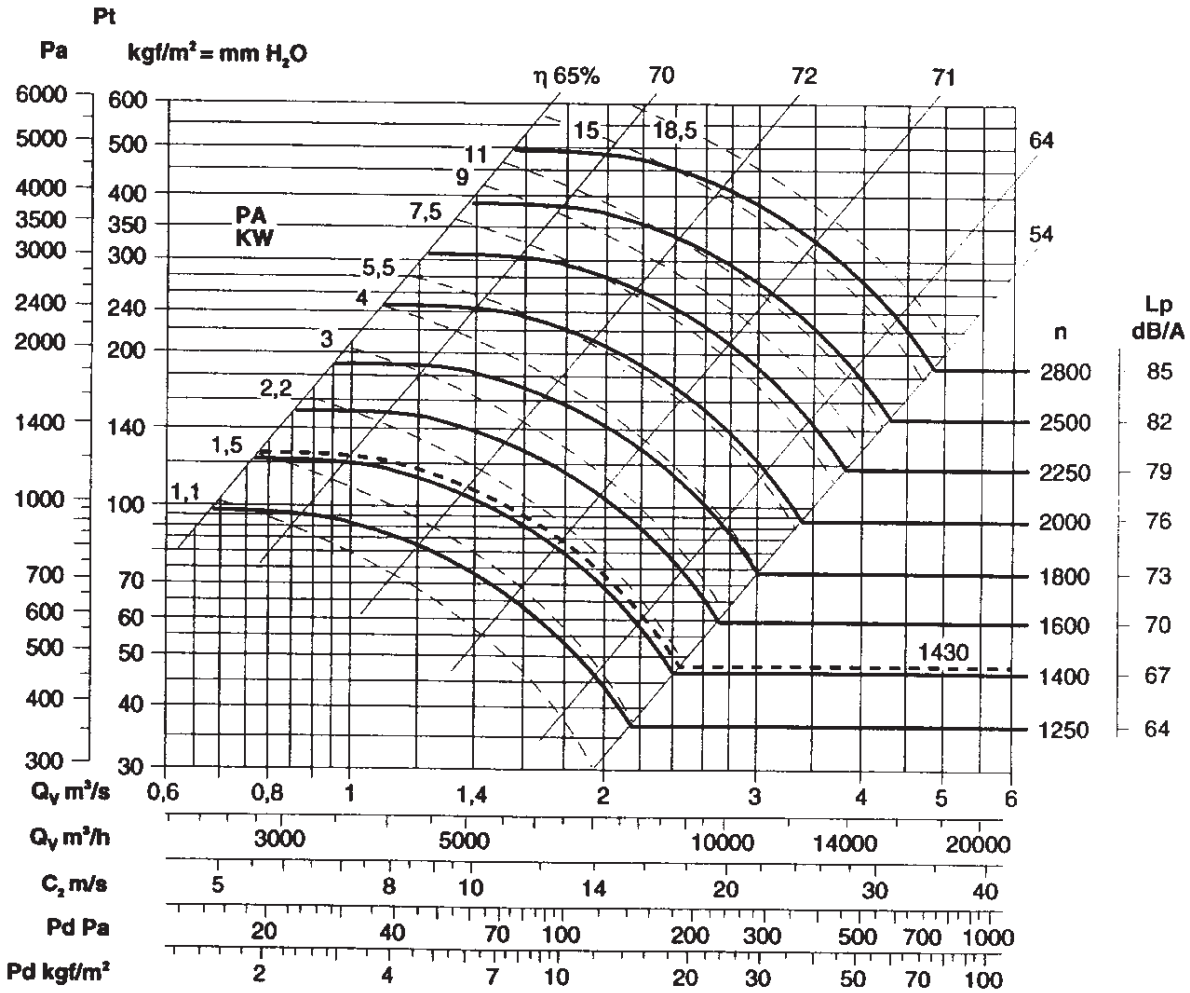
Tip	Model	Alim.	Poli	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	562	T	2	22	42	55/F	92
PS-L	564	T	4	3	6,7	55/F	72

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip	Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	562	17000	33,7	0,14	3,8	180
PS-L	564	7650	15,2	0,14	3,8	100

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	2500	Standard
100°C - 200°C	2250	vis. temperatura/High temperature (PS-L-AT)
200°C - 300° C	2000	vis. temperatura/High temperature (PS-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 63 (aranžman 4/arrangement 4)

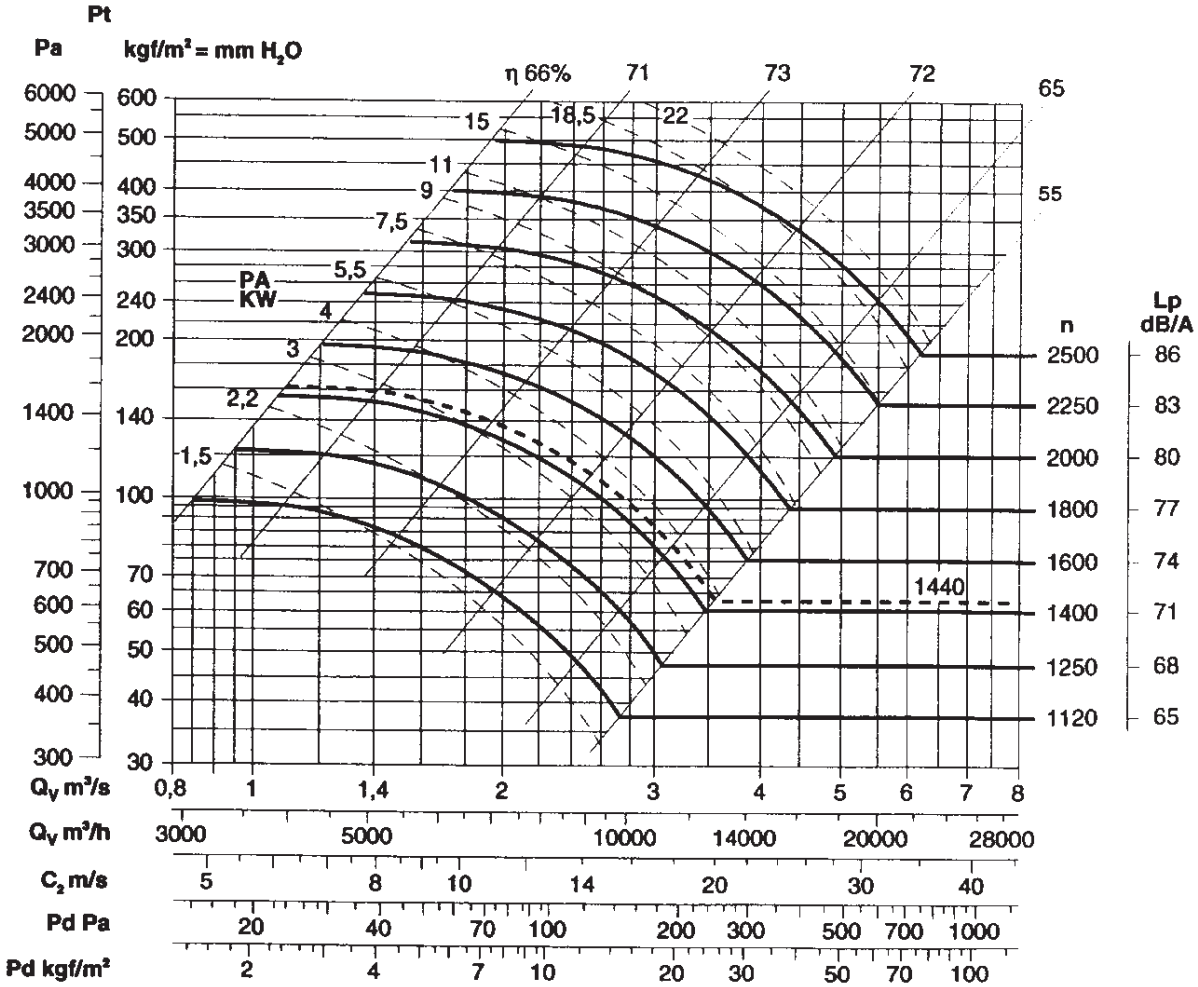
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	634	T	4	5,5	12	55/F	78

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	634	12000	18,5	0,18	6,3	132

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	2250	Standard
100°C - 200°C	2000	vis. temperatura/High temperature (PS-L-AT)
200°C - 300° C	1800	vis. temperatura/High temperature (PS-L-AT)



SEK.6

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 71 (aranžman 4/arrangement 4)

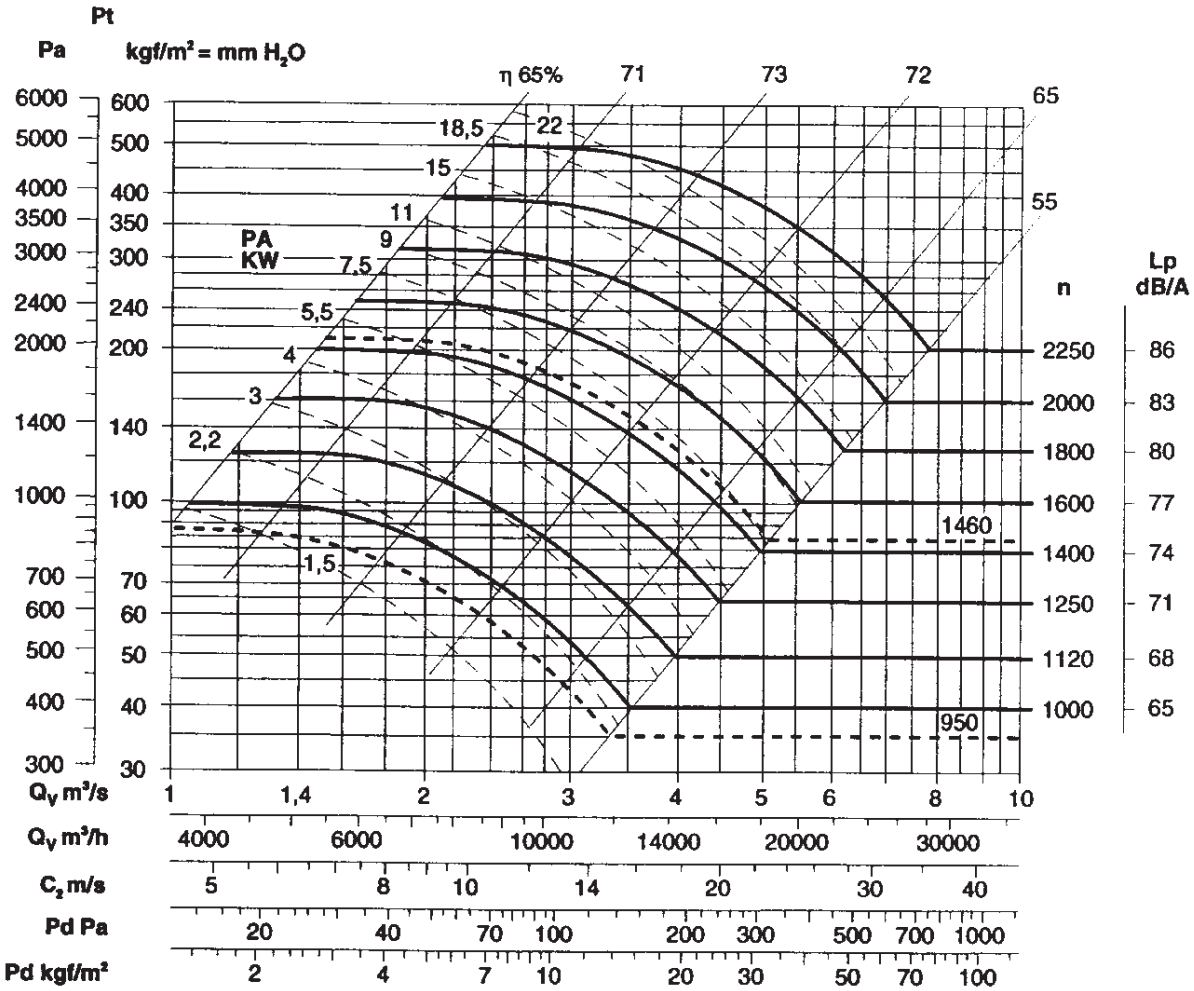
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	714	T	4	11	22,4	55/F	81

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	714	17000	21,4	0,22	12	160

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	2000	Standard
100°C - 200°C	1800	vis. temperatura/High temperature (PS-L-AT)
200°C - 300° C	1600	vis. temperatura/High temperature (PS-L-AT)



SEK. 6

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 80 (aranžman 4/ arrangement 4)

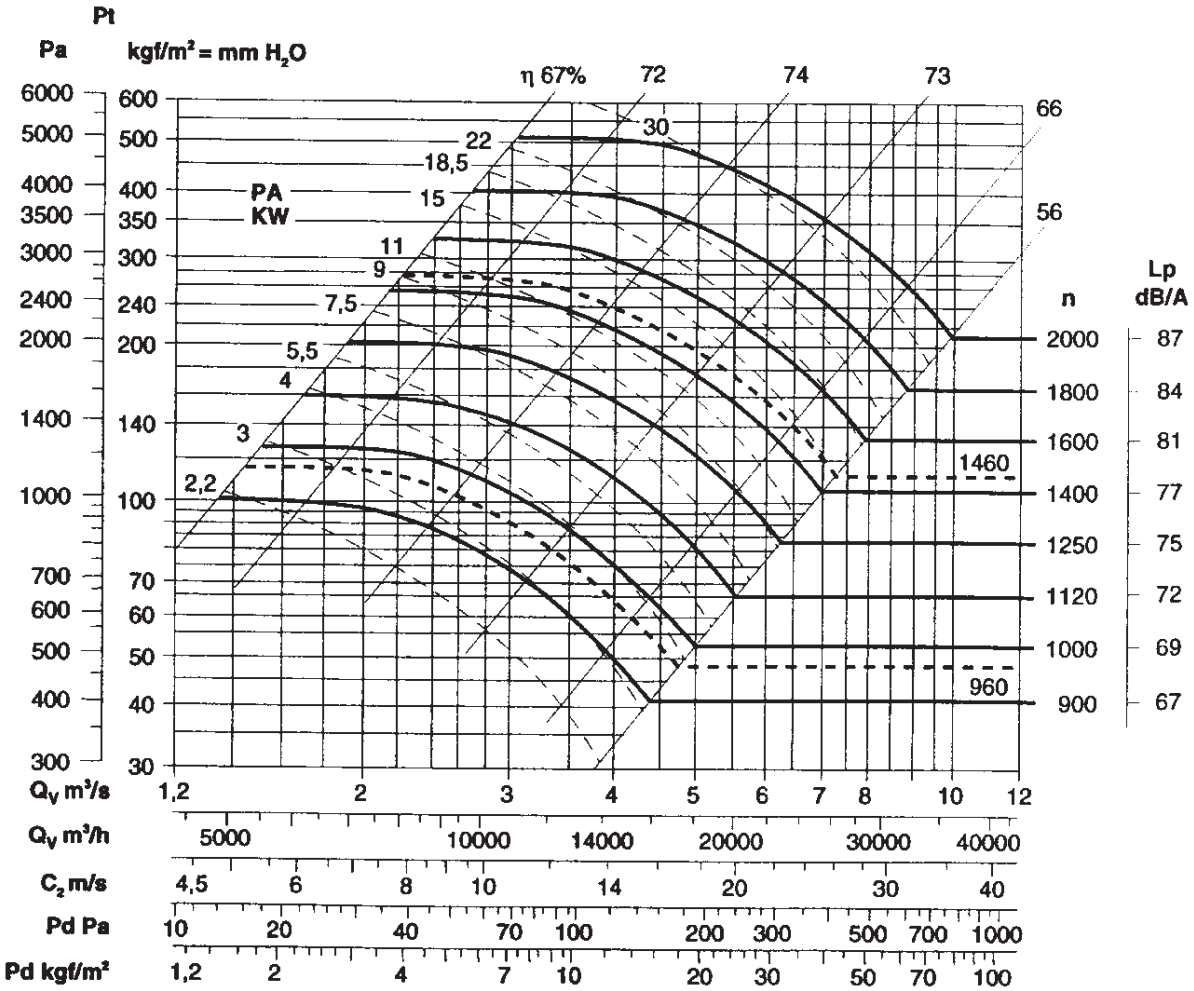
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	804	T	4	18,5	40	55/F	84
PS-L	806	T	6	5,5	13,5	55/F	74

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	804	24.200	23,2	0,29	18	180
PS-L	806	15.300	14,6	0,29	18	132

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	1800	Standard
100°C - 200°C	1600	vis. temperatura/High temperature (PS-L-AT)
200°C - 300° C	1400	vis. temperatura/High temperature (PS-L-AT)



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

PS-L 90 (aranžman 4/ arrangement 4)

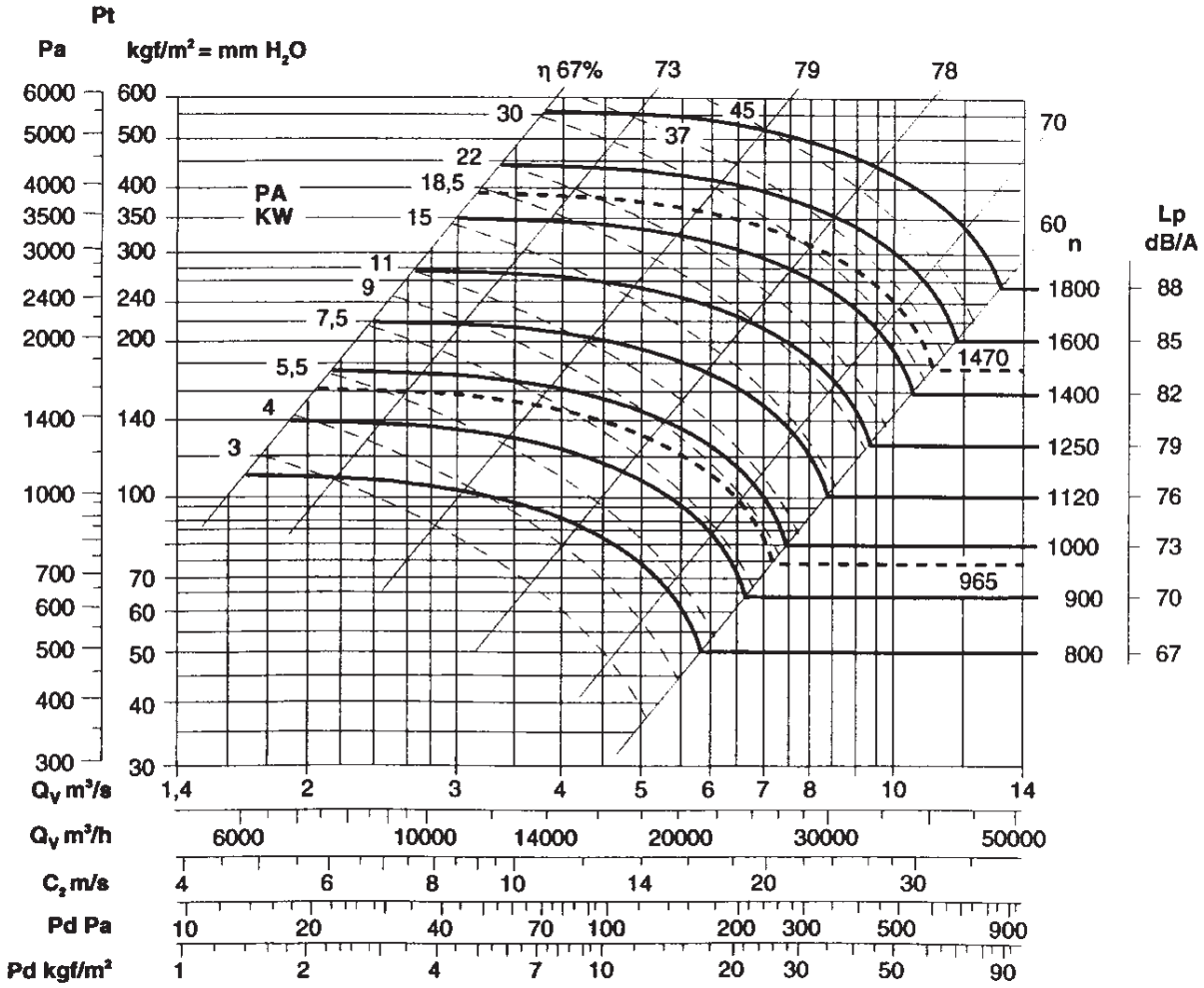
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PS-L	904	T	4	37	69,1	55/F	87
PS-L	906	T	6	11	22,5	55/F	77

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PS-L	904	34.200	26,4	0,36	34	225
PS-L	906	21.600	16,7	0,36	34	160

Maksimalni obrtaj u odnosu na temperaturu vazduha
Maximum rpm with regard to air temperature

Temperatura vazduha Air temperature	rpm	Konstrukcija Construction
0°C - 100° C	1600	Standard
100°C - 200°C	1400	vis. temperatura/High temperature (PS-L-AT)
200°C - 300° C	1250	vis. temperatura/High temperature (PS-L-AT)



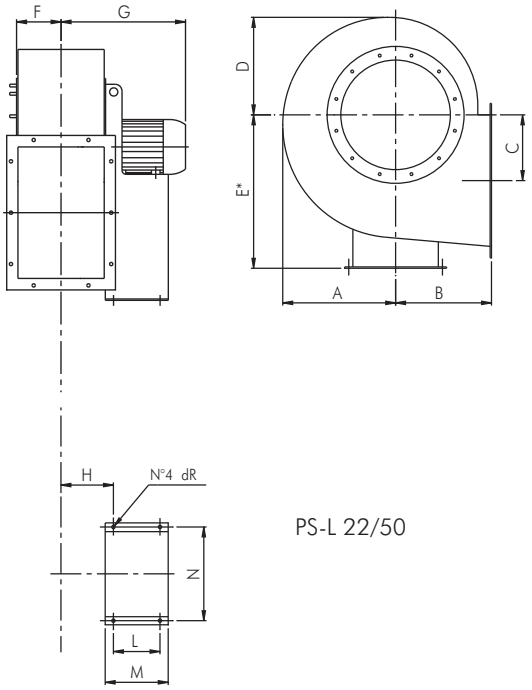
SEK. 6

ARANŽMAN 4 / ARRANGEMENT 4

Tip/Type	A	B	C	D	E* E1 0°+135°	E2 180°+225°	E3 270°+315°	F
PS-L 22	195	165	150	170	255	165	255	62
PS-L 25	246	195	175	211	315	195	315	86
PS-L 28	277	200	202	235	375	200	375	95
PS-L 31	302	225	229	258	400	225	400	105
PS-L 35	345	255	253	290	450	255	450	115
PS-L 40	370	285	286	315	500	285	500	127
PS-L 45	495	320	321	355	560	320	560	141
PS-L 50	472	360	355	400	600	360	600	157
PS-L 56	540	400	390	456	670	400	670	177
PS-L 63	602	450	439	510	750	450	750	195
PS-L 71	689	500	500	566	670	500	850	216
PS-L 80	780	560	560	641	755	560	950	241
PS-L 90	870	630	630	720	850	630	1060	275

Dimenzije u mm/Dimensions in mm

Važno : Pogledati tabelu na str. 26 sez. 6
See discharge angle schedule pag. 26 sez. 6

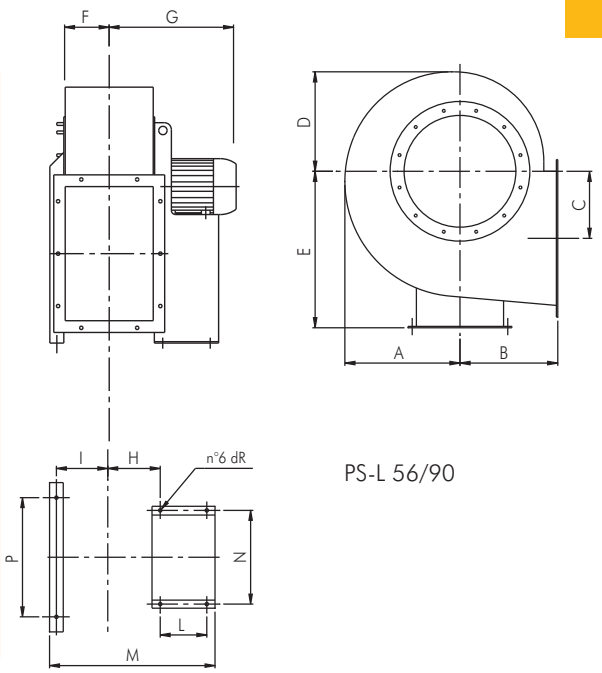


PS-L 22/50

SEK. 6

Tip/Type	Poli/Poles	G	H	I	L	M	N	P	dR	kg
PS-L 22	2	254	100	-	86	145	184	-	10	18
PS-L 25	2	290	121	-	121	180	203	-	10	26
PS-L 28	2	322	131	-	121	180	203	-	10	32
PS-L 31	2	352	151	-	133	205	234	-	10	44
PS-L 35	2	387	162	-	133	205	234	-	10	69
PS-L 40	2	475	148	-	197	250	289	-	12	110
PS-L 45	2	502	171	-	237	300	337	-	12	158
PS-L 50	2	646	198	-	337	415	395	-	17	247
"	4	431	203	195	133	205	234	-	12	135
PS-L 56	2	716	235	195	357	835	434	632	17	316
"	4	486	195	195	197	625	289	632	12	144
PS-L 63	4	582	225	215	237	714	337	702	12	191
PS-L 71	4	698	282	235	316	879	772	772	20	308
PS-L 80	4	743	286	260	361	993	862	862	20	430
"	6	633	286	260	201	833	862	862	20	340
PS-L 90	4	926	313	287	441	1127	962	962	20	620
"	6	736	313	287	316	1002	962	962	20	495

Dimenzije u mm/Dimensions in mm

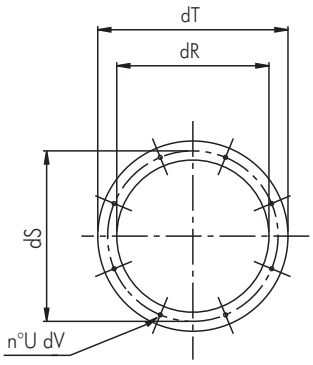


PS-L 56/90

Note: PS-L 22/63 dozvoljava modifikaciju ispusnog ugla
PS-L 71/90 nedozvoljava modifikaciju ispusnog ugla
Note: PS-L 22/63 allow the modification of discharge angle, PS-L 71/90 do not allow the modification of discharge angle

DIMENZIJE / DIMENSIONS

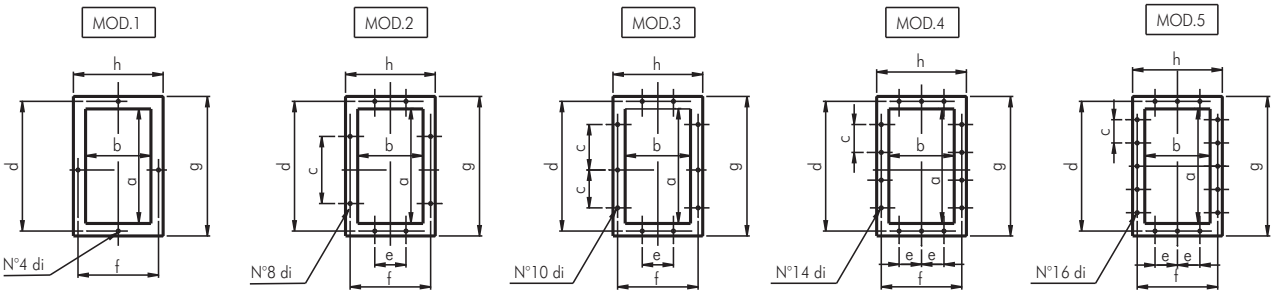
ULAZNI OTVOR / INLET



Tip/Type	dR	dS	dT	U	dV
22	130	150	170	4	8
25	185	219	255	8	8
28	205	241	275	8	8
31	228	265	298	8	8
35	255	292	325	8	10
40	285	332	365	8	10
45	320	366	400	8	10
50	360	405	440	8	10
56	405	448	485	12	10
63	455	497	535	12	10
71	505	551	585	12	10
80	565	629	665	12	10
90	635	698	735	12	12

Dimenzije u mm/Dimensions in mm

IZLAZNI OTVOR / OUTLET



Tip/Type	a	b	c	d	e	f	g	h	di	MOD.
22	124	103	-	145	-	125	164	143	8	1
25	207	148	112	241	112	182	277	218	12	2
28	231	166	112	265	112	200	301	236	12	3
31	258	185	112	292	112	219	328	255	12	3
35	288	205	125	332	125	249	368	285	12	3
40	322	229	125	366	125	273	402	309	12	3
45	361	256	125	405	125	300	441	336	12	3
50	404	288	125	448	125	332	484	368	12	4
56	453	322	125	497	125	366	533	402	12	4
63	507	361	125	551	125	405	587	441	12	4
71	569	404	160	629	160	464	669	504	14	4
80	638	453	160	698	160	513	738	553	14	4
90	715	507	160	775	160	567	815	607	14	5

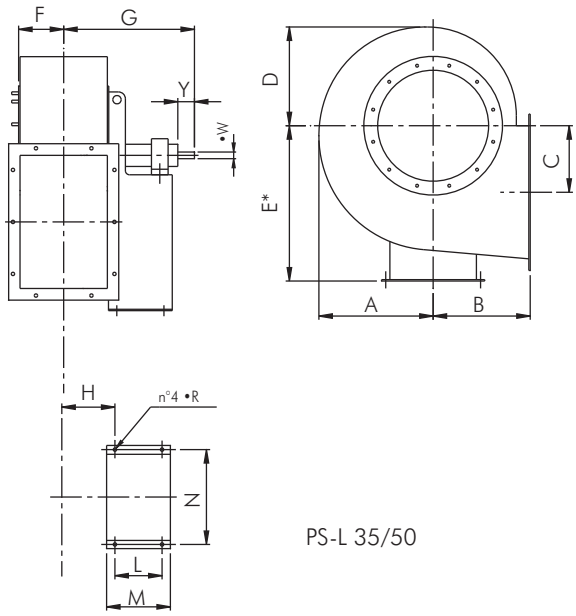
Dimenzije u mm/Dimensions in mm

ARANŽMAN 1 / ARRANGEMENT 1

Tip/Type	A	B	C	D	E* E1 0°+135°	E2 180°+225°	E3 270°+315°	F	G
PS-L 35	345	255	253	290	450	255	450	115	668
PS-L 40	370	285	286	315	500	285	500	127	693
PS-L 45	495	320	321	355	560	320	560	141	706
PS-L 50	472	360	355	400	600	360	600	157	828
PS-L 56	540	400	390	456	670	400	670	177	881
PS-L 63	602	450	439	510	750	450	750	195	907
PS-L 71	689	500	500	566	670	500	850	216	979
PS-L 80	780	560	560	641	755	560	950	241	1000
PS-L 90	870	630	630	720	850	630	1060	275	1026

Dimenzije u mm/Dimensions in mm

Važno : Pogledati tabelu na str. 26 sez. 6
See discharge angle schedule pag. 26 sez. 6

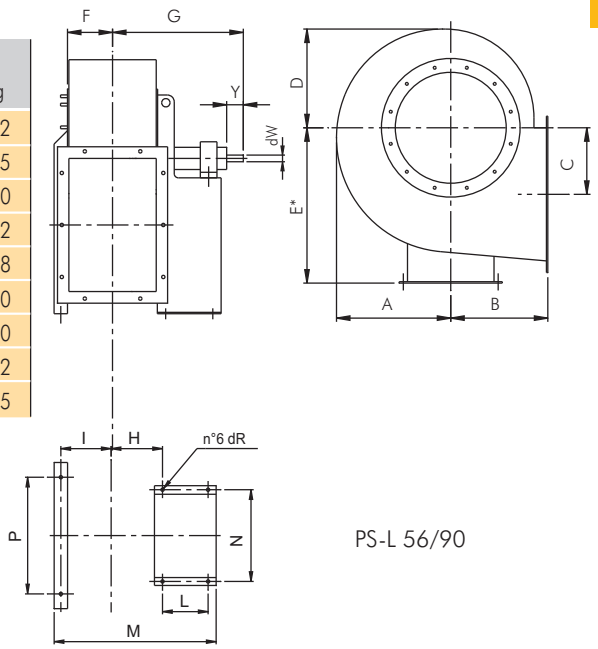


PS-L 35/50

SEK.6

Tip/Type	H	I	L	M	N	P	dR	Osovina/Shaft dW	Y	kg
PS-L 35	157	-	407	485	355	-	14	28	60	72
PS-L 40	168	-	407	485	355	-	14	38	80	85
PS-L 45	181	-	407	485	355	-	14	38	80	100
PS-L 50	198	-	477	560	364	-	17	42	110	142
PS-L 56	219	191	477	943	632	632	17	48	110	178
PS-L 63	239	211	477	983	702	702	17	48	110	230
PS-L 71	262	235	551	1114	772	772	19	48	110	280
PS-L 80	287	259	551	1183	862	862	19	55	110	352
PS-L 90	313	287	551	1237	962	962	19	55	110	435

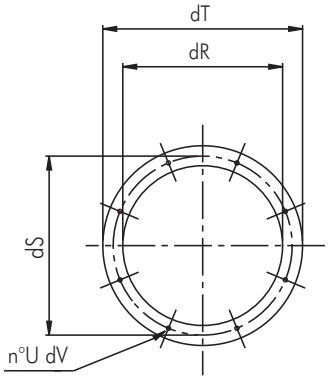
Dimenzije u mm/Dimensions in mm



PS-L 56/90

Note: PS-L 22/63 dozvoljava modifikaciju ispusnog ugla
PS-L 71/90 nedozvoljava modifikaciju ispusnog ugla
Note: PS-L 22/63 allow the modification of discharge angle, PS-L 71/90 do not allow the modification of discharge angle

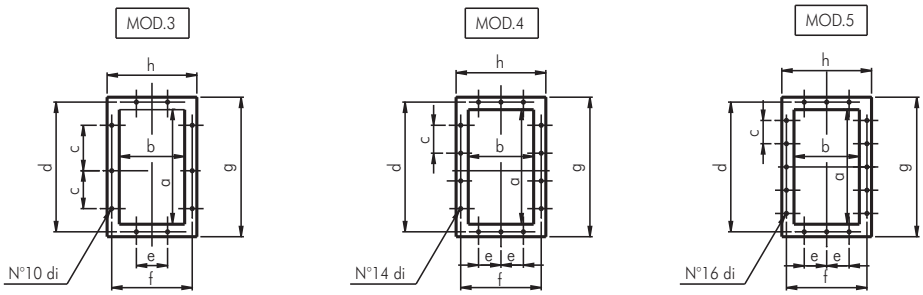
ULAZNI OTVOR / INLET



Tip/Type	dR	dS	dT	U	dV
35	255	292	325	8	10
40	285	332	365	8	10
45	320	366	400	8	10
50	360	405	440	8	10
56	405	448	485	12	10
63	455	497	535	12	10
71	505	551	585	12	10
80	565	629	665	12	10
90	635	698	735	12	12

Dimenzije u mm/Dimensions in mm

IZLAZNI OTVOR / OULET



Tip/Type	a	b	c	d	e	f	g	h	di	MOD.
35	288	205	125	332	125	249	368	285	12	3
40	322	229	125	366	125	273	402	309	12	3
45	361	256	125	405	125	300	441	336	12	3
50	404	288	125	448	125	332	484	368	12	4
56	453	322	125	497	125	366	533	402	12	4
63	507	361	125	551	125	405	587	441	12	4
71	569	404	160	629	160	464	669	504	14	4
80	638	453	160	698	160	513	738	553	14	4
90	715	507	160	775	160	567	815	607	14	5

Dimenzije u mm/Dimensions in mm

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
Cl = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
Cl = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

ARANŽMAN 1/ARRANGEMENT 1

Esempio/Example: Tip / Type	Model / Model	Ispuštanje / Discharge	Ugao / Angle	rpm	Aranžman / Arrangement
PS-L	50	LG	270°	2000 rpm	Es.1

ARANŽMAN 4/ARRANGEMENT 4

Primer: Tip / Type	Model / Model	Voltaža / Voltage	Ispuštanje / Discharge	Ugao / Angle	Aranžman / Arrangement
PS-L	504	T	LG	270°	Es.4

ARANŽMAN 9 e 12/ARRANGEMENT 9 and 12

Primer : Tip / Type	Model / Model	Voltaža / Voltage	Ispuštanje / Discharge	Ugao / Angle	Pozicija motora / Motor position	rpm	Aranžman / Arrangement
PS-L	56	T	LG	270°	Z	2500 rpm	Es.9

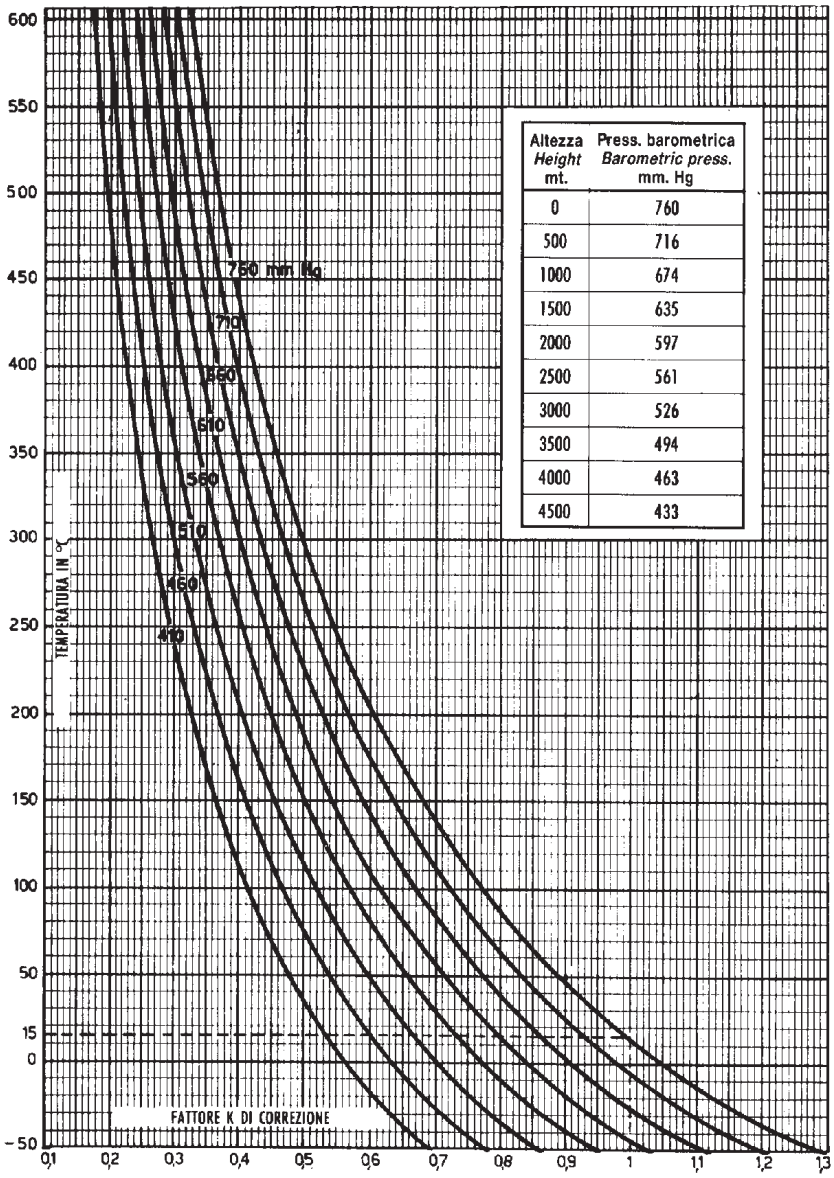
Tel. (++39) 030 9913575 (5 linee r.a.) - fax (++39) 030 9913766 - E-mail dynair@dynair.it - www.dynair.it
Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

Centrifugalni ventilatori sa suprotno nazubljenim lopaticama

Backward curved blade centrifugal fans

Popravljiv faktor "K" za definisanje gustine vazduha u stanju različitog od standarda (15°C, 760 mm. Hg)

"K" correcting factor to define air density in conditions differing from standard (15°C, 760 mm. Hg)



Altezza *Height* mt.	Press. barometrica *Barometric press.* mm. Hg
0	760
500	716
1000	674
1500	635
2000	597
2500	561
3000	526
3500	494
4000	463
4500	433

PRIMER :

Kako izabrati PR- L ventilator sposoban da izduva vazduh pri temperaturi od 100 °C, sa protokom vazduha 9000 m3/h, sa totalnim pritiskom od 90 mm ,na nadmorskoj visini od 950 m.
Iz k faktor diagrama : F = 0.7.
Odnosi se na podatke date diagramom :
Snabdevanje vazduhom: Q = 9000 m3/h
(nepromenjenia postojeći volumetrični protok)
Totalni pritisak : 90/0.7 = 128 mm
Gustina vazduha : 1.22 * 0.7 = 0.854 kg/m3
Izabrali smo : PR- L 56 :
Snabdevanje vazduhom : Q = 9000 m3/h
Totalni pritisak : Ht = 128 mm wg.
Brzina ventilatora : 1650 rpm
Ulazna snaga : Pv = 4 KW
Prilikom aktivnog rada PR- L 56 ventilator prati sledeće rezultate :
Snabdevanje vazduhom : Q = 9000 m3/h
Totalni pritisak : Ht = 128*0.7 = 90 mm
Gustina vazduha = 0.854 kg/m3
Brzina ventilatora :1650 rpm
Ulazna snaga : Pv = 4*0.7 = 2.8 KW

EXAMPLE:

How to select a PR-L fan able to exhaust air at 100° C, with 9000 m³/h delivery, 90 mm. w.g. total pressure, placed at 950 m. on sea level.
From k factor diagram: F = 0,7. Referring given data to diagram conditions, we have:
Dedlivery: Q = 9000 m³/h (unchanged, being volumetric delivery).
Total pressure: 90/0,7 = 128 mm.
Air density: 1,22x0,7 = 0,854 kg/m³.
We select PR-L 56:
Air delivery Q = 9000 m³/h.
Total pressure Ht = 128 mm wg.
Fan speed: 1650 r.p.m.
Input power Pv = 4KW.
At real working conditions, the PR-L 56 fan will performas follows:
Air delivery Q = 9000 m³/h.
Total pressure Ht = 128x0,7 = 90 mm.
Air density = 0,854 kg/m³.
Fan speed: 1650 rpm.
Input power Pv = 4x0,7 = 2,8 KW

PV-L

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama za transport prljavog vazduha
Backward curved blade centrifugal fans for dusty air

OSNOVNI PODACI :

Ventilatori PV- L serije su našli svoju glavnu primenu u (industrijskim pogonima za izradu pneumatika ,cementa, keramike, stakla, drveta, mermera, rudnicima itd) za izduvavanje, transport i filtraciju prljavog dima, vazduha sa ne abrazivnim česticama ,sa maksimalnom temperaturom u standardnoj izvedbi do 80 °C i specijalnoj do 150 °C (AT model).

KONSTRUKCIJA :

- Kućište je izrađeno od čelika , zaštićeno od spoljašnjih utica Epoxy smolom.
- Radno kolo sa unazad zakrivljenim lopaticama je izrađeno od čelika i premazano Epoxy smolom.
- Dostupno samo u izvedbi 4 (sa radnim kolom direktno povezanim na nosač motora).
- Trofazni asinhroni motor u skladu sa IEC34- IEC72 – 89/392 EEC- 89/336 EEC- 73/ 23 EEC standardima,CE kvalifikovan, IP 55 zaštitom klase F . Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Odvodni kanal kondenzata
- Suprotan bok ulaznog otvora
- Suprotan bok izlaznog otvora
- Zaštita ulaznog otvora
- Ulazne fleksibilne veze
- Izlazne fleksibilne veze
- Antivibracioni okvir

NA ZAHTEV :

- Model za transport vrelog gasa do temperature maksimalno 300°C. (PV-L / AT)
- Model otporan na koroziju izrađen sa kućištem ,sa ulaznim delom diska i lopaticama od čelika AISI304 (PV- L / INOX-A)

GENERAL DESCRIPTION

The fans of the PV-L series find their principal application in the industrial plants of pneumatic transport, suction and filtering in foundries, cement factories, mines, marble, ceramics and glass factories, furnaces, etc.
They can convey air with non-abrasive particles and dusty smoke with max. temperature of 80°C in standard version, 150°C in AT version (high temperature).

CONSTRUCTION

- Volute in steel sheet, protected against atmospheric agents by epoxy paint.
- Single inlet backward curved wheel with high efficiency, manufactured in epoxy painted steel sheet.
- Available only in execution 4 (with impeller directly coupled to the motor shaft).
- Three-phase asynchronous motor according to IEC34-IEC72 - 89/392 EEC - 89/336 EEC - 73/23 EEC standards, marked CE, IP55, class F. Suitable for S1 service (continuous working at constant load).

ACCESSORIES

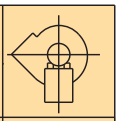
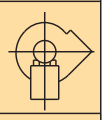
- Condensation drain hole.
- Inlet counter-flange.
- Outlet counter-flange.
- Inlet protection guard.
- Inlet flexible connection.
- Outlet flexible connection.
- Antivibration mounts.

UPON REQUEST

- High temperature version suitable for conveying hot gases, max 150°C (PV-L/AT).
- Corrosion resistant version, manufactured with casing, inlet side disc and impeller in stainless steel AISI304 (PV-L/INOX-A).

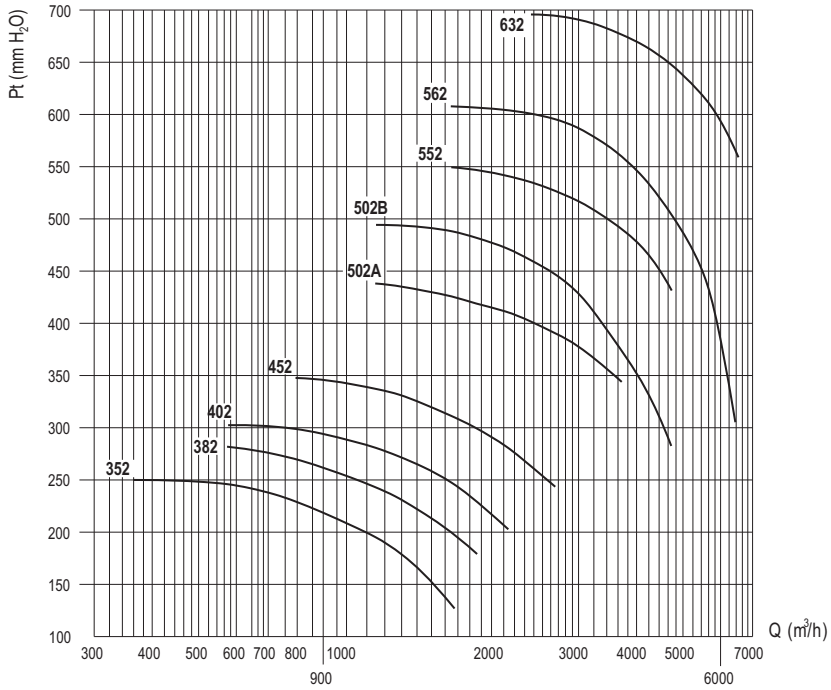
UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

PV-L

Rotacija Rotation RD								
Forma-Form	0	45	90	135	180(*)	225(*)	270	315
Rotacija Rotation LG								
Visina-Height	E1				E2		E3	

N.B. Standardna orijentacija LG270°/Standard orientation LG270°
(*) Zahteva specijalnu konstrukciju/Request special construction

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



PV-L 352

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	352	T	2	1,1	2,80	55/F	70

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	352	1656	46	0,01	0,34	80

PV-L 382

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	382	T	2	1,5	3,4	55/F	74

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	382	2142	31,0	0,019	0,7	90

PV-L 402

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	402	T	2	2,2	5,1	55/F	75

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	402	2376	34,2	0,019	0,7	90

PV-L 452

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	452	T	2	3	6,0	55/F	76

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	452	2664	30,8	0,024	1,0	100

PV-L 502

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	502/A	T	2	4	8,5	55/F	80
PV-L	502/B	T	2	5,5	11	55/F	84

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	502/A	3384	31,3	0,030	1,6	112
PV-L	502/B	4680	43,3	0,030	1,6	132

PV-L 552

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	552	T	2	7,5	15,3	55/F	86

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	552	4680	49,4	0,038	2,6	132

PV-L 562

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	562	T	2	11	23	55/F	87

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	562	6480	47,3	0,038	67	160

PV-L 632

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PV-L	632	T	2	15	29,0	55/F	88

OPERATIVNI LIMIT / OPERATIONAL LIMITS

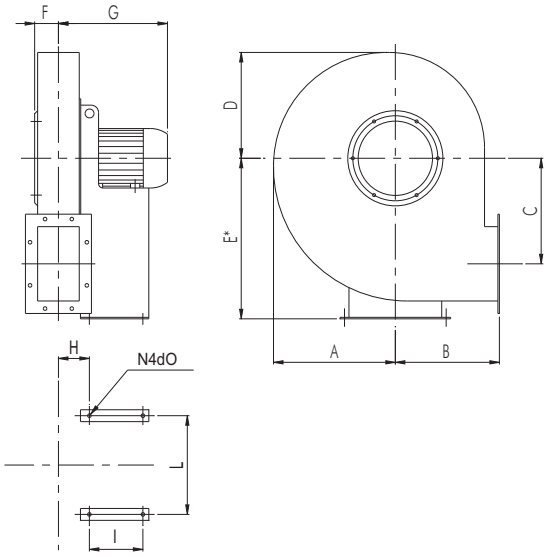
Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PV-L	632	6480	38,3	0,047	4,1	160

Tip/Type	A	B	C	D	E* E1 0°+135°	E2 180°+225°	E3 270°+315°	F	G	H	I	L	d O	kg
PV-L 352	285	250	215	260	355	250	355	65	286	101	121	203	10	36
PV-L 382	310	280	238	283	375	280	375	71	333	118	133	234	10	48
PV-L 402	310	280	238	283	375	280	375	71	333	118	133	234	10	52
PV-L 452	345	300	265	315	400	300	400	78	410	100	197	289	12	63
PV-L 502/A	380	335	297	345	450	335	450	86	418	108	197	289	12	93
PV-L 502/B	380	335	297	345	450	335	450	86	481	118	237	337	12	106
PV-L 552	430	375	337	390	500	375	500	95	492	129	237	337	14	133
PV-L 562	430	375	337	390	500	375	500	95	629	139	237	395	14	141
PV-L 632	485	425	381	440	560	425	560	105	639	149	337	395	14	193

Dimenzije u mm/Dimensions in mm

Važno : pogledati tabelu na str. 43 sez. 6

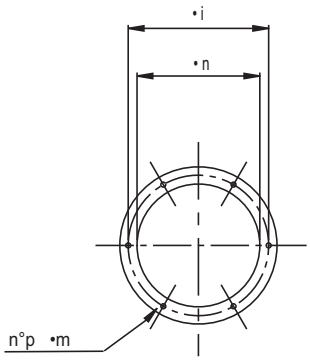
See discharge angle schedule pag. 43 sez. 6



ULAZNI OTVOR / INLET

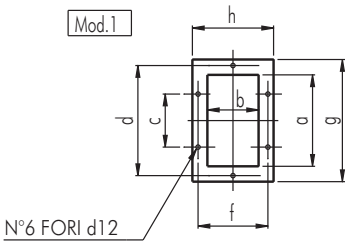
Tip/Type	dn	di	p	dm
PV-L 352	185	219	8	8
PV-L 382	205	241	8	8
PV-L 402	205	241	8	8
PV-L 452	228	265	8	8
PV-L 502/A	255	292	8	10
PV-L 502/B	255	292	8	10
PV-L 552	285	332	8	10
PV-L 562	285	332	8	10
PV-L 632	320	366	8	10

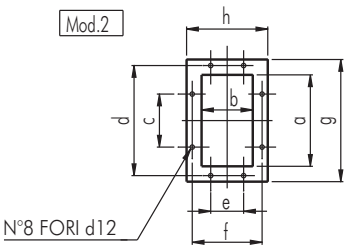
Dimenzije u mm/Dimensions in mm



SEK.6

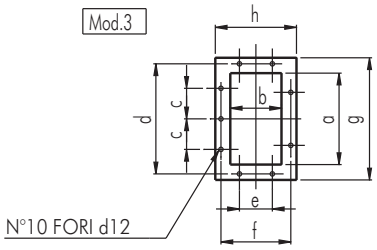
IZLAZNI OTVOR / OUTLET





Tip/Type	a	b	c	d	e	f	g	h	Mod.
PV-L352	146	105	112	182	-	139	216	175	1
PV-L 382	166	117	112	200	-	151	236	187	1
PV-L 402	166	117	112	200	-	151	236	187	1
PV-L 452	185	131	112	219	-	165	255	201	1
PV-L 502/A	207	148	112	241	112	182	277	218	2
PV-L 502/B	207	148	112	241	112	182	277	218	2
PV-L 552	231	166	112	265	112	200	301	236	2
PV-L 562	231	166	112	265	112	200	301	236	2
PV-L 632	258	185	112	292	112	219	328	255	3

Dimenzije u mm/Dimensions in mm



LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage	Ispuštanje / Discharge	Ugao / Angle
	PV-L	452	T	LG	270°

In line redni centrifugalni ventilatori
In line centrifugal fans

7

LINE-METAL str. 2.7

Centrifugalni ventilatori kružnog toka transporta vazduha
Round duct backward bladed centrifugal fans

ERM-EX str. 7.7

Radiaksialni ventilatori povecanog stepena sigurnosti
"Increased safety" mixed flow fans

SS-BOX str. 9.7

Akustično centrifugalni ventilatori unazad zakrivljenih lopatica
Acoustic backward bladed centrifugal fans

AxB str. 12.7

Centrifugalni ventilator sa unapred za krivljenim lopaticama za četvorougaone kanalne sisteme
Rectangular duct foreward bladed centrifugal fans

INDICE/IN

Krovni centrifugalni ventilatori
CENTRIFUGAL ROOF FANS — SEK. 1

Krovni aksijalni ventilatori
AXIAL ROOF FANS — SEK. 2

Ventilatori sa ramom za usmeravanje vazduha
PLATE MOUNTED AND RING AXIAL FANS — SEK. 3

Cevni ventilatori
DUCTED AXIAL FANS — SEK. 4

Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama i centrifugalni ventilatori izrađeni od livenog aluminijuma
SMALL SIZE FORWARD CURVED BLADE AND RADIAL CENTRIFUGAL FANS IN ALUMINIUM — SEK. 5

Centrifugalni ventilatori sa unaza zakrivljenim lopaticama
BACKWARD CURVED BLADE CENTRIFUGAL FANS FOR CLEAN AIR — SEK. 6

In line – redni centrifugalni ventilatori
IN LINE CENTRIFUGAL FANS — SEK. 7

Box ventilatori na direktan pogon sa dva otvora
DIRECT DRIVE DOUBLE INLET BOX FANS — SEK. 8

Centrifugalni box ventilatori i ventilatori sa duplim otvorom na remeni pogon
CENTRIFUGAL BOX FANS AND DOUBLE INLET BELT DRIVEN FANS — SEK. 9

Antikorozivni ventilatori
ANTICORROSIVE FANS — SEK. 10

Ventilatori za odstranjivanje dima
SMOKE EXTRACT FANS — SEK. 11

Regulatori brzine obrtaja
SPEED REGULATORS — SEK. 12

Akustično linijski centrifugalni ventilatori i Rekuperator toplote
IN LINE ACOUSTIC CENTRIFUGAL FANS AND HEAT RECUPERATOR — SEK. 13

LINE-METAL

Centrifugalni ventilatori kružnog toka transporta vazduha
Round duct backward bladed centrifugal fans

OSNOVNI PODACI :

LINE_METAL je serija centrifugalnih ventilatora sa osobinama tipičnih za aksijalne ventilatore, što znači da se protok odvija na istoj osovini.
Ove karakteristike – ograničena dimenzija , veličina otvora doprinose lakoj ugradnji. Nizak nivo buke i srednji nivo radnog pritiska transporta vazduha čine ga idealnim za kućnu i industrijsku upotrebu. Zahvaljujući kompaktnom dizajnu može se ugraditi u bilo koji deo cevi – kanala, neposredno u ventilacioni kanal. Pogodni su za pogon čistog vazduha temperature do maksimalnih 60 °C.

KONSTRUKCIJA :

- Kućište je izrađeno od galvanizovanog čelika, zaštićeno Epoxy smolom - model 355 A i 355 B .
- Monofazni el. motor , IP 44 , klasa B, sa termo zaštitom, ugradiv regulator brzine (prikazan u katalogu).
- Unazad zakrivljene lopatice visoke produktivnosti i niskog nivoa buke.
- Usmerenost protoka vazduha za što veću produktivnost.
- Eksterna el. konekcija je obložena Techno- polymer- om unutar kutije, što znači da je otporna na spoljašnje atmosferske uticaje- odnosno uređaj poseduje IP 54 zaštitu.

DELOVI :

- Regulator brzine
- Žaluzine
- Nosač kućišta
- Zaštitna mreža (rešetka)
- Cevna stega
- Prigušivač

GENERAL DESCRIPTION

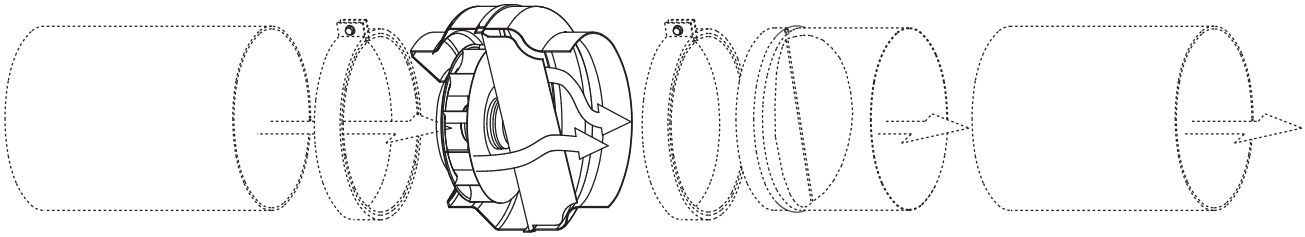
The LINE-METAL is a series of centrifugal fans with the advantage, typical of axial fans, to convey air on the same axis of the impeller. This characteristic, the limited dimensions and the standardized inlet and outlet sizes grant a particularly easy installation. The low noise level and the medium pressure head make them ideal for industrial and residential installations, in extracting hoods and small exhausting plants, since they can be installed in any point along the duct, or to the duct ends, either in intake or exhaust.
They are suitable to convey clean air upto a maximum temperature of 60°C.

CONSTRUCTION

- *Casing in galvanized steel sheet, Epoxy paint for model 355 A and 355 B.*
- *Single-phase electric motor, IP44, class B, with thermal protection, suitable for speed regulation (using the suitable speed regulators shown in this catalogue).*
- *Backward bladed impeller with high efficiency and low noise level.*
- *Air stream rectifiers, for improved efficiency.*
- *External electric connections enclosed in a terminal box in self-extinguishing techno-polymer, resisting to atmospheric agents with IP54 protection degree.*

ACCESSORIES

- *Speed controllers.*
- *Shutters.*
- *Fixing brackets.*
- *Protection guard.*
- *Duct clamps.*
- *Silencers.*

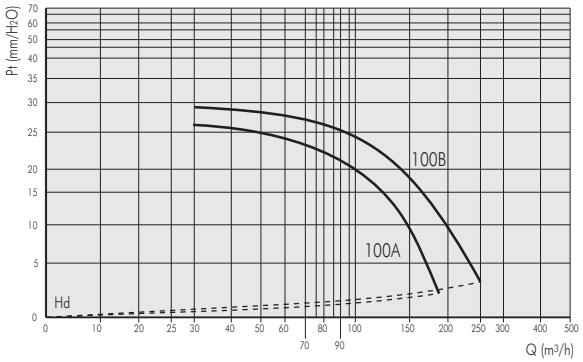


Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

LINE-METAL 100

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	100 A	M	1990	0,064	0,3	44/B	RVN o RVS
LINE-METAL	100 B	M	2530	0,064	0,3	44/B	RVN o RVS

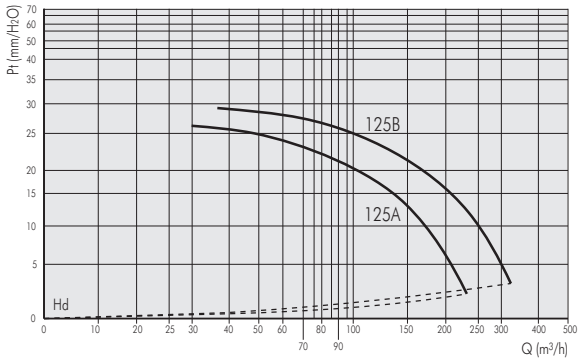
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	100 A	40	43	/	30	31	32	37	36	35	31
LINE-METAL	100 B	47	50	/	35	37	38	43	41	42	36



LINE-METAL 125

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	125 A	M	1700	0,07	0,34	44/B	RVN o RVS
LINE-METAL	125 B	M	2400	0,07	0,3	44/B	RVN o RVS

Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	125 A	39	42	/	33	30	31	36	34	32	30
LINE-METAL	125 B	50	54	/	36	38	39	43	41	43	38

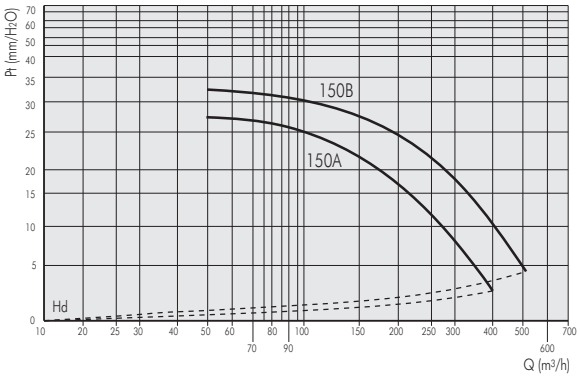


SEK. 7

LINE-METAL 150

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	150 A	M	2470	0,064	0,30	44/B	RVN o RVS
LINE-METAL	150 B	M	2400	0,078	0,40	44/B	RVN o RVS

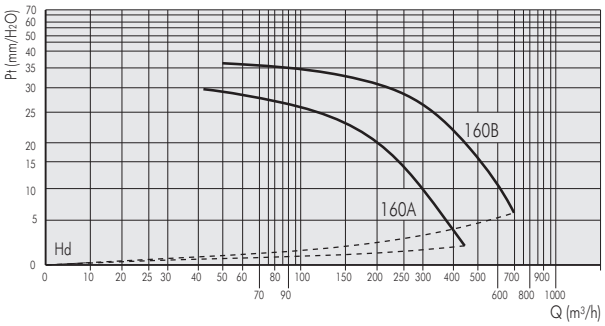
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	150 A	52	54	/	32	39	41	44	48	43	36
LINE-METAL	150 B	53	60	/	39	41	47	51	50	51	40



LINE-METAL 160

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	160 A	M	2400	0,07	0,3	44/B	RVN o RVS
LINE-METAL	160 B	M	2550	0,11	0,5	44/B	RVN o RVS

Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	160 A	51	52	/	31	37	39	43	45	41	35
LINE-METAL	160 B	53	57	/	38	41	46	51	49	50	38

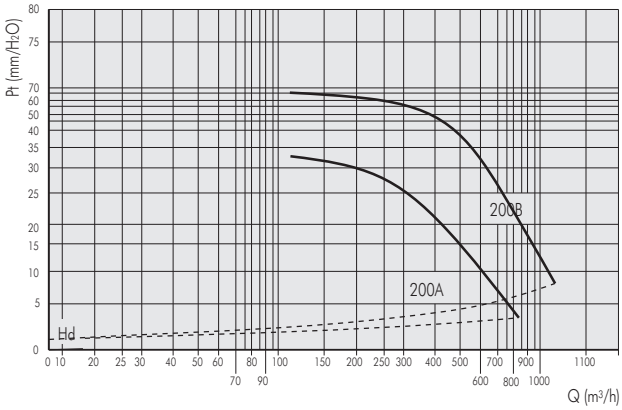


Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

LINE-METAL 200

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	200 A	M	2450	0,08	0,4	44/B	RVN o RVS
LINE-METAL	200 B	M	2550	0,15	0,7	44/B	RVN o RVM

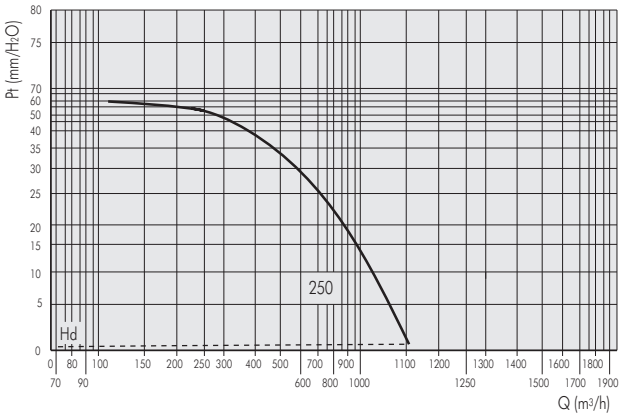
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	200 A	52	55	/	35	41	44	49	47	45	34
LINE-METAL	200 B	53	56	/	43	42	45	50	49	48	40



LINE-METAL 250

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	250	M	2550	0,18	0,78	44/B	RVN o RVM

Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	250	55	58	/	39	44	47	52	51	49	41

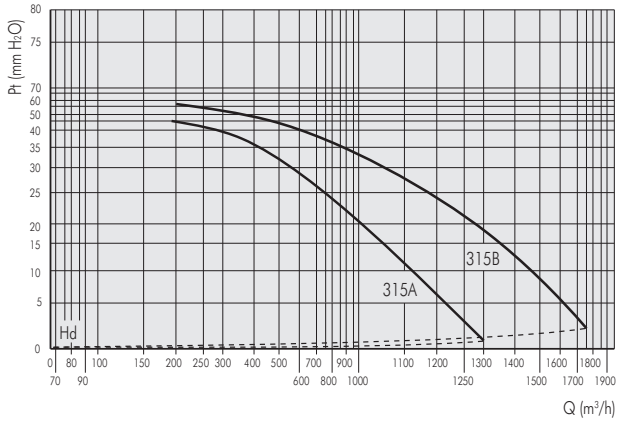


SEK. 7

LINE-METAL 315

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	315 A	M	2650	0,18	0,8	44/B	RVN o RVM
LINE-METAL	315 B	M	2630	0,29	1,3	44/B	RVM

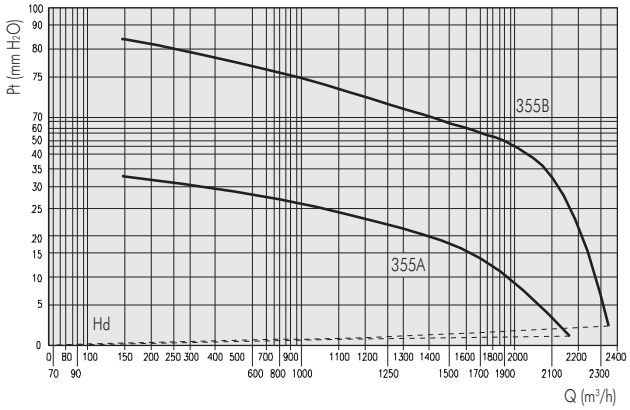
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	315 A	53	56	/	38	40	44	49	51	47	39
LINE-METAL	315 B	57	60	/	40	41	47	50	52	49	41

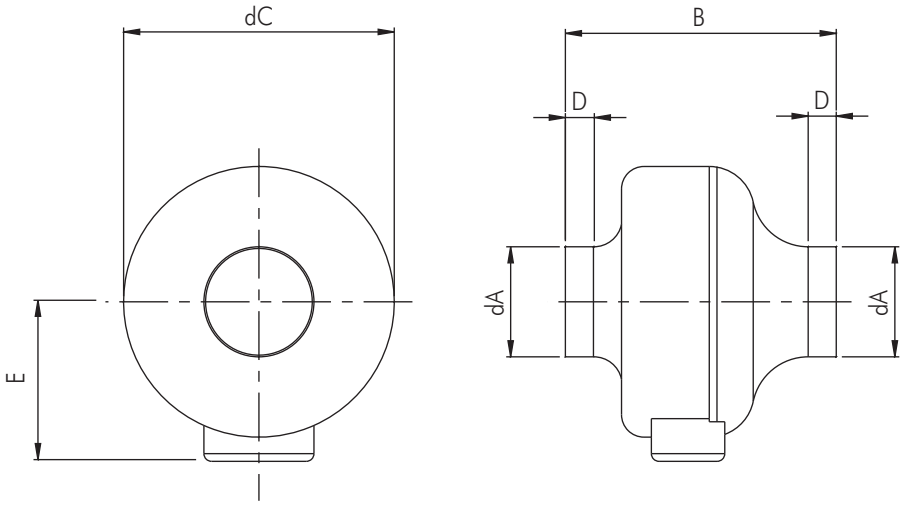


LINE-METAL 355

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
LINE-METAL	355 A	M	1330	0,25	1,12	44/B	RVN o RVS-1
LINE-METAL	355 B	M	2560	0,63	2,82	44/B	RV1

Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma (Hz) "in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
LINE-METAL	355A	55	58	/	39	42	43	50	53	50	40
LINE-METAL	355B	60	62	/	42	43	47	51	55	52	41





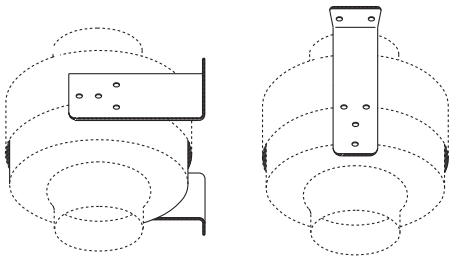
Tip/Type	dA	B	dC	D	E	kg
LINE METAL 100A	98	210	241	25	160	3
LINE METAL 100B	98	210	241	25	160	3
LINE METAL 125A	123	210	241	25	160	3
LINE METAL 125B	123	210	241	25	160	3
LINE METAL 150A	148	210	241	25	160	3
LINE METAL 150B	148	232	331	25	205	5
LINE METAL 160A	158	210	241	25	160	3
LINE METAL 160B	158	232	331	25	205	5
LINE METAL 200A	198	230	335	25	210	5
LINE METAL 200B	198	230	335	25	210	5
LINE METAL 250	248	230	335	25	210	5
LINE METAL 315A	313	295	404	30	245	8
LINE METAL 315B	313	305	404	30	245	9
LINE METAL 355A	355	400	484	50	280	12
LINE METAL 355B	355	400	484	50	280	14

DODATNI DELOVI / ACCESSORIES LINE-METAL

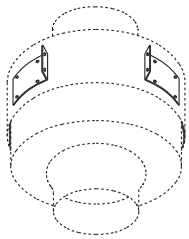
FIKSIRAJUĆI NOSAČ / FIXING BRACKETS

Set podupirača za fiksiranje na zid. Izrađen od galvanizovanog čelika i kompletiran je završetcima.

Set of brackets for the wall fixing. Manufactured in galvanized steel sheet and completed with findings.



Mod. 100-315

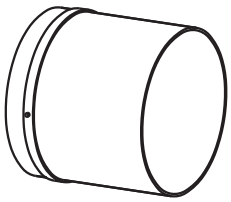


Mod. 355
Po narudžbini / iUpon request

ŽALUZINA / SHUTTER

Zadnja vučna regulatorska žaluzina izrađena od galvanizovanog čelika sa ukrasom na zatvarajućim krilima, za bolji protok i manju buku.

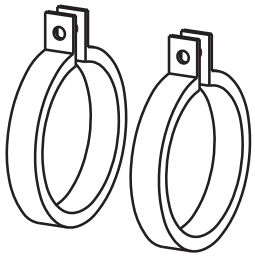
Back draught throttle shutter in galvanized steel sheet with garnishing on the closing of the fins, for a greater sealing and less noise.



FIKSIRNI PRSTEN / FIXING COLLAR

Prsten izrađen od galvanizovanog čelika , s unutrašnje strane presvučen Polyurethan-om .
Neophodan za povezivanje ventilatora na cev- cevni sistem..

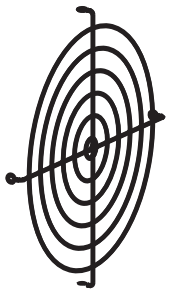
Collar manufactured in galvanized steel sheet, inside lined with expanded polyurethane. Necessary to connect the fan to the duct.



ZAŠTITNA REŠETKA / PROTECTION GUARD

Deo namenjen za zaštitu , izradjen od metala otpornog na koroziju , montira se šrafovima na cevni deo kucišta ventilatora. Pažnja: *ovaj deo je neophodan u slucaju kada lopatice nisu uopšte zašticene.*

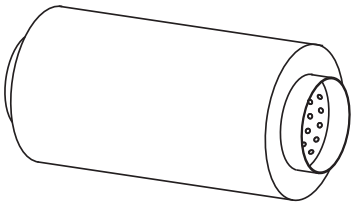
Set composed by protection guard manufactured in steel rod protected against the corrosion and screws for the fixing on the round side of the fan. ATTENTION: this accessory becomes indispensable if the side of the fan is not ducted or protected in any other way.



PRIGUŠIVAČ / SILENCER

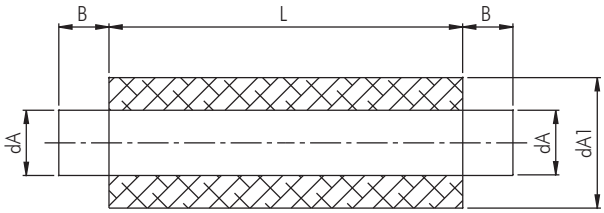
Apsorbtni prigušivac.strukture u galvanizovanom čeliku sa akustičnom linijom.Sa unutrašnje strane izrađeno od galvanizovanog čelika, mikro sito koje dozvoljava apsorbciju vazdušne buke prouzrokovanu brzinom vazduha.

Absorption silencer. The structure is in galvanized steel sheet containing acoustic lining. Inside a micro drilled net in galvanized steel allows the absorption of the aerial noise caused by the velocity of the air.



Tip/Type	dA	dA1	B	L	Kg
100	100	200	40	600	4
125	125	224	40	600	5
160	160	260	40	600	6
200	200	315	40	900	10
250	250	355	60	900	13
315	315	450	60	900	15
355	355	450	60	900	15

Dimensije u mm/*Dimensions in mm*



Lw dB (A) u oktavi spektruma (Hz)							
Tip/Type	125	250	500	1k	2k	4k	8k
100	8	14	26	34	41	45	25
125	6	12	22	28	37	38	22
160	5	10	18	23	33	30	19
200	7	13	24	31	44	31	20
250	6	11	21	27	39	25	19
315	5	9	18	23	32	20	18
355	5	10	20	25	32	23	19

ERM-EX

Radiaksijalni ventilatori povecanog stepena sigurnosti
"Increased safety" mixed flow fans

OSNOVNI PODACI :

ERM – EX ventilatori su jedini radiaksijalni ventilatori povećanog stepena sigurnosti – Eex – e dostupni na tržištu . Specifična konstrukcija dozvoljava ugradnju u rizičnom okruženju kao što je : (fabrika akumulatora, boja... itd). Pažnja ! (odabir tipa sigurnosti motora zavisi od zone – mesta i stepena rizičnosti okoline gde se ventilator montira-ugrađuje.)
Pogledati stranice koje slede .
Pogodan za transport čistog vazduha do temperature od 50 °C.
ERM – EX serije nisu pogodne za regulaciju.

KONSTRUKCIJA :

- Kućište i radno kolo su izrađeni od specijalnog plastičnog materijala otpornog na varnice-udare .
- Monofazni električni motor , IP 54 , klase B , sa termo zaštitom.
Pogodan za neprekidan rad.
- Izvedba Eex- e IIB T3 u skladu sa EN50014/77 i EN50019/77, VDE0170/0171 standardima.
- El. Konekcija koja se nalazi u eksternoj kutiji , je otporna na spoljašnje vremenske uticaje sa stepenom zaštite IP 54 .

PAŽNJA :

Odabir tipa sigurnosti motora zavisi od zone – opasnosti i stepena rizičnosti okoline gde se ventilator montira-ugrađuje.
Samo kompetentni nadležni organi mogu odrediti klasu-zonu opasnosti rizične-hazardne okoline.

GENERAL DESCRIPTION

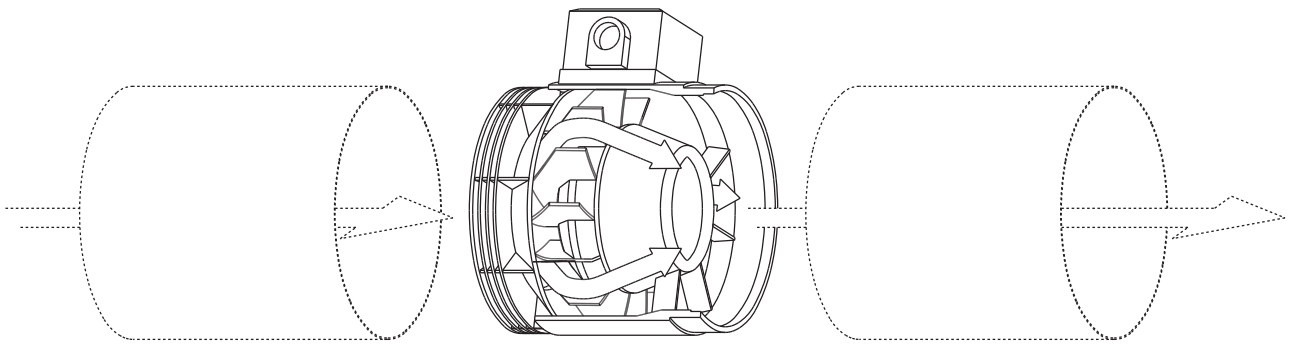
The ERM-EX fans are the only mixed flow in line series in increased safety execution "EEx-e" available on the market. The particular construction allows the installation in hazardous environment as: battery rooms, dyeing-plants, garages, etc. (Note: the choice of the type of the motor protection must be made in function of the dangerous zones and classes of hazardous areas in which the fan will be installed in. See the following pages). Suitable to convey clean air with working temperature upto 50°C. The ERM-EX series are not suitable for regulation.

CONSTRUCTION

- Housing and impeller are manufactured in sparkproof plastic material resistant to the impacts.
- Single-phase electric motor, IP 54, class B, with thermal protection. Suitable for working in continuous service. Execution EEx-e IIB T3, according to EN50014/77 and EN50019/77, VDE0170/0171 standards.
- Electric connections enclosed in an external terminal box, resistant to atmospheric agents with IP54 protection degree.

ATTENTION

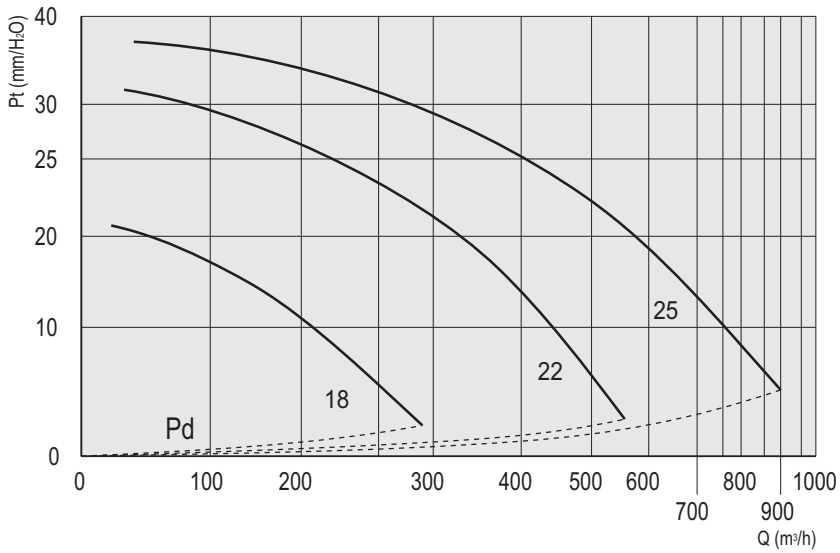
The choice of the motor protection type must be made in function of the zones of danger and the classes of hazardous areas, which the fan will be installed in. Only the competent authorities can attribute the classes and the zones of danger to the hazardous areas.



PERFORMANSE / PERFORMANCE

ERM-EX

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3



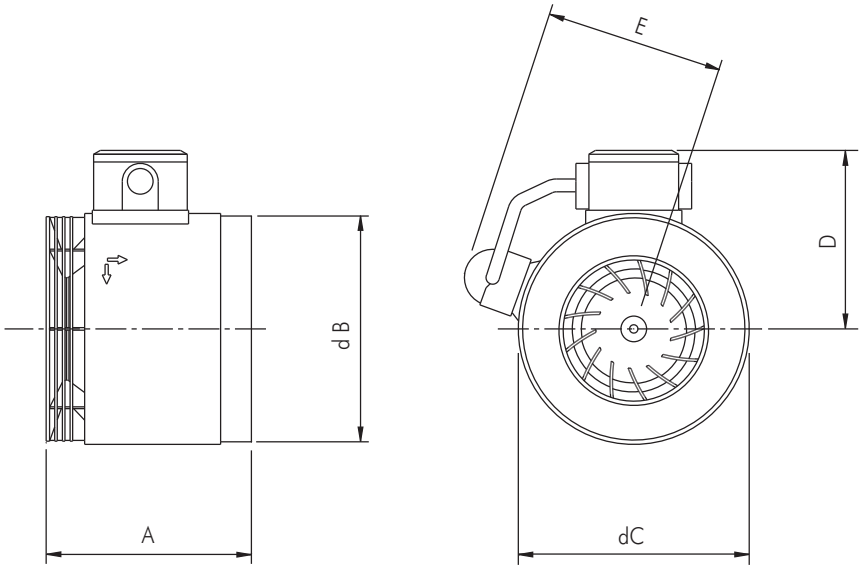
ERM-EX

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Lw dB(A)
ERM-EX	18	M	2760	0,059	0,28	54/B	64
ERM-EX	22	M	2850	0,2	0,93	54/B	74
ERM-EX	25	M	2890	0,3	1,42	54/B	80

SEK. 7

DIMENZIJE / DIMENSIONS

ERM-EX



Tip/Type	A	dB	dC	D	E	kg
ERM-Ex 18	161	175	180	137	140	2
ERM-Ex 22	175	221	230	165	165	5
ERM-Ex 25	205	245	255	178	180	6,5

Dimenzije u mm/Dimensions in mm

SS-BOX

Akustično centrifugalni ventilatori unazad zakrivljenih lopatica
Acoustic backward bladed centrifugal fans

OSNOVNI PODACI :

Nizak nivo buke, čini ovu seriju ventilatora pogodnim za industrijske pogone manjih kapaciteta, gde je mala dimenzija I jednostavnost montiranja važna stavka. Lako odvajanje lopatica od motora, čini ovaj ventilator jednostavnim za održavanje. Standardizovan ulazni i izlazni obod , mogućnost regulacije brzine čini SS – BOX seriju ventilatora ekskluzivnom i jedinstvenom.
Pogodan za transport čistog vazduha , na temperaturi do 40 °C.
Montirani uređaj mora biti u vodoravnom položaju.

KONSTRUKCIJA :

- Kućište je izrađeno od galvanizovanog čelika , s unutrašnje strane presvučen akustičnom izolacijom debljine (50 mm).
- Monofazni električni motor, IP 44/IP 20, klase B, sa termalnom zaštitom pogodan za regulisanje brzine (regulatorom dostupnim u katalogu).
- Radno kolo sa unazad zakrivljenim lopaticama velike efikasnosti (mod. 125 – 160 – 200 – 250)
- Ventilator sa unapred zakrivljenim lopaticama duplog otvora (model 315 – 355 – 400 – 450)

DELOVI :

- Regulator brzine
- Žaluzine
- Zaštitne rešetke
- Cevna stega
- Prigušivač

Pažnja ! : karakteristike dodatnih delova na strani 6.

GENERAL DESCRIPTION

The low noise level of these fans make them suitable for being installed in small exhausting plants, where limited dimensions and easy installation are also required. The possibility of easy removal of the motor-impeller assembly for maintenance, the standardized inlet and outlet flanges and the possibility of speed regulation make the SS-BOX fan series exclusive and unequalled. Suitable to convey clean air to a max temperature of 40°C Round inlet and outlet. They must be installed only in horizontal position.

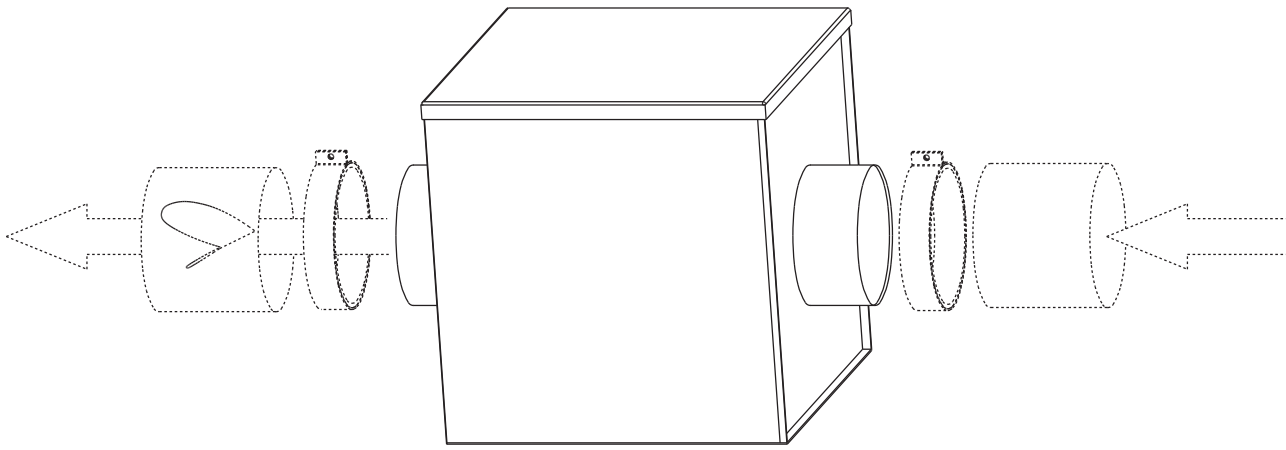
CONSTRUCTION

- Main structure in galvanized steel sheet, inside lined with acoustic insulation (thickness 50 mm)
- Single-phase electric motor, IP44/IP20, class B, with thermal protection, suitable for speed regulation (using the regulators available in this catalogue).
- Backward bladed impeller with high efficiency (mod. 125-160-200-250)
- Double inlet forward bladed fan (mod. -15-355-400-450)

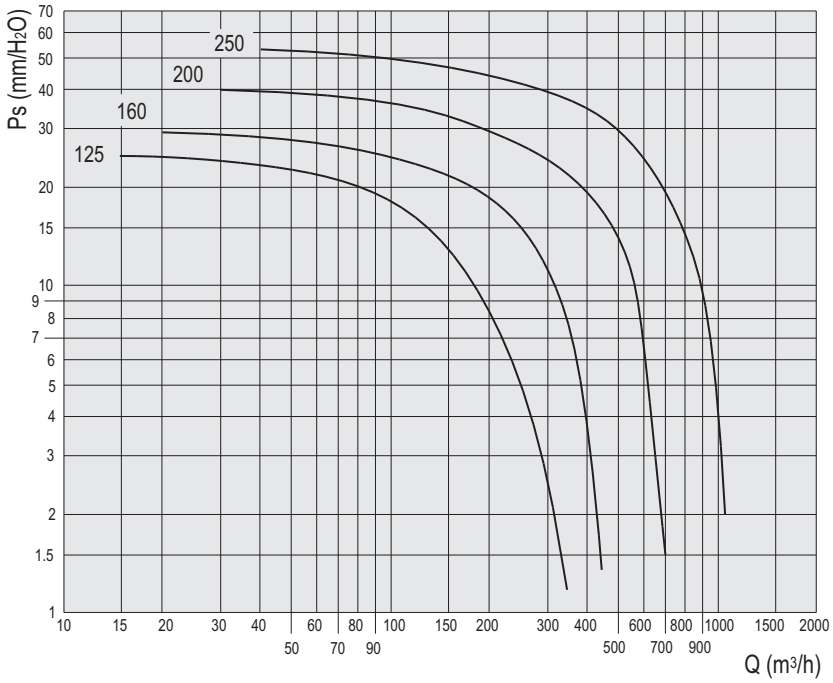
ACCESSORIES

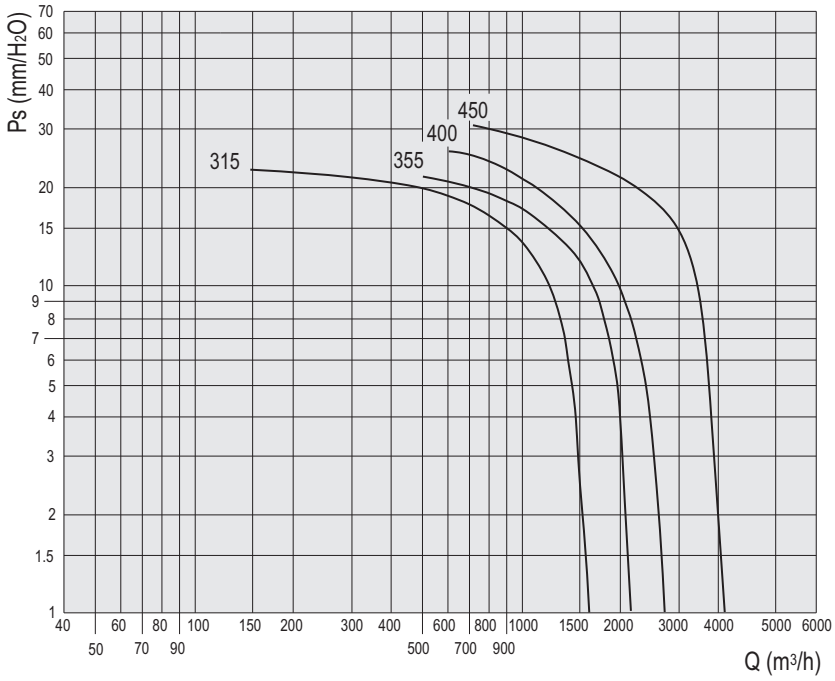
- Speed regulators.
- Shutters.
- Protection guards.
- Collars for fixing to the duct.
- Silencers.

Note: See page 6 for characteristics of accessories.



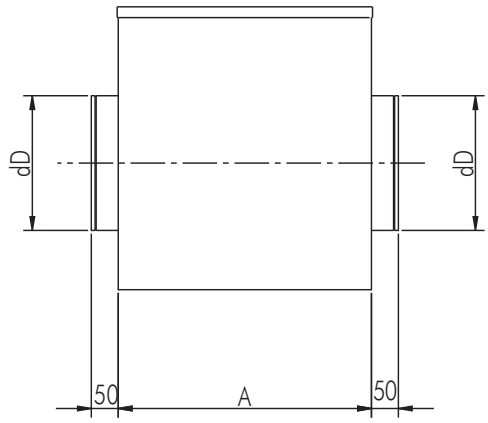
Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

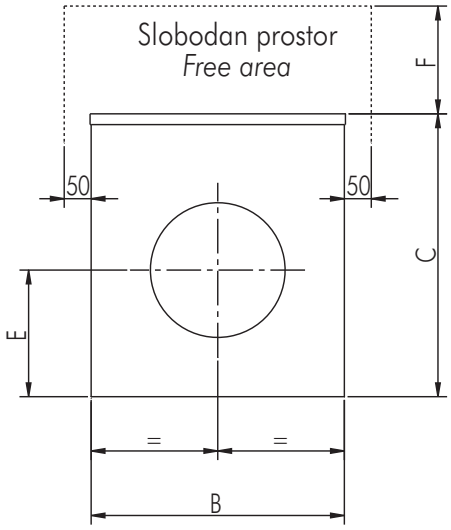




Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Reg.
SS-BOX	125 M	M	2	0,07	0,4	44/B	RVN o RVS
SS-BOX	160 M	M	2	0,11	0,52	44/B	RVN o RVS
SS-BOX	200 M	M	2	0,18	0,9	44/B	RVM
SS-BOX	250 M	M	2	0,3	1,4	44/B	RVM
SS-BOX	315 M	M	4	0,14	1,7	20/B M/AP	RV-1 o RVM-2
SS-BOX	355 M	M	6	0,24	2,2	44/B	RV-1 o RVM-2
SS-BOX	400 M	M	6	0,24	3	44/B	RV-1 o RVM-2
SS-BOX	450 M	M	6	0,55	5,6	44/B	RV-2 o RVM-3

Tip Type	Mod.	Lp dB(A)	Lw dB (A) oktava spektruma u (Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
SS-BOX	125	32	39	29	28	29	34	27	28	31	30
SS-BOX	160	36	43	34	28	33	36	35	33	34	35
SS-BOX	200	41	48	32	37	42	43	40	37	36	33
SS-BOX	250	42	46	34	34	39	41	36	37	39	30
SS-BOX	315	48	55	36	35	37	36	35	33	29	26
SS-BOX	355	48	55	36	35	37	36	35	33	29	26
SS-BOX	400	49	56	36	35	37	41	35	33	29	26
S-BOX	450	49	56	36	35	37	36	35	33	29	26





Tip/Type	A	B	C	dD	E	F	kg
SS-BOX 125	360	360	385	125	180	400	14
SS-BOX 160	400	400	425	160	200	430	17
SS-BOX 200	430	430	450	200	215	460	20
SS-BOX 250	470	470	525	250	235	530	25
SS-BOX 315	550	550	550	315	300	560	37
SS-BOX 355	550	550	550	355	300	560	43
SS-BOX 400	650	650	650	400	380	660	59
SS-BOX 450	750	750	750	450	430	760	79

Dimenzije u mm/Dimensions in mm

AxB

Centrifugalni ventilatori sa unapred zakrivljenim lopaticama za četvorougaone kanalne sisteme

Rectangular duct foreward bladed centrifugal fans

OSNOVNI PODACI :

AxB serija ventilatora predstavlja najpovoljnije i najmodernije rešenje transporta vazduha kroz četvorougle kanale- oluke.
Dizajniran je za praktično i lako priključivanje na četvorougaone kanalne sisteme.
Serija je predviđena 2,4,6 – o polnim, trofaznim ili monofaznim motorima. Koristi direktan prenos unapred zakrivljenih lopatica centrifugalnog ventilatora (izuzev modela 4x2 M2 sa unazad zakrivljenim lopaticama) smeštenim u obodnom delu kanalnog sistema.
El. Konektor je smešten u eksterno kućište na samom kućištu ventilatora radi lakše konekcije – priključenja.
Pogodan je za transport čistog vazduha maksimalne temperature do 50 °C.

KONSTRUKCIJA :

- Kućište je izrađeno od čelika sa fiksnirnim obodima standardnih dimenzija.
- Monofazni i trofazni električni motor , IP 44 klase F sa termalnom zaštitom, Pogodan za regulaciju (koristeći regulatore iz datog kataloga)
- Radno kolo sa unapred zakrivljenim lopaticama (izuzev modela 4x2 M2 , sa unazad zakrivljenim lopaticama) Sa prilično visokom efikašnošću i niskim nivoom buke.
- Eksterni el. konektor smešten u nepromočivu techno – polymer-nu kutiju, otpornu na atmosferske uticaje sa stepenom zaštite IP 54.

DODATNI DELOVI :

- Regulator brzine
- Prigušivač
- Fleksibilni preklučci.

GENERAL DESCRIPTION

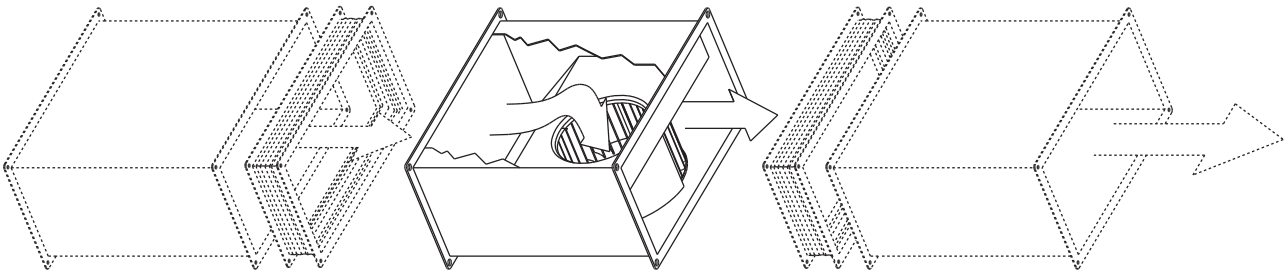
The AxB series represents the least expensive solution for the installation of centrifugal fans in ducted plants. It has been designed for the practical and quick inclusion in the duct strokes of rectangular section. The series foresees models of 2,4 and 6 poles, three-phase and single-phase. It uses direct drive forward bladed centrifugal fans (except for the model 4X2 M2 which is backward curved) housed in a flanged piece of duct. The electrical connections are housed in a suitable box placed outside for an easy connection. Suitable to convey clean air with a max. temperature of 50°C.

CONSTRUCTION

- Casing in galvanized steel sheet with fixing flanges in standardized dimensions.
- Single-phase and three-phase electric motor, IP44, class F, with thermal protection, suitable for regulation (using the suitable regulators in this catalogue).
- Forward bladed impeller (except model 4x2 M2, which is backward curved) with fairly high efficiency and low noise level.
- External electric connections, housing in self-extinguishing techno-polymeric box, resistant to atmospheric agents with protection degree IP54.

ACCESSORIES

- Speed regulators.
- Silencers.
- Flexible connections.



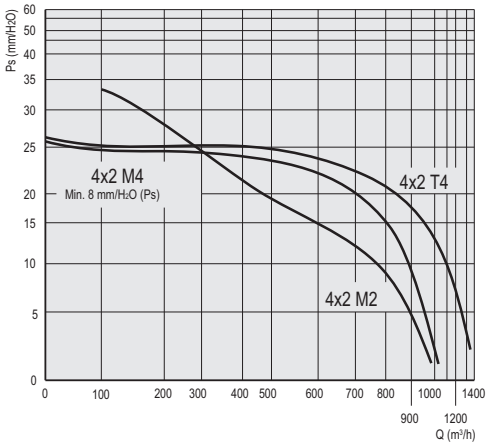
Važno : izlazni vod mora biti bar 1.5 m dug.
Note: the outlet duct must be at least 1,5 meters long.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

AxB 4x2

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Reg.
AxB	4x2 M2	M	2	0,15	0,6	44/B	RVN
AxB	4x2 M4	M	4	0,3	1,4	44/B	RV-1 o RVM
AxB	4x2 T4	T	4	0,3	0,65	44/B	RVT

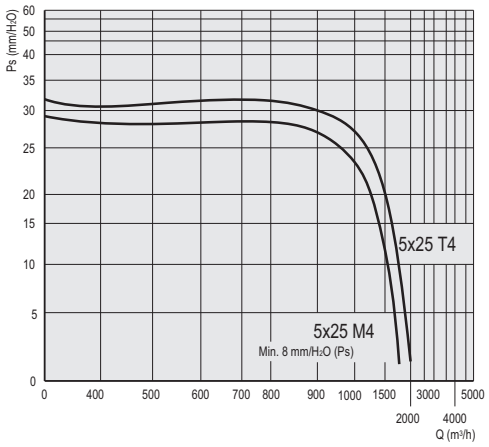
Tip/Type	Lp dB(A)	Lw dB (A) oktava spektruma u (Hz) " in octave spectrum (Hz)								
		Tot.	63	125	250	500	1k	2k	4k	8k
AxB 4x2 M2	63	63	38	45	59	55	56	49	46	41
AxB 4x2 M4	55	55	38	45	59	55	56	49	46	41
AxB 4x2 T4	53	53	33	41	58	51	49	44	40	33



AxB 5x25

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Reg.
AxB	5x25 M4	M	4	0,6	2,7	44/B	RVM-2 o RV-1
AxB	5x25 T4	T	4	0,56	1,1	44/B	RVT

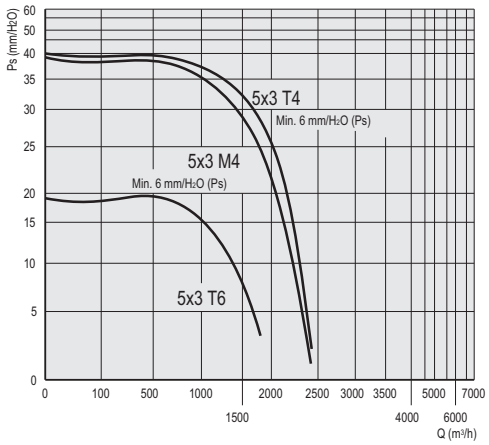
Tip/Type	Lp dB(A)	Lw dB (A) oktava spektruma u (Hz) " in octave spectrum (Hz)								
		Tot.	63	125	250	500	1k	2k	4k	8k
AxB 5x25 M4	56	63	39	50	58	58	55	52	47	50
AxB 5x25 T4	55	62	38	46	53	55	56	52	50	55



AxB 5x3

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Reg.
AxB	5x3 M4	M	4	1,1	4,8	44/B	RV-2 o RVM-3
AxB	5x3 T4	T	4	1,1	2	44/B	RVT
AxB	5x3 T6	T	6	0,34	0,65	44/B	RVT

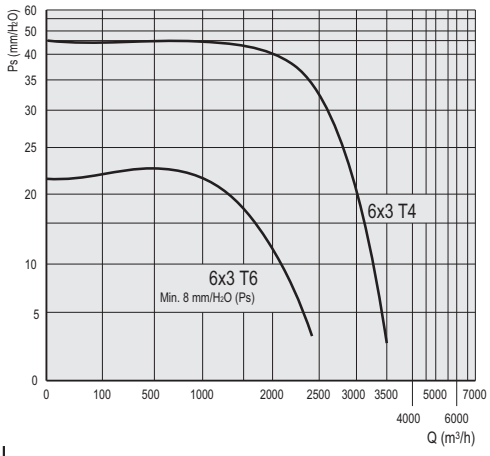
Tip/Type	Lp dB(A)	Lw dB (A) oktava spektruma u (Hz) " in octave spectrum (Hz)								
		Tot.	63	125	250	500	1k	2k	4k	8k
AxB 5x3 M4	59	66	38	54	62	58	61	55	52	47
AxB 5x3 T4	57	64	43	52	59	55	58	54	50	48
AxB 5x3 T6	51	58	32	44	52	54	50	46	44	36



AxB 6x3

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Reg.
AxB	6x3 T4	T	4	1,6	2,5	44/B	RVT-1
AxB	6x3 T6	T	6	0,7	1,4	44/B	RVT

Tip/Type	Lp dB(A)	Lw dB (A) oktava spektruma u (Hz) " in octave spectrum (Hz)								
		Tot.	63	125	250	500	1k	2k	4k	8k
AxB 6x3 T4	58	65	40	55	60	60	57	54	52	47
AxB 6x3 T6	49	56	37	51	51	48	46	42	40	35



PERFORMANSE / PERFORMANCE

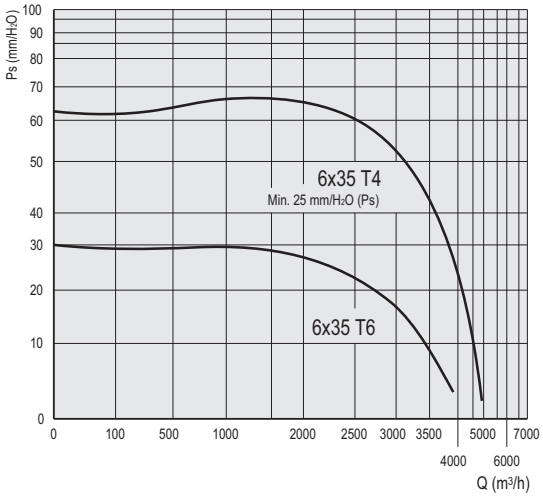
AxB

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

AxB 6x35

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Reg.
AxB	6x35 T4	T	4	2,5	5	44/B	RVT-2
AxB	6x35 T6	T	6	0,9	1,5	44/B	RVT

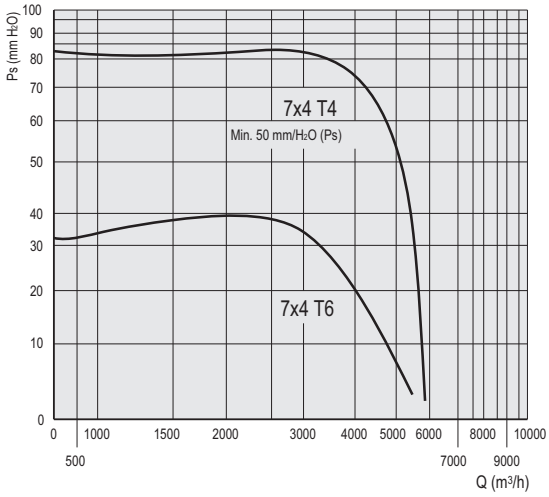
Tip/Type		Lp dB(A)	Lw dB (A) oktava spektruma u (Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
AxB	6x35 T4	61	68	49	62	62	60	60	55	52	48
AxB	6x35 T6	53	60	43	52	56	53	50	56	45	40



AxB 7x4

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Reg.
AxB	7x4 T4	T	4	3,2	5,8	44/B	RVT-2
AxB	7x4 T6	T	6	1,4	3	44/B	RVT-1

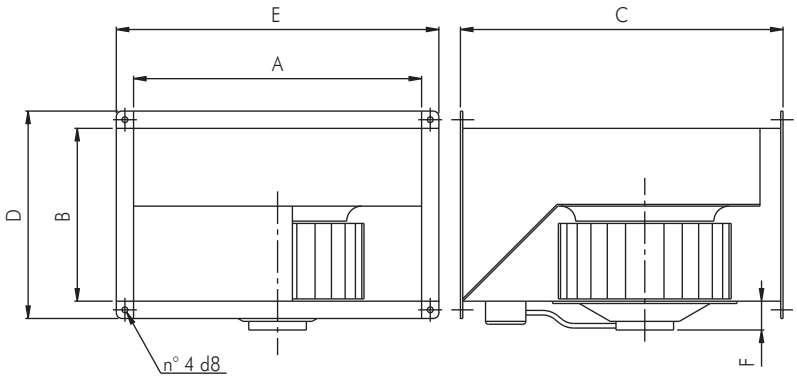
Tip/Type		Lp dB(A)	Lw dB (A) oktava spektruma u (Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
AxB	7x4 T4	66	73	56	65	67	65	68	63	63	59
AxB	7x4 T6	56	63	49	57	57	59	55	50	46	41



SEK. 7

DIMENZIJE / DIMENSIONS

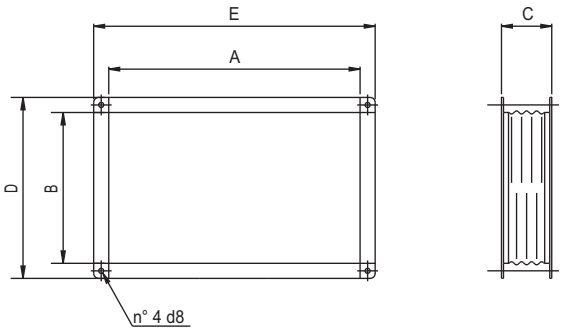
AxB



Tip/Type	A	B	C	D	E	F	kg
AxB 4x2	400	200	500	240	440	40	15
AxB 5x25	500	250	540	300	550	40	20
AxB 5x3	500	300	570	350	550	40	28
AxB 6x3	600	300	650	350	650	60	35
AxB 6x35	600	350	730	400	650	90	45
AxB 7x4	700	400	790	440	740	90	65

Dimenzije u mm/Dimensions in mm

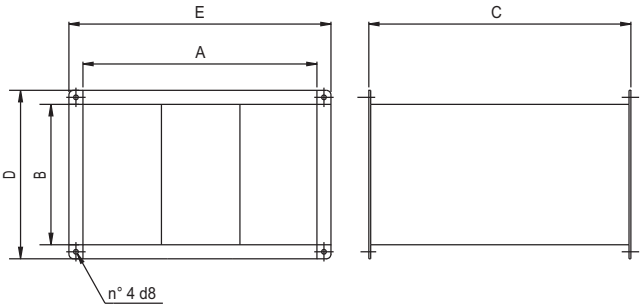
FLEKSIBILNA SPOJNICA / FLEXIBLE JOINT



Tip/Type	A	B	C	D	E
4x2	400	200	120	240	440
5x25	500	250	120	310	560
5x3	500	300	120	360	560
6x3	600	300	120	360	660
6x35	600	350	120	410	660
7x4	700	400	120	440	740

Dimenzije u mm/Dimensions in mm

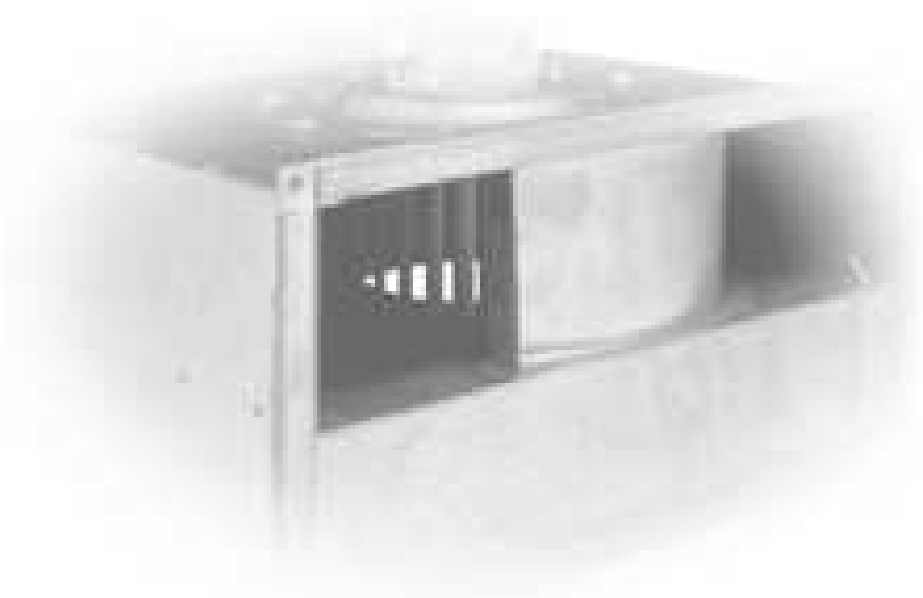
PRIGUŠIVAČ / SILENCER



Tip/Type	A	B	C	D	E
4x2	400	200	500	240	440
5x25	500	250	560	310	560
5x3	500	300	560	360	560
6x3	600	300	710	360	660
6x35	600	350	710	410	660
7x4	700	400	780	440	740

Dimenzije u mm/Dimensions in mm

	Oslabljenje buke (dB) u spektrumskoj oktavi(Hz) Noise attenuation (dB) in octave spectrum (Hz)						
Tip/Type	125	250	500	1k	2k	4k	8k
4x2	6	12	20	25	23	15	11
5x25	4	7	13	16	15	10	8
5x3	5	6	12	15	14	9	7
6x3	7	13	21	26	24	16	12
6x35	6	12	20	25	23	15	11
7x4	4	7	13	16	15	10	8



LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Maximal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 3 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model
	LINE METAL	160 B

Primer / Example:	Tip / Type	Model / Model
	ERM-EX	22

Primer / Example:	Tip / Type	Model / Model
	SS-BOX	315 M

Primer / Example:	Tip / Type	Model / Model
	AxB	5x3 T6

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Box ventilatori na direktan pogon sa dva otvora
Direct drive double inlet box fans

8

BOX-D str. 1.8

Box ventilatori na direktan pogon sa dva otvora
Direct drive double inlet box fans

SLIM-BOX str. 5.8

Kompaktni box ventilatori sa dva otvora
Double inlet compact box fan

TW-D & TW-R str. 8.8

Box ventilatori– Blizanci – DUTY & STAND BY
Duty and "stand by" box fans

DA str. 12.8

Ventilatori na direktan pogon sa dva otvora (bez kućišta)
Direct drive double inlet fans

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AXIAL ROOF FANS — SEK. 2

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PLATE MOUNTED AND RING AXIAL FANS — SEK. 3

Cevni ventilatori
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Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama i centrifugalni ventilatori izrađeni od livenog aluminijuma
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BOX-D

Box ventilatori na direktan pogon sa dva otvora
Direct drive double inlet box fans

BOX - D

OSNOVNI PODACI :

Ventilatori BOX – D serije su dizajnirani za odvlačenje, filtraciju i održavanje vazduha .Važna karakteristika im je nizak nivo buke, što ih čini pogodnim za urbane sredine : (apartmane, kuće, barove, restorane, škole, kancelarije itd) i za industrijske pogone gde je visok nivo buke problem.Nizak nivo buke je dobijen zahvaljujući Plenum akustičnom materijalu koji omogućuje izuzetnu redukciju nivoa buke, neizbežno proizvedenu od strane ventilatora.
Ventilator je unapred zakrivljena lopatica sa ugrađenim motorom i dva otvora.

KONSTRUKCIJA :

- BOX – D : ram ventilatora je izrađen od livenog aluminijuma; oplata- stranice (koje su odvojive) izrađene su od galvanizovanog čelika ;u celini daje vrlo estetičan utisak.
Vodootporni poklopac je izrađen od galvanizovanog čelika.
- Ventilator je fiksiran koristeći spoljne ivice i podupret odgovarajućim podupiračima sa strane ventilatora.
Ventilator je kompletno izolovan od konstrukcije antivibracionim okvirom i izolacionim materijalom.
- Iznutra obložen Plenum-mom u Techno-polymer- u klase I.
- Box ventilatori na direktan pogon sa dva otvora – motorom monofaznim ili trofaznim asinhronim, klase B pogodnim za regulaciju brzine (koristeći regulatore koji se prikazuju u ovom katalogu)
Sa odgovarajućim otvorima za podizače – držače.

DODATNI DELOVI :

- Otvor – ispust sa zaštitnom rešetkom otporan na kišu .
- Elektronski i auto- transformirajući regulator brzine
- Nožni podupirač

NA ZAHTEV :

- Verzija sa asinhronim tro brzinskim motoron, klase B.
- Verzija sa totalno zatvorenim motorom , klase B.

GENERAL DESCRIPTION

The fans of the BOX-D series are particularly designed for air extraction, filtration systems, air conditioning plants. Their main characteristic is the low noise level which makes them ideal for urban environments (apartments, houses, bar, restaurants, gymnasiums, offices) and industrial sites where the noise is a problem. The low noise level is due to their "lined plenum" of acoustic material that allows a remarkable reduction of the noise level inevitably generated by the fan. The fan is a double inlet forward curved centrifugal wheel with built-in motor.

CONSTRUCTION

- BOX/D: frame in extruded aluminium profile; removable panels in galvanized steel sheet; all this brings to an excellent aesthetic impact. Weatherproof cover in galvanized steel sheet.
- The fan is fixed by using the outlet flange and suitable brackets on the sides of the fan. The fan is completely isolated from the structure, by antivibration mounts and gaskets.
- Inside lining of the plenum in techno-polymer class I.
- Double inlet fan, frontward bladed, with direct drive built-in motor, asynchronous, single-phase or three-phase, class B, suitable for speed regulation (using regulators shown in this catalogue).
- With suitable holes for lifting hooks.

ACCESSORIES

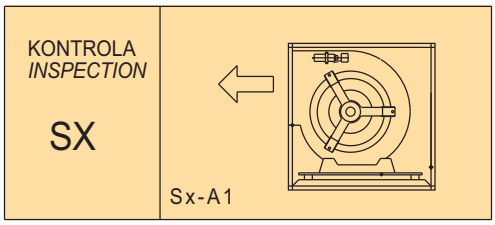
- Rainproof outlet with guard.
- Electronic and self-transformer speed regulators.
- Feet support

UPON REQUEST

- Versions with asynchronous 3 speed motor , class B.
- Versions with totally enclosed motor, class B.

SEK. 8

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES — BOX-D

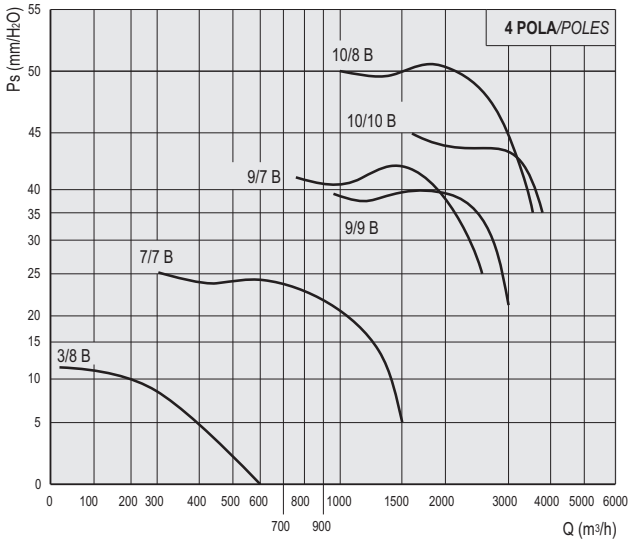


Važno: standardi uglova ispuštanja SX-A1 / Note: standard discarge angles SX-A1

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

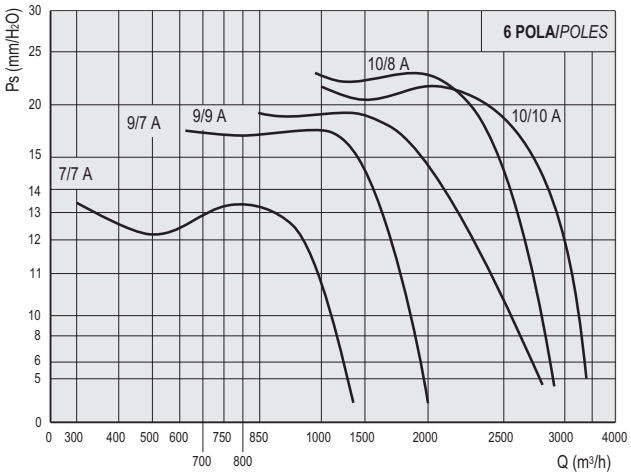
BOX-D - 4 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	3/8 B	M	4	0,04	0,5	45	RV/1 o RVM/2
BOX-D	7/7 B	M	4	0,14	2	57	RV/1 o RVM/2
BOX-D	9/7 B	M	4	0,37	5	62	RV/2 o RVM/3
BOX-D	9/9 B	M	4	0,37	4,5	62	RV/2 o RVM/3
BOX-D	10/8 B	M	4	0,55	6,7	63	RV/2 o RVM/3
BOX-D	10/10 B	M	4	0,55	6,5	64	RV/2 o RVM/3



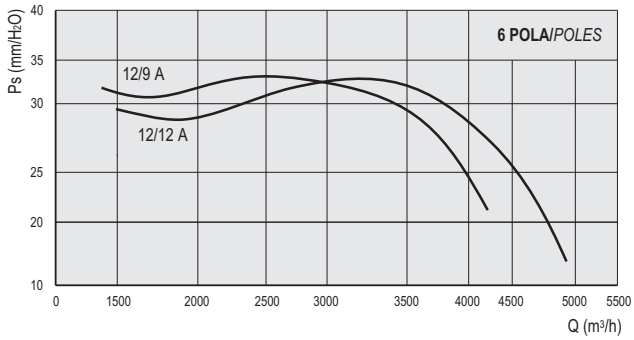
BOX-D - 6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	7/7 A	M	6	0,06	1,1	51	RV/N o RVM
BOX-D	9/7 A	M	6	0,14	2	54	RV/1 o RVM/2
BOX-D	9/9 A	M	6	0,24	2,6	56	RV/1 o RVM/2
BOX-D	10/8 A	M	6	0,24	2,6	56	RV/1 o RVM/2
BOX-D	10/10 A	M	6	0,24	3	56	RV/1 o RVM/2



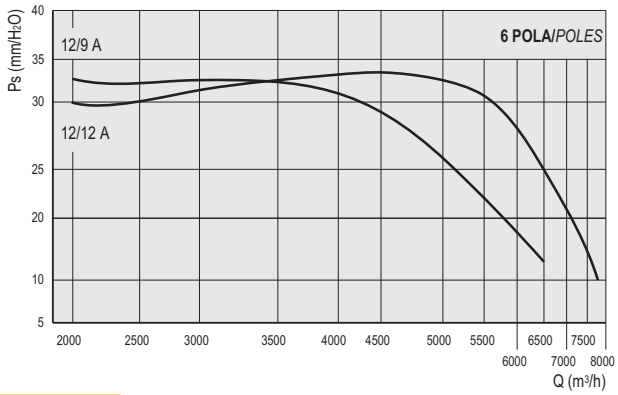
BOX-D - 6 pola/poles

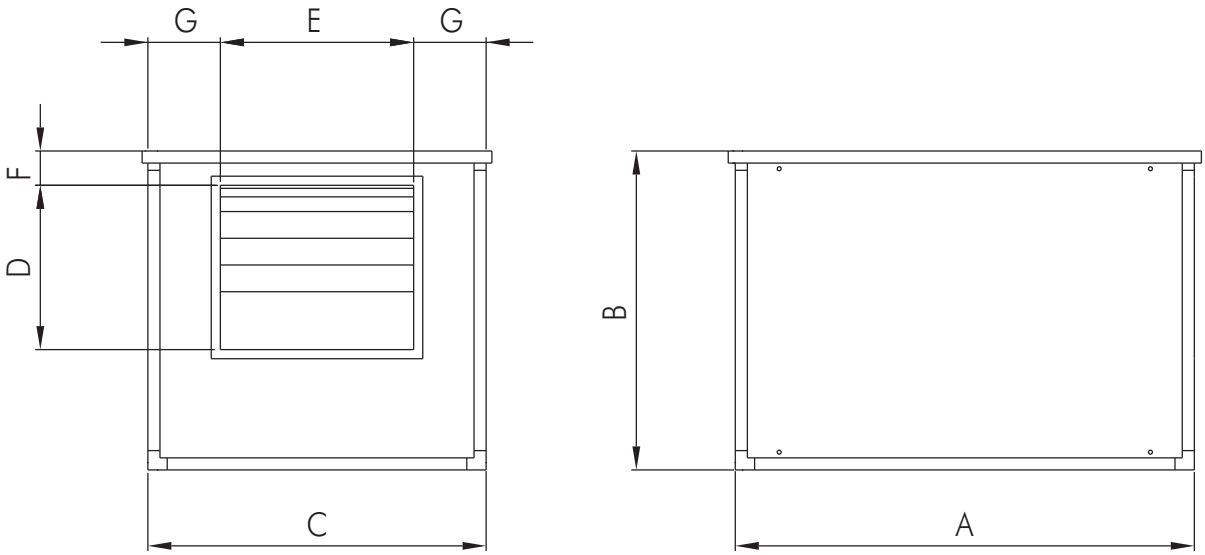
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	12/9 A	M	6	0,59	6,7	59	RV/2 o RVM/3
BOX-D	12/12 A	M	6	0,59	7	64	RV/2 o RVM/3



BOX-D - 6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	12/9 A T	T	6	1,1	4,3	68	RVT/1
BOX-D	12/12 A T	T	6	1,1	4,7	70	RVT/1





BOX-D

Tip/Type	A	B	C	D	E	F	G	kg
3/8 B	300	300	500	100	250	80	125	10
7/7 A	420	420	420	220	240	55	90	24
7/7 B	420	420	420	220	240	55	90	24
9/7 A	500	500	500	280	260	70	120	28
9/7 B	500	500	500	280	260	70	120	28
9/9 A	500	500	500	280	310	70	95	33
9/9 B	500	500	500	280	310	70	95	33
10/8 A	600	550	600	300	290	70	155	35
10/8 B	600	550	600	300	290	70	155	35
10/10 A	600	550	600	300	335	70	133	36
10/10 B	600	550	600	300	335	70	133	36
12/9 A	640	640	750	360	320	80	215	65
12/9 A T	640	640	750	360	320	80	215	65
12/12 A	640	640	750	360	400	80	175	66
12/12 A T	640	640	750	360	400	80	175	66

Dimenzije u mm/Dimensions in mm

SLIM-BOX

Kompaktni box ventilatori sa dva otvora
Double inlet compact box fan

OSNOVNI PODACI :

SLIM – BOX seriju , vezuju dve karakteristike koje uglavnom nisu kombinovane : nizak nivo buke tipičan za BOX ventilatore,na osnovu Plenum linije akustičnih materijala i kompaktnosti In-line cevnih ventilatora ,upotrebljivi su koristeći ekstra kompaktne dvostruke spiralne ventilatore.Idealan je za ventilaciju industrijskih pogona malih dimenzija ili za mesta gde je buka pravi problem (kancelarije, marketi, kuće itd .).
Ostale karakteristike :
- Jednostavnost montiranja
- Estetika
- Materijali otporni na koroziju
- Mogućnost pregleda-provere i jednostavnost zamene radnog kola – motora montiranih sa zadnje strane.
- Mogućnost biranja jedne od tri brzine rotacije sa interfejsa kompatibilnog sa termostatom prostorije.

Dizajnirani su za transport čistog vazduha do temperature od maksimalnih 40 °C.

KONSTRUKCIJA :

- Samonoseći ram je izrađen od galvanizovanog čelika sa stranicama (koje su odvojive), radi lakšeg pristupa lopaticama – motoru.
- Fiksirni podupirači su izrađeni od galvanizovanog čelika
- Izolacija od Plenum- a u Techno – polymer- u , klase I.
- Ventilator na direktan pogon sa dva otvora , asinhronim monofaznim motorom ,klase B sa tri brzine rotacije.
- Električni konektor smešten na spoljašnji deo kućišta ventilatora za direktno ili spajanje sa odgovarajućim prekidačem, Zaštićen od spoljašnjih atmosferskih uticaja IP 55 stepenom zaštite.

Model 100 je jedini opremljen sa terminalnom kutijom, za direktnu konekciju u odgovarajući prekidač.

DODATNI DELOVI :

- Trostepeni menjač brzine sa (on / of) prekidačem.

GENERAL DESCRIPTION

SLIM-BOX series link together two characteristics that usually are not combined: the low noise level, typical of the box fans, due to the plenum lined of acoustic material and the compactness of the in line ducted fans obtained by using extra compact twin scroll fans. Therefore they are ideal in ventilation plants with height-limited spaces (for example false ceilings) or where the noise is a real problem (offices, shops, houses, Etc). Some other characteristics are: installation easiness, good aesthetic impact, corrosion free materials, possibility of inspection and easy replacement of the impeller-motor assembly from the bottom side, possibility to choose 3 rotation speeds with interface compatibility to a room thermostat . They are designed for clean air up to 40°C max.

CONSTRUCTION

- Frame in self-supporting galvanized steel sheet with removable panel, for easy access to the fans.
- Fixing brackets in galvanized steel sheet.
- Lining of the plenum in techno-polymer, class I.
- Double inlet fans with direct drive built-in motor, asynchronous single-phase, class B, 3 rotation speeds.
- Electric panel with power module for direct connection to the mains or through suitable switch. It is placed on the outer panelling (IP55 protection) . The type 100 is only equipped with a terminal box, having compatible absorption for a direct connection to a suitable switch.

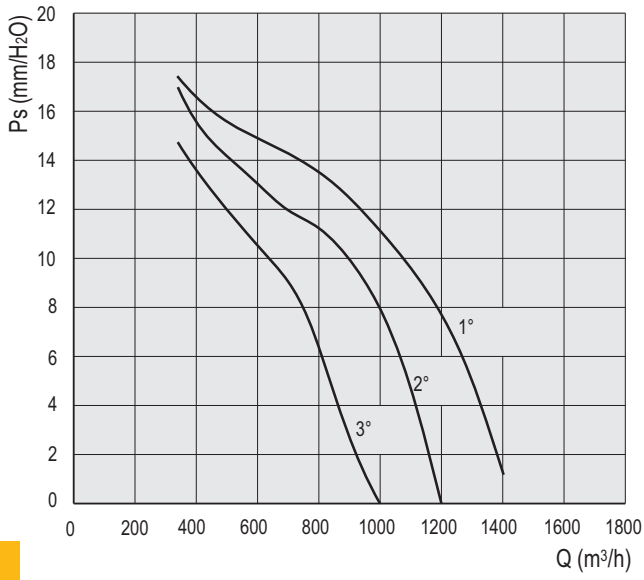
ACCESSORIES

- 3 step speed changeover with on/ off switch

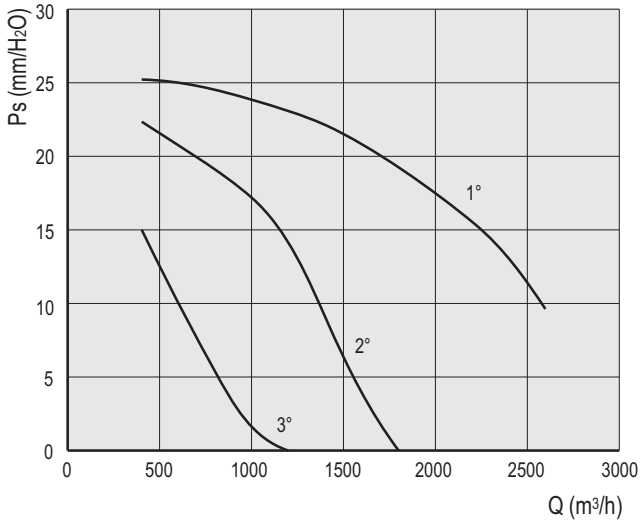
Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

Tip Type	Mod.	U	P	Pm (kW)	In max (A)	Lp dB(A) - brzina/speed 1° Vel.	2° Vel.	3° Vel.
SLIM-BOX	100	M	4	0,09	1	41	37	31
SLIM-BOX	200	M	4	0,19	2	45	41	35
SLIM-BOX	400	M	4	0,42	4	48	44	39
SLIM-BOX	600	M	4	0,6	6	49	46	40

SLIM-BOX 100



SLIM-BOX 200



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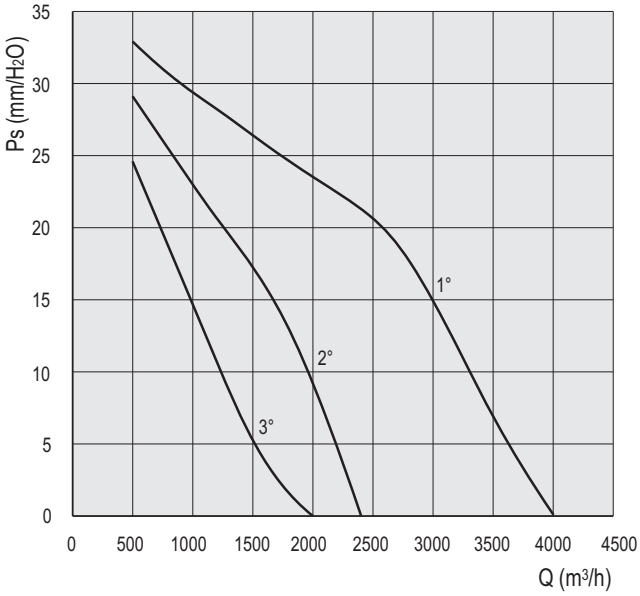
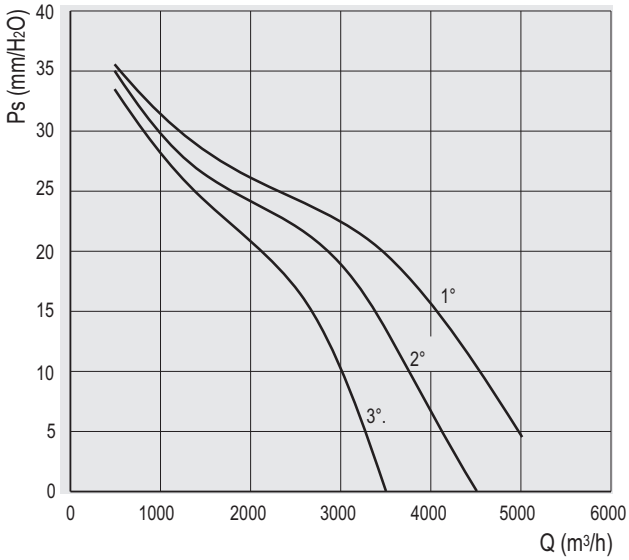
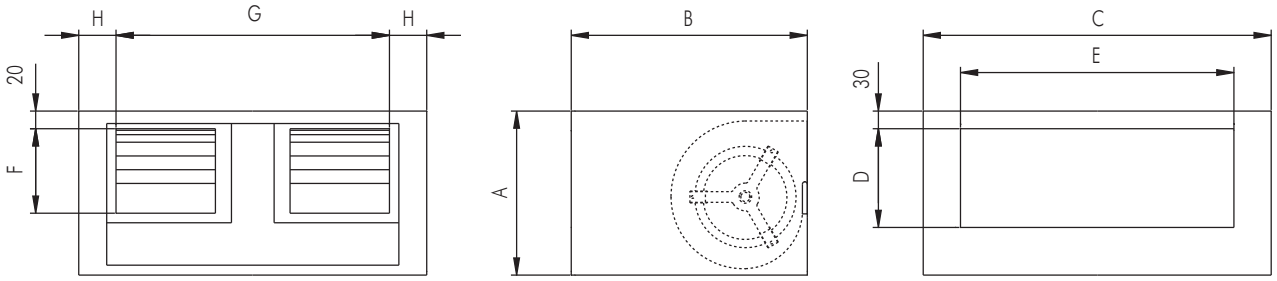
SLIM-BOX 400



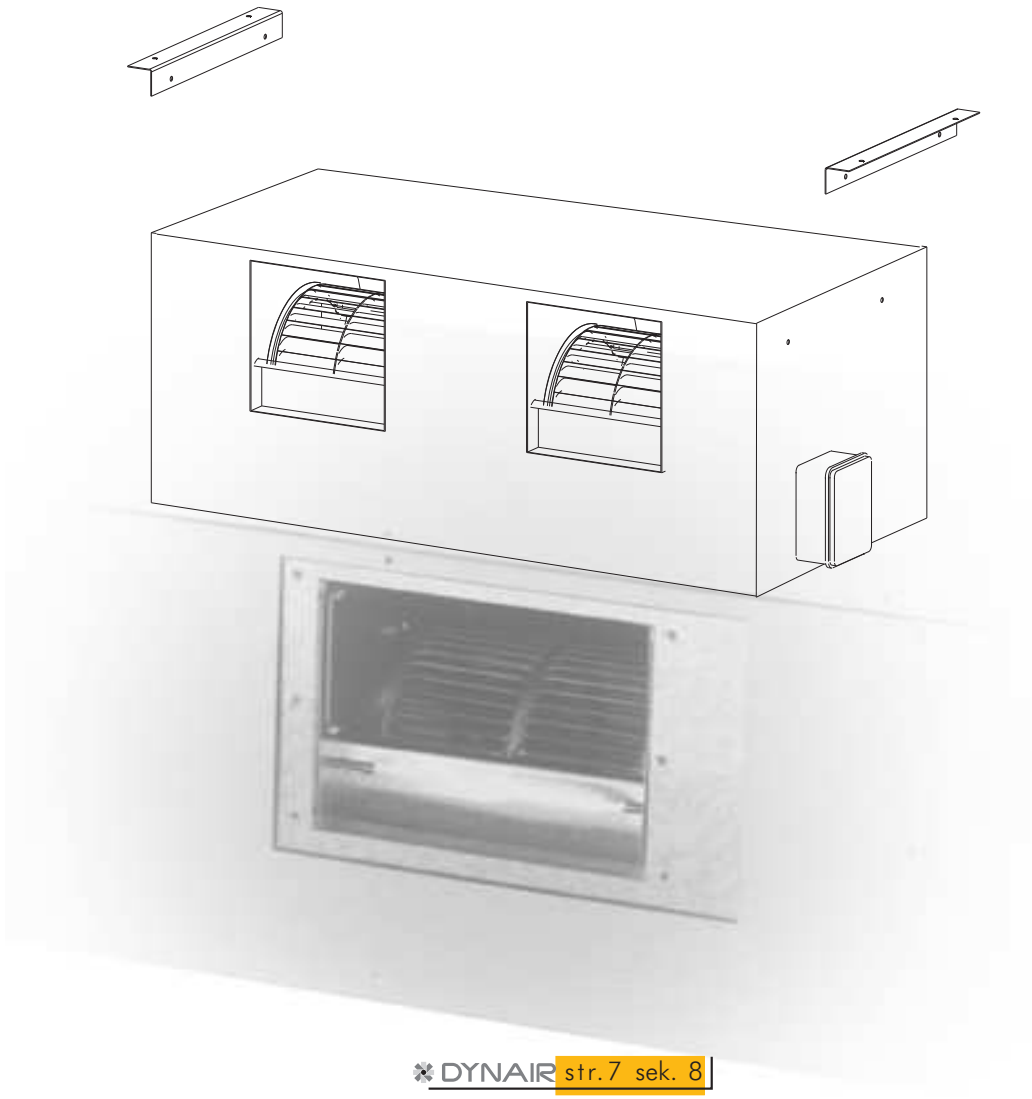
SLIM-BOX 600





Tip/Type	A	B	C	D	E	F	G	H	kg
SLIM-BOX 100	295	450	640	210	500	235	440	100	28
SLIM-BOX 200	322	500	1100	235	960	235	800	150	58
SLIM-BOX 400	372	535	1340	260	1200	280	1070	135	66
SLIM-BOX 600	372	535	1340	260	1200	280	1070	135	70

Dimenzije u mm/Dimensions in mm



TW-D & TW-R

Box ventilatori– Blizanci
DUTY & STAND BY
Duty and “stand by” box fans

TW - D

TW - R

SEK. 8

OSNOVNI PODACI :

Ventilacioni uređaji (BLIZANCI) TW- D i TW- R su dizajnirani za ugradnju u prostorije gde je bezuslovno garantovati besprekidan dovod ili odvod vazduha.
Ovaj rezultat je dostignut ventilatorom - IN DUTY - , a drugi ventilator – STAND BY – čeka na automatski start u slučaju kvara-defekta prvog..DUTY i STAND BY ventilatori tj. njihov rad se može manualno i automatski regulisati pomoću el. konzole dostupne u više verzija.(automatska AC konzola).
TW- D : ventilacija za unutrašnju upotrebu,pogodna za povezivanje na ventilacione kanale.
TW- R : ventilatori koji se montiraju na krov – na kraj ventilacionog kanala za izvlačenje vazduha.

KONSTRUKCIJA :

- Ventilatori TW- D i TW- R koriste standardan otpusni otvor, sa sistemom gravitacionih žaluzina , koji sprečavaju kruženje vazduha kroz - STAND BY – ventilator.Oba ventilatora su snabdevena senzorima za protok vazduha , koji u slučaju zastoja – DUTY - ventilatora šalje informaciju konzoli za menjanje uređaja, koja odmah pušta u pogon – STAND BY – ventilator.U slučaju da je izmena rada ventilatora pod automatskim režimom, konzola automatski određuje ciklus rada ventilatora.
- Ram TW- D ventilatora je izrađen od pod pritiskom livenog aluminijuma, maska i stranice su izrađene od galvanizovanog čelika, obloženog Techno- polymer- om klase I.Otvori su koaksijalni i spremni su za povezivanje na cevni sistem, za odvod i dovod vazduha,konstrukcija nije pogodna za spoljašnju upotrebu.
- Ram i stranice TW- R ventilatora su izrađene od aluminijuma ,obložene Techno- polymer-om klase I.
Ulazni otvor stoji vertikalno naspram izlaznog , što je pogodno za sastajanje vazduha u finalnom delu kanala.
Pogodan je za spoljašnju upotrebu (zaštitna rešetka na otvorima).
- Servisni prekidač
- Niži prizemni nosač ili nožni podupirač (nogare).
- Ventilatori na direktan pogon sa dva otvora ,motorom monofaznim ili trofaznim asinhronim, IP 20 zaštite , klase B (zatvoreni tip motora – po zahtevu)

DODATNI DELOVI :

- AC automatska konzola : AC01 :ventilator koji je u pogonu izabran od strane prekidača; u slučaju kvara, - STAND BY – ventilator se automatski uključuje , kao i crvena led dioda za signalizaciju kvara.AC02 :u poziciji - Ručnog - radi isto kao i kod – Automatske – pozicije, svakih 24 h dolazi do promene pogonskog ventilatora , ovim se izbegava besprekidan rad samo jednog ventilatora.
AC02/R : radi na istom principu kao i AC02 , samo što je dodat regulator brzine.
AC03 : radi skoro isto kao i AC02, samo što se kod AC03 modela promena pogonskog ventilatora vrši posredstvom nedeljnog tajmera.
- Modul snage motora (PM) : dozvoljava upotrebu AC konzole kod TW modela sa trofaznim ili monofaznim motorom, apsorbne trenutne snage veće od 6A.

GENERAL DESCRIPTION

The ventilation units (TWIN-FANS) TW-D and TW-R are designed for installations where it is peremptory to guarantee an uninterrupted air exhaust (or intake) .This purpose is reached by means of a fan “in duty” and another one in "stand-by" waiting to start automatically in case of breakdown of the first fan. Duty and Stand-by fans can be manually or automatically exchanged. Both a.m. functions are achieved by an electronic panel, available in different versions (Automatic Changeover Panel AC).
TW-D: ventilation units for indoor use, suitable for connection to in line ducts.
TW-R: extraction units suitable for installations on coverings or roofs, to be connected to duct end.

CONSTRUCTION

- The twin units TW-D and TW-R use a common outlet, with a system of gravity shutters that prevents the air recycling through the “stand-by” fan . Each fan is supplied with an airflow sensor which, in case of failure of the “duty” fan, gives information to the changeover panel; this will immediately switch-on the “stand-by” fan.
In case of programmed switching, the autochangeover panel will automatically alternate the working cycle of the fans.
- TW-D Frame in extruded aluminium profile and panels in galvanized steel sheet, lined with techno-polymer class I. Inlet and outlet are coaxial, suitable for being ducted, either in exhausting and intaking. Construction not suitable for outdoor installation.
- TW-R Frame in aluminium profile and panels in aluminium sheet, lined with techno-polymer class I. Inlet perpendicular to the outlet, suitable for assembly in the final part of the duct. Construction suitable for outdoor installations; bird screen on outlet.
Lower ground frame or support feet.
- Service switch.
- Double inlet direct drive fan with built-in motor, asynchronous single-phase and three-phase, IP20, class B (closed motor type upon request).

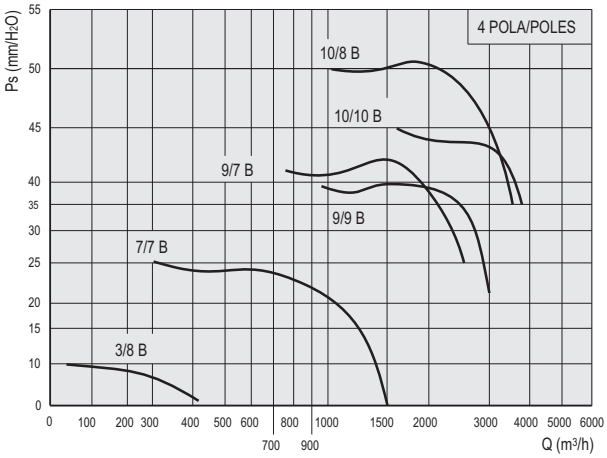
ACCESSORIES

- AC Auto change-over panels: AC01: the service fan is selected through a switch; in case of failure, the stand-by fan starts automatically and a red light signals the breakdown. AC02: in the position "MANUAL" it works exactly as the AC-01 model. In "AUTOMATIC" position,every 24 hours an exchange is made between the “duty” and “stand-by” fans; this to avoid the continuous working of just one fan.
AC02/R: it works as the AC-02 model with the addition of a speed regulator.
AC03: it works almost as the AC-02 model; in AC03 the exchange between the two fans is programmed by means of a weekly timer.
- Power module (PM) : it allows the use of the changeover panels (AC) in TW units with three-phase motor or single-phase motor with absorbed current higher than 6 A.

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

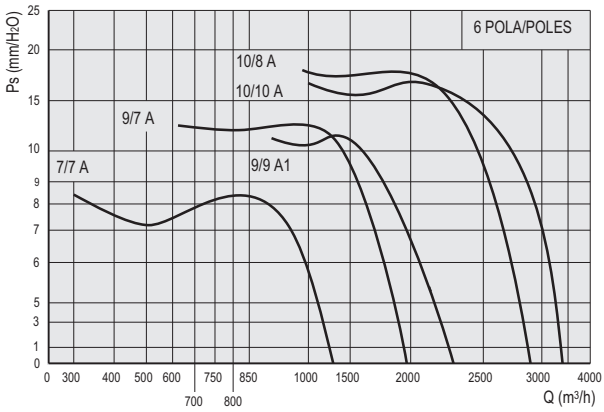
4 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)
TW-D & TW-R	3/8 B	M	4	0,04	1,1	46
TW-D & TW-R	7/7 B	M	4	0,14	1,7	56
TW-D & TW-R	9/7 B	M	4	0,37	4	61
TW-D & TW-R	9/9 B	M	4	0,37	4,5	61
TW-D & TW-R	10/8 B	M	4	0,55	5,2	63
TW-D & TW-R	10/10 B	M	4	0,55	6,8	64



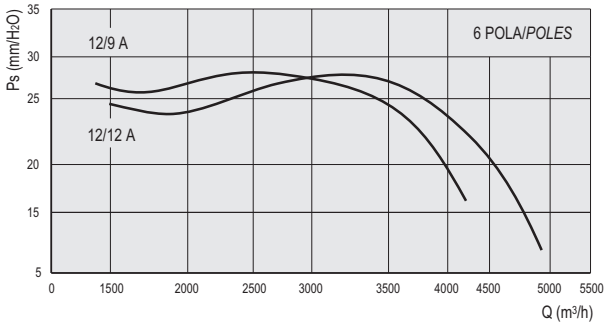
6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)
TW-D & TW-R	7/7 A	M	6	0,07	1,1	49
TW-D & TW-R	9/7 A	M	6	0,12	2	54
TW-D & TW-R	9/9 A1	M	6	0,12	2,2	55
TW-D & TW-R	10/8 A	M	6	0,24	3	55
TW-D & TW-R	10/10 A	M	6	0,24	3	55



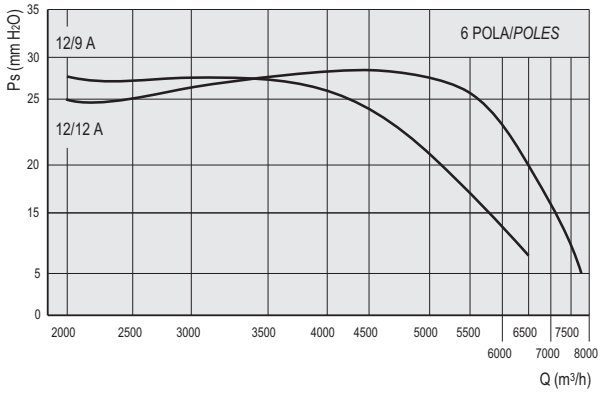
6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)
TW-D & TW-R	12/9 A	M	6	0,55	6	58
TW-D & TW-R	12/12 A	M	6	0,55	5,6	60

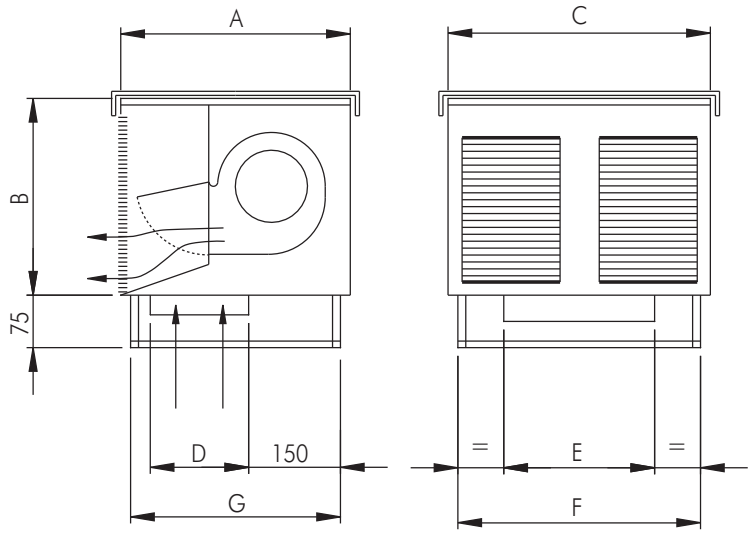


6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)
TW-D & TW-R	12/9 AT	T	6	1,1	4,2	67
TW-D & TW-R	12/12 AT	T	6	1,1	4,7	69



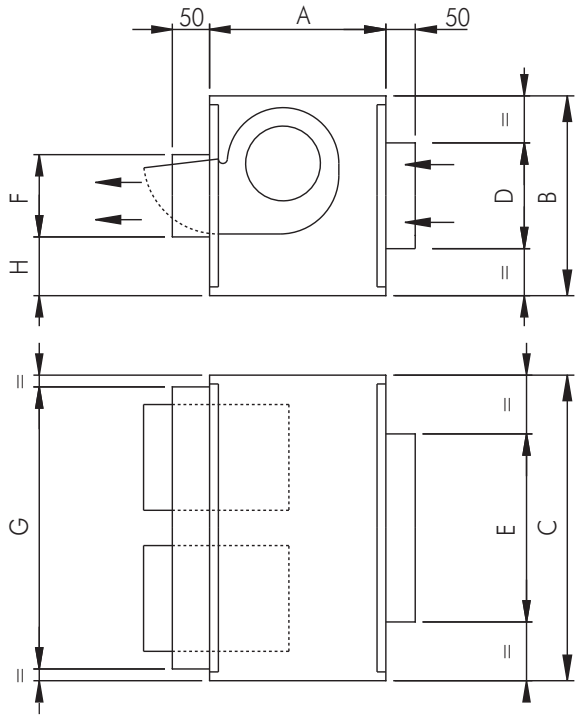
TW - R



Tip/Type	A	B	C	D	E	F	G	kg
TW-R 3/8	400	300	800	150	250	770	370	10
TW-R 7/7	650	500	900	200	300	870	620	18
TW-R 9/7	800	600	900	200	300	870	770	30
TW-R 9/9	800	600	1100	300	400	1070	770	60
TW-R 10/8	900	600	1100	400	400	1070	870	78
TW-R 10/10	900	600	1100	400	400	1070	870	78
TW-R 12/9	1000	750	1400	400	400	1370	970	90
TW-R 12/12	1000	750	1500	400	400	1470	970	100

Dimenzije u mm/Dimensions in mm

TW - D



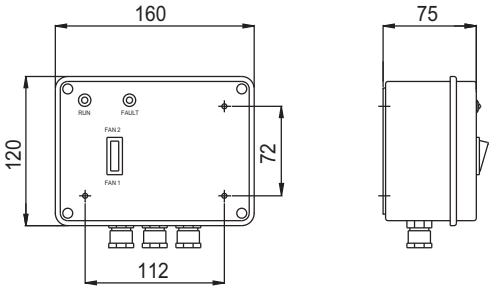
Tip/Type	A	B	C	D	E	F	G	H	kg
TW-D 3/8	300	300	800	200	200	200	700	50	8
TW-D 7/7	500	500	900	300	400	340	700	80	16
TW-D 9/7	500	500	900	400	400	340	700	80	26
TW-D 9/9	600	600	1100	400	400	400	900	100	52
TW-D 10/8	600	600	1100	400	400	400	900	100	64
TW-D 10/10	600	600	1100	400	400	400	900	100	64
TW-D 12/9	750	750	1400	400	400	400	1100	125	80
TW-D 12/12	750	750	1500	500	600	400	1100	125	94

Dimenzije u mm/Dimensions in mm

AC 01

Ventilator koji je u pogonu izabran od strane prekidača; u slučaju kvara, - STAND BY – ventilator se automatski uključuje , kao i crvena led dioda za signalizaciju kvara

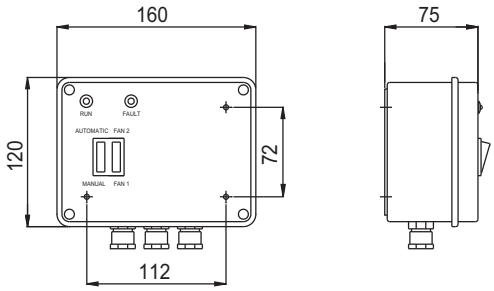
The service fan is selected through a switch; in case of failure, the stand-by fan starts automatically and a red light signals the breakdown.



AC02

U poziciji - Ručnog - radi isto kao i kod – Automatske – pozicije, svakih 24 h dolazi do promene pogonskog ventilatora , ovim se izbegava besprekidan rad samo jednog ventilatora.

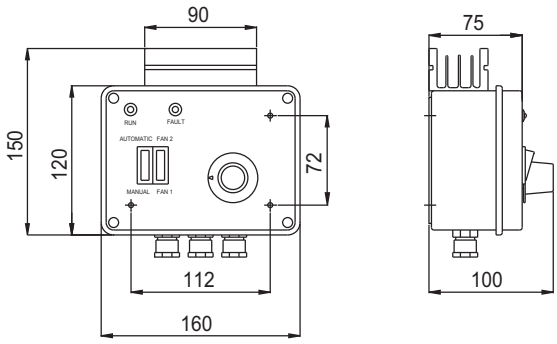
In the position "MANUAL" it works exactly as the AC-01 model. In "AUTOMATIC" position,every 24 hours an exchange is made between the "duty" and "stand-by" fans; this to avoid the continuous working of just one fan.



AC02/R

Radi na istom principu kao i AC02 , samo što je dodat regulator brzine.

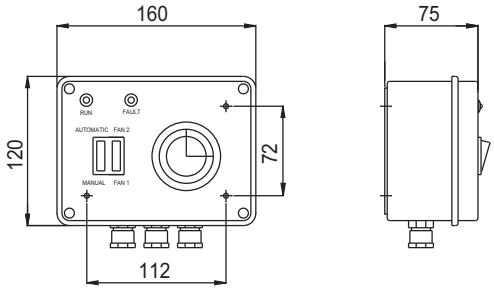
It works as the AC-02 model with the addition of a speed regulator.



AC03

Radi skoro isto kao i AC02, samo što se kod AC03 modela promena pogonskog ventilatora vrši posredstvom nedeljnog tajmera.

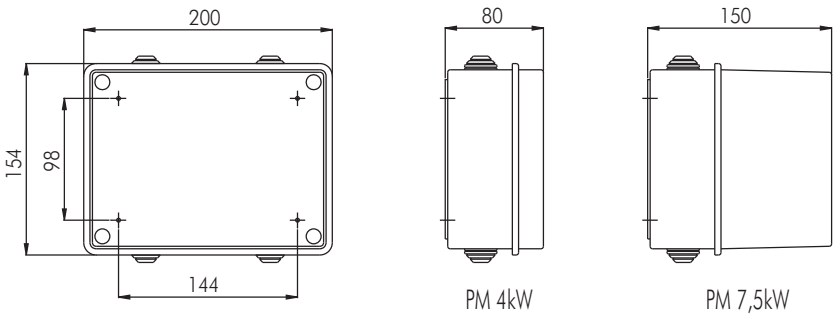
It works almost as the AC-02 model; in AC03 the exchange between the two fans is programmed by means of a weekly timer.



MODUL SNAGE MOTORA (PM) / POWER MODULE (PM)

Modul snage motora (PM) : dozvoljava upotrebu AC konzole kod TW modela sa trofaznim ili monofaznim motorom sa apsorbne trenutne snage veće od 6A.

Power module (PM) : it allows the use of the changeover panels (AC) in TW units with three-phase motor or single-phase motor with absorbed current higher than 6 A.



DA

Ventilatori na direktan pogon sa dva otvora (bez kućišta)
Direct drive double inlet fans

OSNOVNI PODACI :

Serija DA ventilatora je pogodna za ventilaciju, održavanje, filtraciju i grejanje.Mogu da transportuju čist vazduh do temperature maksimalno od 40 °C.Za pravilno funkcionisanje neophodno im je kućište (Plenum strukture).
Ventilator u transportu neće izdati manji pritisak , nego prikazan u performansnom diagramu.

KONSTRUKCIJA :

- Izrađen od galvanizovanog čelika.
- Direktan pogon radnog kola sa unapred zakrivljenim lopaticama ventilatora sa dva otvora.
- Monofazni i trofazni motor (samo 12/9 i 12/12), IP 20, klase B.
Pogodan za regulaciju brzine (koristeći regulatore koji se prikazuju u ovom katalogu)
Termalna zaštita kod monofaznog modela.

DODATNI DELOVI :

- Fiksirna nožica
- Regulator brzine
- Zatvorena verzija motora , klase B
- Verzija sa trobrzinskim motorom, IP 20 klase B.
- Spoljni ram-obod (za povezivanje sa cevnim sistemom)

GENERAL DESCRIPTION

The fans of the DA series are suitable for ventilation, conditioning, filtering, heating. They can treat clean air with max. temperature of 40°C .For a proper working condition, they require an housing structure (Plenum). The fans shall not be selected with pressures lower than shown on their performance diagram.

CONSTRUCTION

- Volute in galvanized steel sheet.
- Direct drive double inlet forward curved wheel.
- Single-phase and three-phase motor (only 12/9 and 12/12), IP 20, class B. Suitable for speed regulation (using the suitable regulators shown in this catalogue). Thermal protection in single-phase versions.

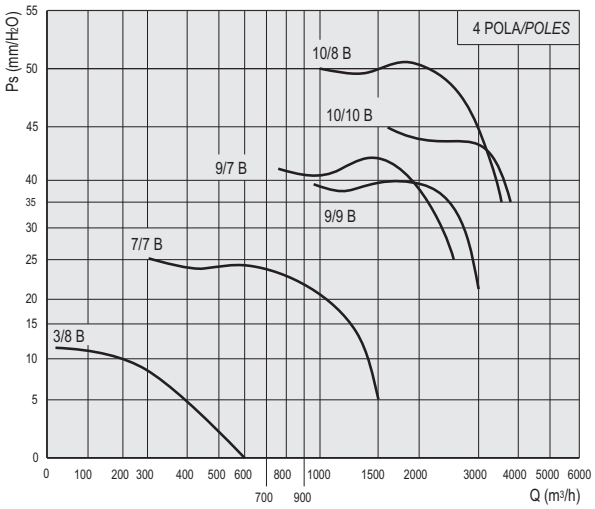
ACCESSORIES

- Fixing feet.
- Speed regulators.
- Versions closed, class B motors.
- Versions with 3 speeds motor, IP 20, class B.
- Outlet flange.

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

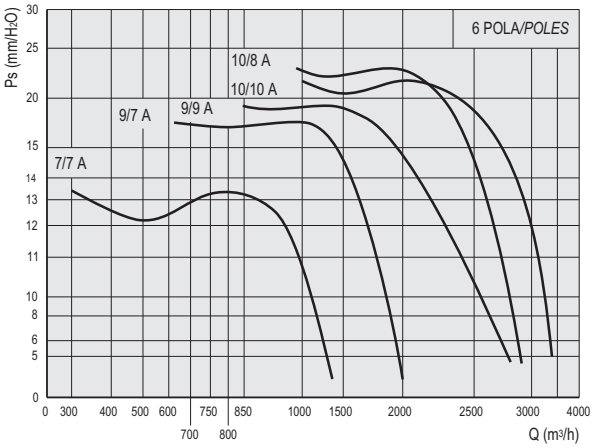
4 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
DA	3/8 B	M	4	0,04	0,5	55	RV/1 o RVM/2
DA	7/7 B	M	4	0,14	2	66	RV/1 o RVM/2
DA	9/7 B	M	4	0,37	5	73	RV/2 o RVM/3
DA	9/9 B	M	4	0,37	4,5	73	RV/2 o RVM/3
DA	10/8 B	M	4	0,55	6,7	74	RV/2 o RVM/3
DA	10/10 B	M	4	0,55	6,5	74	RV/2 o RVM/3



6 pola/poles

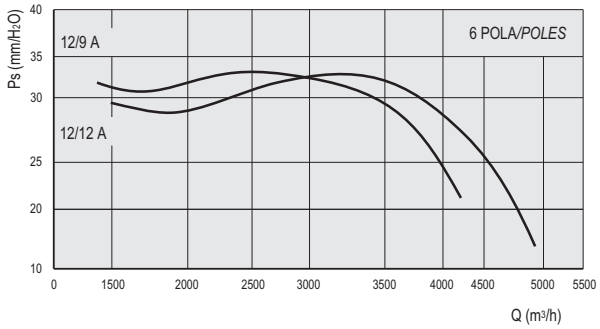
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
DA	7/7 A	M	6	0,06	1,1	61	RV/N o RVM
DA	9/7 A	M	6	0,14	2	65	RV/1 o RVM/2
DA	9/9 A	M	6	0,24	2,6	68	RV/1 o RVM/2
DA	10/8 A	M	6	0,24	2,6	65	RV/1 o RVM/2
DA	10/10 A	M	6	0,24	3	65	RV/1 o RVM/2



SEK. 8

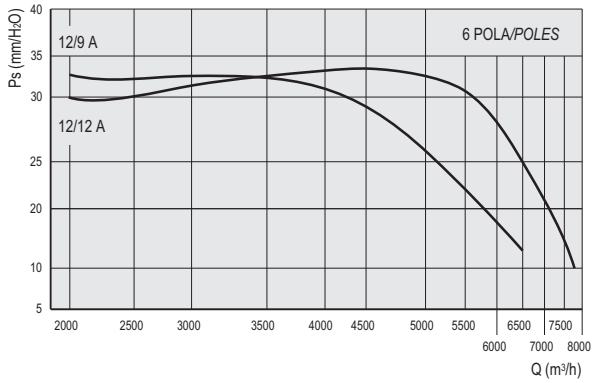
6 pola/poles

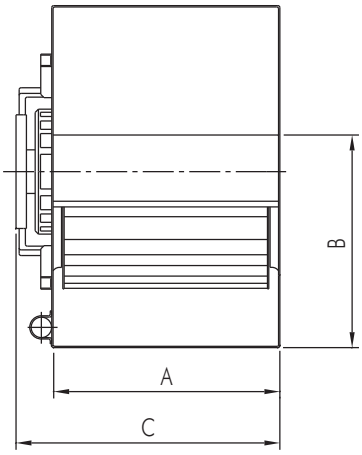
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
DA	12/9 A	M	6	0,59	6,7	68	RV/2 o RVM/3
DA	12/12 A	M	6	0,59	7	69	RV/2 o RVM/3

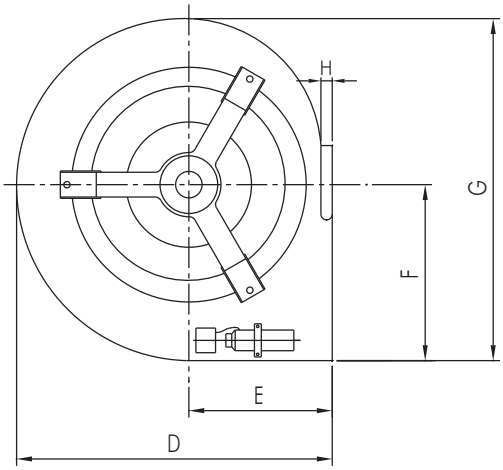


6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
DA	12/9 A T	T	6	1,1	4,3	76	RVT/1
DA	12/12 AT	T	6	1,1	4,7	77	RVT/1

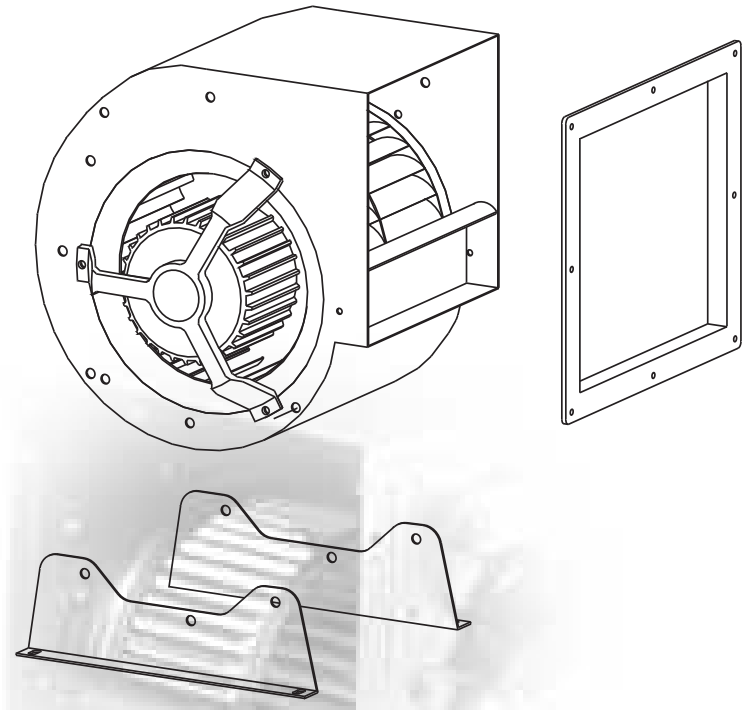






Tip/Type	A	B	C	D	E	F	G	H
3/8	260	100	300	200	100	114	210	30
7/7	230	210	270	315	150	185	325	30
9/7	230	260	300	380	185	215	390	40
9/9	300	260	354	380	184	215	390	40
10/8	265	290	310	425	200	250	440	40
10/10	330	290	385	425	200	250	440	40
12/9	310	340	400	490	230	295	520	40
12/12	395	340	485	490	230	295	520	40

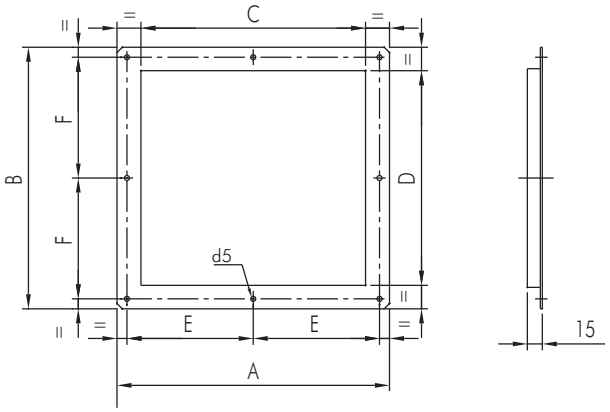
Dimenzije u mm/Dimensions in mm



OBRUČ IZLAZNOG OTVORA / OUTLET FLANGE

Ivica je montirana na izlaznu stranu ventilatora , i omogučava spolj na kanalni-cevni sistem.

The flange is mounted on the outlet side of the fan and allows the connection to the duct.

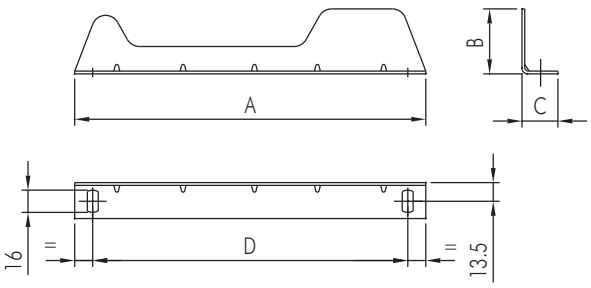


Tipo/Type	A	B	C	D	E	F
7/7	273	262	225	215	126,5	121
7/9	340	249	292	202	160	114,5
9/7	273	300	225	253	126,5	140
9/9	340	300	292	253	160	140
10/8	317	340	260	282	146,5	158
10/10	383	340	326	282	179,5	158
12/9	365	395	304	333	170,5	187
12/12	450	395	388	333	213	187
15/11	426	460	365	395	201	218
15/15	526	460	465	395	251	218
18/13	498	544	428	474	234	257
18/18	618	544	548	474	294	257

Dimenzije u mm/Dimensions in mm

FIKSIRNE NOGARE /FIXING FEET

Montirani su sa strane ventilatora i omogućuju usidravanje ventilatora do eventualne podrške.
Mogućnost usmeravanja izlaznog otvora 90°.
They are assembled on the fan sides to allow the anchorage of the fan itself to eventual supports.
Possibility of orientation of the outlet by 90° steps.



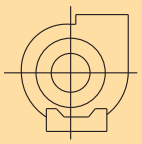
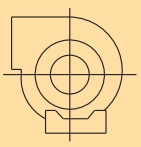
Tip/Type	A	B	C	D
7/	254	47	26	227
9/	325	102	26	297
10/	363	102	26	339
12/	434	144	26	407
15/	521	164	26	494
18/	635	186	26	608

Dimenzije u mm/Dimensions in mm

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES DA

Zamisao na osnovu fiksirnih podupirača.

Figures available using the fixing brackets.

Rotacija *Rotation* LG				
Forma/*Form*	0°	90°	180°	270°

BOX-DR

Box ventilatori na direktan pogon sa dva otvora
Direct drive double inlet box fans

BOX - DR

OSNOVNI PODACI :

Ventilatori BOX -DR serije su dizajnirani za odvlačenje, filtraciju i održavanje vazduha .Važna karakteristika im je nizak nivo buke, što ih čini pogodnim za urbane sredine : (apartmane, kuće, barove, restorane, škole, kancelarije itd) i za industrijske pogone gde je visok nivo buke problem.Nizak nivo buke je dobijen zahvaljujući Plenum akustičnom materijalu koji omogućuje izuzetnu redukciju nivoa buke ,neizbežno proizvedenu od strane ventilatora.
Ventilator je unapred zakrivljena lopatica sa ugrađenim motorom i dva otvora.

KONSTRUKCIJA :

- BOX-DR : ram ventilatora je izrađen od livenog aluminijuma; oplata- stranice (koje su odvojive) izrađene su od galvanizovanog čelika ;u celini daje vrlo estetičan utisak.
Vodootporni poklopac je izrađen od galvanizovanog čelika.
- Panel duplog sloja ,debljine 13 mm.
- Ventilator je fiksiran koristeći spoljne ivice i podupret odgovarajućim podupiračima sa strane ventilatora.
Ventilator je kompletno izolovan od konstrukcije antivibracionim okvirom i izolacionim materijalom.
- Iznutra obložen Plenum-mom u Techno-polymer- u klase I.
- Box ventilatori na direktan pogon sa dva otvora – motorom monofaznim ili trofaznim asinhronim, klase B pogodnim za regulaciju brzine (koristeći regulatore koji se prikazuju u ovom katalogu)
Sa odgovarajućim otvorima za podizače – držače.

DODATNI DELOVI :

- Elektronski i auto- transformirajući regulator brzine
- Nožni podupirač

NA ZAHTEV :

- Verzija sa asinhronim tro brzinskim motorom, klase B.
- Verzija sa totalno zatvorenim motorom , klase B.

GENERAL DESCRIPTION

The fans of the BOX-DR series are particularly designed for air extraction, filtration systems, air conditioning plants. Their main characteristic is the low noise level which makes them ideal for urban environments (apartments, houses, bar, restaurants, gymnasiums, offices) and industrial sites where the noise is a problem. The low noise level is due to their "lined plenum" of acoustic material that allows a remarkable reduction of the noise level inevitably generated by the fan. The fan is a double inlet forward curved centrifugal wheel with built-in motor.

CONSTRUCTION

- BOX/DR: frame in extruded aluminium profile; removable panels in galvanized steel sheet; all this brings to an excellent aesthetic impact. Weatherproof cover in galvanized steel sheet.
- Double skin panels thickness 13 mm.
- The fan is fixed by using the outlet flange and suitable brackets on the sides of the fan. The fan is completely isolated from the structure, by antivibration mounts and gaskets.
- Inside lining of the plenum in techno-polymer class I.
- Double inlet fan, frontward bladed, with direct drive built-in motor, asynchronous, single-phase or three-phase, class B, suitable for speed regulation (using regulators shown in this catalogue).
- With suitable holes for lifting hooks.

ACCESSORIES

- Electronic and self-transformer speed regulators.
- Feet support

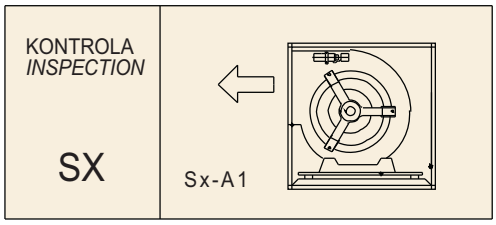
UPON REQUEST

- Versions with asynchronous 3 speed motor , class B.
- Versions with totally enclosed motor, class B.

SEK.8

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

BOX-DR

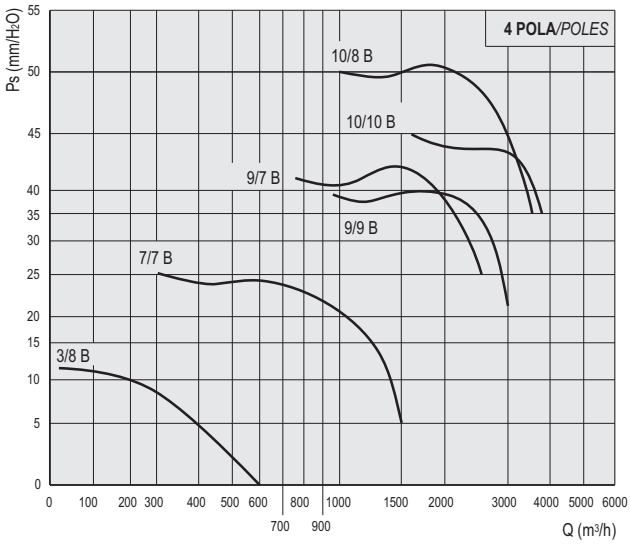


Važno: standardi uglova ispuštanja SX-A1 / Note: standard discarge angles SX-A1

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

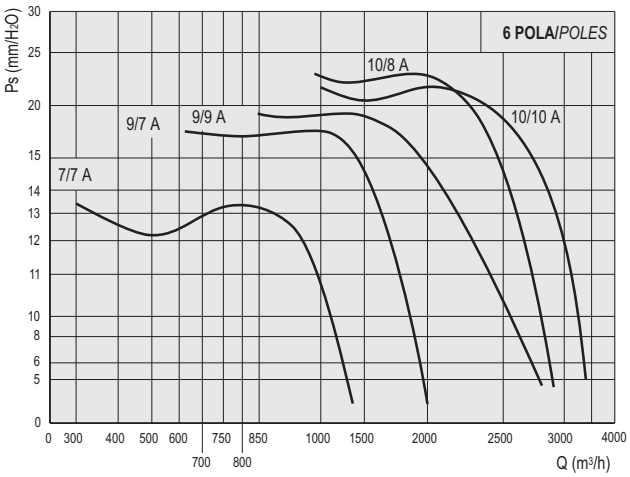
BOX-D - 4 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	3/8 B	M	4	0,04	0,5	45	RV/1 o RVM/2
BOX-D	7/7 B	M	4	0,14	2	57	RV/1 o RVM/2
BOX-D	9/7 B	M	4	0,37	5	62	RV/2 o RVM/3
BOX-D	9/9 B	M	4	0,37	4,5	62	RV/2 o RVM/3
BOX-D	10/8 B	M	4	0,55	6,7	63	RV/2 o RVM/3
BOX-D	10/10 B	M	4	0,55	6,5	64	RV/2 o RVM/3



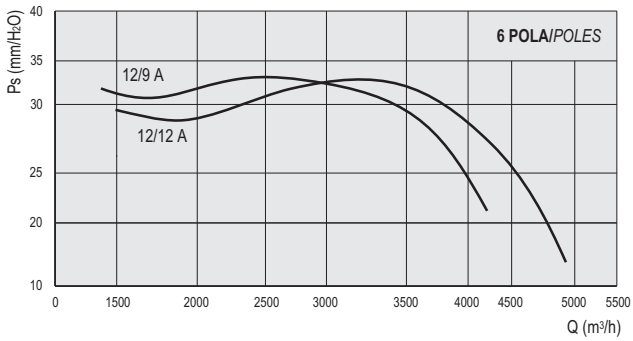
BOX-D - 6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	7/7 A	M	6	0,06	1,1	51	RV/N o RVM
BOX-D	9/7 A	M	6	0,14	2	54	RV/1 o RVM/2
BOX-D	9/9 A	M	6	0,24	2,6	56	RV/1 o RVM/2
BOX-D	10/8 A	M	6	0,24	2,6	56	RV/1 o RVM/2
BOX-D	10/10 A	M	6	0,24	3	56	RV/1 o RVM/2



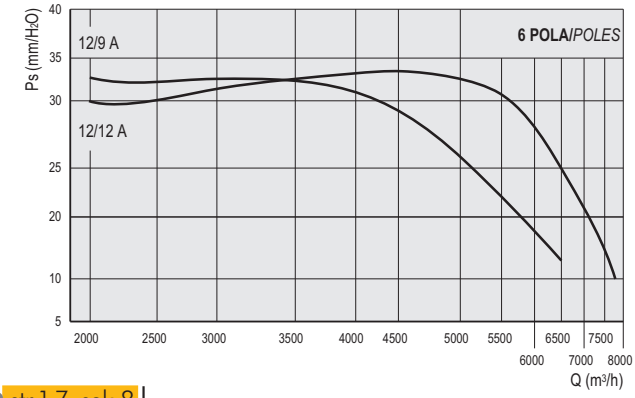
BOX-D - 6 pola/poles

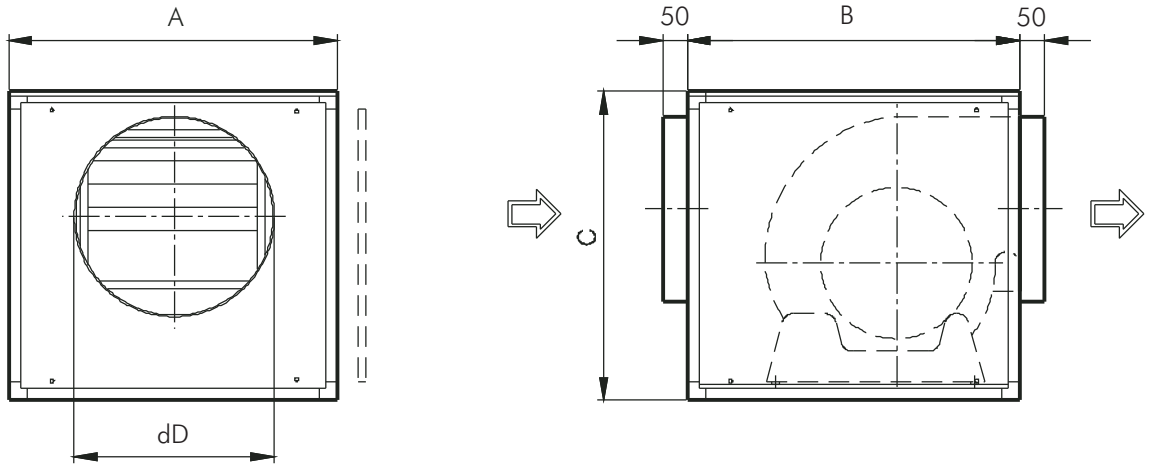
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	12/9 A	M	6	0,59	6,7	59	RV/2 o RVM/3
BOX-D	12/12 A	M	6	0,59	7	64	RV/2 o RVM/3



BOX-D - 6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	Lp dB(A)	Reg.
BOX-D	12/9 A T	T	6	1,1	4,3	68	RVT/1
BOX-D	12/12 A T	T	6	1,1	4,7	70	RVT/1





Veličina	k W	A	B	C	d D	K g
7 / 7	0 . 1 4	4 2 0	4 2 0	4 2 0	2 5 0	2 4
9 / 7	0 . 3 7	5 0 0	5 0 0	5 0 0	3 1 5	2 8
9 / 9	0 . 3 7	5 0 0	5 0 0	5 0 0	3 5 5	3 3
1 0 / 8	0 . 5 5	6 0 0	6 0 0	6 0 0	4 0 0	3 5
1 0 / 1 0	0 . 5 5	6 0 0	6 0 0	6 0 0	4 5 0	3 6
1 2 / 9	0 . 5 5	7 5 0	6 4 0	6 4 0	4 5 0	6 5
1 2 / 1 2	0 . 5 5	7 5 0	6 4 0	6 4 0	4 5 0	6 6

Dimenzije u mm/Dimensions in mm

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

	Tip / Type	Model / Model
Primer / Example:	BOX-D	10/10 A
Primer / Example:	SLIM-BOX	400
Primer / Example:	TW – D & TW – R	10/10 B
Primer / Example:	DA	10/10 B

Tel. (++39) 030 9913575 (5 linee r.a.)
fax (++39) 030 9913766
E-mail dynair@dynair.it - www.dynair.it
Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

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AVIT
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Tel. +381-21- 64- 10 -160 , Fax: +381-21-64-10-159
E-mail: info@avit.co.yu www.avit.co.yu

Centrifugalni box ventilatori i ventilatori sa duplim otvorom na remeni pogon
Centrifugal box fans and double inlet belt driven fans

9

BOX-T str. 2.9

Ventilatori sa duplim otvorom na remeni pogon
Belt driven double inlet box fans

BOX-TL str. 5.9

Box ventilatori sa dvostrukim ulaznim otvorom i pogonom na klinasti remen
Belt driven double inlet box fans

BOX-CA str. 7.9

Filter jedinica sa aktivnim ugljem
Active carbon filtering units

DA-T str. 10.9

Ventilatori sa dvostrukim otvorom bez motora
Double inlet fans without motor

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AXIAL ROOF FANS — SEK. 2

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PLATE MOUNTED AND RING AXIAL FANS — SEK. 3

Cevni ventilatori
DUCTED AXIAL FANS — SEK. 4

Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama i centrifugalni ventilatori izrađeni od livenog aluminijuma
SMALL SIZE FORWARD CURVED BLADE AND RADIAL CENTRIFUGAL FANS IN ALUMINIUM — SEK. 5

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama
BACKWARD CURVED BLADE CENTRIFUGAL FANS FOR CLEAN AIR — SEK. 6

In line – redni centrifugalni ventilatori
IN LINE CENTRIFUGAL FANS — SEK. 7

Box ventilatori na direktan pogon sa dva otvora
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Centrifugalni box ventilatori i ventilatori sa duplim otvorom na remeni pogon
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Antikorozivni ventilatori
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Akustično linijski centrifugalni ventilatori i Rekuperator toplote
IN LINE ACOUSTIC CENTRIFUGAL FANS AND HEAT RECUPERATOR — SEK. 13

BOX-T

Ventilatori sa duplim otvorom na remeni pogon
Belt driven double inlet box fans

OSNOVNI PODACI :

Ventilatori iz serije BOX-T su pogodni za izvlačenje i filtriranje vazduha.
Glavna prednost im je mali nivo buke, koji ih čini pogodnim za javna mesta kao što su (barovi, restorani, sportske hale, kancelarije) i u industrijskim objektima gde je visok nivo buke - problem.
Ima tih rad zahvaljujući panelnom materijalu koji ima postavu tzv. plenum apsorber zvuka, koji izvanredno smanjuje nivo buke.

KONSTRUKCIJA :

- Unutrašnji ram je izrađen od vučenog aluminijuma, panelni omotači su od galvanizovane čelične ploče.
- Postava plenuma je od prvoklasnog tehno polimer materijala.
- Radijalni ventilator sa unapred zakrivljenim lopaticama ,dvostrukim ulaznim otvorom, na pogon sa klinastim remenom i podesivom remenicom. Izrada tipa 14/d do veličine 10/10; za vrednosti iznad u izradi 11/d. Lopatice i motor se nalaze u kućištu i izolovani su od strukture antivibracionim čeljustima i fleksibilno su povezani na kanalni sistem.
- Trofazni asinhroni motor odgovara standardima IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23EEC I ima oznaku kvaliteta CE. Podloga za montiranje je tipa B3, IP55, klase F. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Panel sa zaštitom od kiše
- Noge za montiranje
- Zaštita od kiše za izlazni otvor sa rešetkama.
- Regulaciona žaluzina
- Regulaciona žaluzina sa filterom za vazduh (standardna verzija sa filterom od poliestera sa efikasnošću od 90.1%, klasa EU4).

NA ZAHTEV :

- Trofazni dvopolni (4-6 polova) motor
- Verzija ATEX (sa protiv eksplozivnom zaštitom) (konstrukcija odgovara za transport tečnosti sa mogućnošću eksplozije i/ili zapaljivosti, odgovara propisu IEC79-10, CEI 64-2. - Verzija sa jednofaznim asinhronim motorom odgovarajući standardima IEC34-IEC72 i 89/392 EEC-89/336EEC-73/23 EEC, oznaka CE.Podloga za montiranje je tipa B3, IP55, klase F.Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju). - Aluminijumski panel - Panel od nerđajućeg čelika - Dupli panel

GENERAL DESCRIPTION

The fans of the BOX-T series are suitable for air extraction or filtering plants. Their main characteristic is the low noise level, which makes them ideal in urban environments (bars, restaurants, gymnasiums, offices) and industrial plants where the noise is a problem. The low noise level is due to the "lined plenum" of acoustic material which allows a remarkable pulling down of the noise level.

CONSTRUCTION

- Frame in extruded aluminium profiles and removable panels in galvanized steel sheet.
- Lining of the plenum with techno-polymer class I material.
- Double inlet centrifugal fan with forward curved blades, driven by trapezoidal belts and adjustable pulleys. Execution 14/ d up to size 10/10; beyond, execution 11/ d. Fan and motor supported by single baseframe and isolated from the structure by antivibration mounts and flexible joint on the outlet.
- Three-phase asynchronous motor according to IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23EEC standards, CE marked. Pad mounting type B3, IP55, class F. Suitable for S1 service (continuos working at constant load).

ACCESSORIES

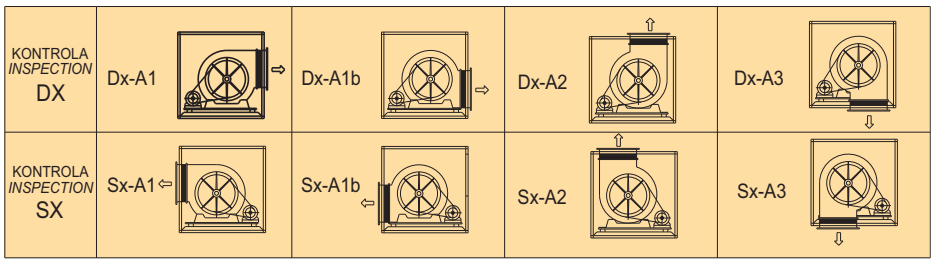
- Upper rain protection panel.
- Support feet.
- Outlet rain protection terminal with guard.
- Setting shutter.
- Setting shutter with filtering section (standard version with filter in Polyester with efficiency 90.1%, class EU4).

UPON REQUEST

- Version with three-phase two-polarity motors (4/6 poles).
- ATEX (explosion proof) version (construction suitable for the conveyance of fluids potentially explosive and/or flammable, according to IEC79-10, CEI 64-2 standard.
- Version with asynchronous single-phase motors according to IEC34-IEC72 and 89/392 EEC-89/336EEC-73/23 EEC standards, marked CE. Pad mounting type B3, IP55, class F. Suitable for S1 service (continuos working at constant load).
- Panels in aluminium sheet.
- Panels in stainless steel sheet.
- Double panelling.

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

BOX-T



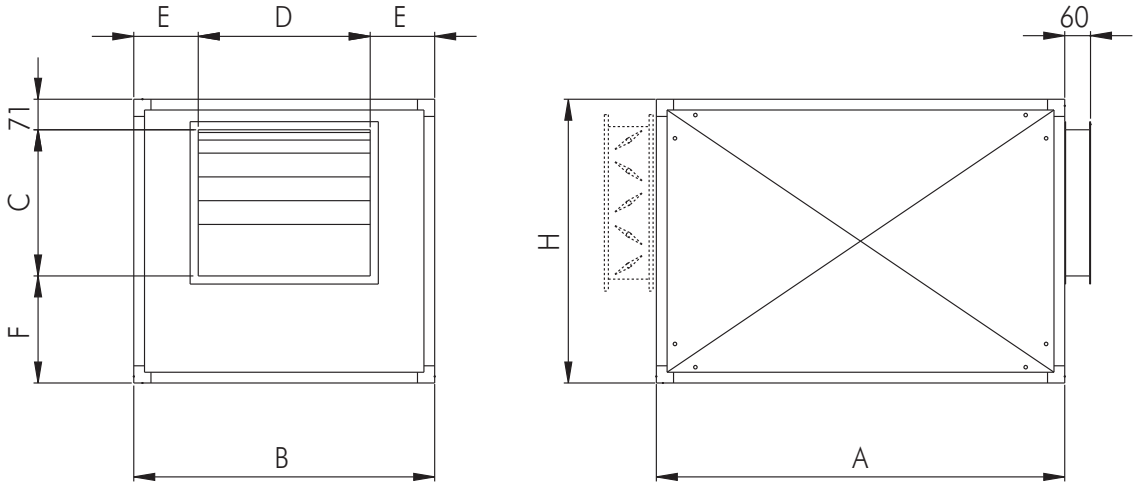
VAŽNO : Standard ugla ispuštanja DX-A1
Note: Standard discharge angles DX -A1

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

Tip/Type	Q (m³/h)	C (m/s)	Ps (mm/H₂O) 10 rpm	10 Pm kw	10 Lw db(A)	15 rpm	15 Pm kw	15 Lw db(A)	20 rpm	20 Pm kw	20 Lw db(A)	25 rpm	25 Pm kw	25 Lw db(A)	30 rpm	30 Pm kw	30 Lw db(A)	35 rpm	35 Pm kw	35 Lw db(A)	40 rpm	40 Pm kw	40 Lw db(A)	45 rpm	45 Pm kw	45 Lw db(A)	50 rpm	50 Pm kw	50 Lw db(A)	55 rpm	55 Pm kw	55 Lw db(A)
7/7	750	4,3	830	0,37	56	1018	0,37	59	1176	0,37	64	1313	0,37	66	1435	0,37	70	1547	0,37	73												
	1000	5,8	837	0,37	60	1017	0,37	65	1174	0,37	69	1314	0,37	71	1440	0,37	73	1555	0,37	74	1662	0,37	75									
	1500	8,6	924	0,37	67	1060	0,37	71	1192	0,37	72	1319	0,37	73	1439	0,37	74	1553	0,37	75	1660	0,75	77	1762	0,75	78	1858	0,75	80	1949	0,75	81
	2000	11,5	1073	0,37	74	1176	0,37	75	1278	0,37	76	1379	0,75	77	1480	0,75	78	1578	0,75	79	1675	0,75	80	1769	0,75	81	1860	0,75	81	1948	0,75	82
9/9	1000	3,6	663	0,37	60	842	0,37	64	1000	0,37	66	1217	0,37	68	1265	0,37	68	1379	0,37	69												
	2000	7,1	697	0,37	62	814	0,37	66	923	0,37	67	1027	0,37	68	1129	0,37	69	1228	0,37	69	1325	0,75	70	1419	0,75	71	1510	0,75	72	1599	0,75	73
	3000	10,7	820	0,37	70	917	0,75	71	1005	0,75	72	1087	0,75	73	1164	0,75	74	1239	0,75	74	1312	0,75	75	1384	0,75	76						
10/10	2000	7,3	587	0,37	61	707	0,37	63	825	0,37	64	933	0,37	66	1031	0,37	67	1123	0,75	68	1208	0,75	69	1287	0,75	70	1362	0,75	72	1433	1,1	74
	3000	10,9	697	0,37	67	726	0,37	69	820	0,37	70	910	0,75	71	997	0,75	72	1080	0,75	73	1160	0,75	74	1237	0,75	75	1311	1,1	76	1381	1,1	77
	4000	14,5	832	0,75	72	797	0,75	73	871	0,75	74	944	0,75	74	1015	0,75	75	1085	1,1	75	1154	1,1	76	1221	1,1	77	1286	1,1	77			
12/12	4000	8,2	552	0,75	67	646	0,75	68	730	0,75	70	808	0,75	71	881	0,75	72	951	0,75	73	1017	1,1	73	1081	1,1	74	1142	1,1	75	1201	1,5	76
	5000	10,3	592	0,75	70	680	0,75	71	758	0,75	72	830	1,1	73	897	1,1	73	960	1,1	74	1021	1,1	74	1080	1,5	75	1137	1,5	76	1192	1,5	77
	6000	12,4	644	0,75	73	720	1,1	74	793	1,1	75	861	1,1	76	964	1,5	77	984	1,5	77	1041	1,5	78									
15/15	6000	8,8	437	1,1	65	510	1,1	67	579	1,1	68	646	1,1	69	710	1,1	71	771	1,1	72	828	1,5	73	882	1,5	75	934	2,2	76	983	2,2	76
	7000	10,2	464	1,1	67	528	1,1	69	590	1,1	70	650	1,1	71	708	1,5	72	765	1,5	73	820	1,5	74	872	2,2	75	923	2,2	76	972	2,2	77
	8000	11,7	495	1,1	70	552	1,1	71	608	1,5	72	662	1,5	73	715	1,5	74	767	2,2	75	818	2,2	76	867	2,2	77	916	2,2	78	962	3	79
	9000	13,1	530	1,5	72	581	1,5	73	631	1,5	74	681	2,2	75	729	2,2	76	776	2,2	76	823	2,2	77	869	3	78	914	3	79	959	3	80
	10000	14,6	566	1,5	74	614	2,2	75	659	2,2	75	704	2,2	76	748	2,2	77	771	3	77	835	3	78	878	3	79	920	3	80			
18/18	10000	10,4	412	2,2	72	467	2,2	73	519	2,2	73	568	2,2	74	616	2,2	75	662	2,2	76	706	2,2	76	750	3	77	792	3	77	833	3	78
	12000	12,5	449	2,2	75	500	2,2	75	546	2,2	76	590	2,2	76	632	2,2	77	673	3	77	714	3	77	753	3	78	791	4	78	828	4	79
	14000	14,6	490	2,2	76	537	2,2	77	579	3	77	620	3	78	658	3	78	696	4	78	732	4	79	767	4	79	802	4	79	836	5,5	80
	16000	16,7	533	3	78	577	3	79	616	4	80	654	4	80	690	4	81	724	5,5	82	758	5,5	82	790	5,5	82	822	5,5	82	854	5,5	83
500	16000	10,9	423	4	78	467	4	79	508	4	79	548	4	80	587	4	80	625	4	81	661	4	81	697	5,5	82	732	5,5	83	765	5,5	84
	18000	12,3	454	4	80	495	4	80	533	4	81	569	4	81	605	4	82	640	5,5	82	674	5,5	83	707	5,5	83	740	5,5	84	772	7,5	85
	20000	13,6				525	4	80	560	5,5	81	594	5,5	82	627	5,5	82	659	5,5	82	691	7,5	84	722	7,5	84	753	7,5	85	783	7,5	86
	22000	15				556	5,5	83	589	5,5	83	621	7,5	84	652	7,5	84	682	7,5	84	712	7,5	85	741	7,5	85							
	24000	16,4				588	7,5	85	620	7,5	85	650	7,5	85	679	7,5	85															
560	22000	12	394	4	80	430	4	80	464	4	81	496	5,5	81	527	5,5	82	558	5,5	83	587	7,5	83	616	7,5	84	645	7,5	85	672	7,5	86
	24000	13	417	5,5	81	451	5,5	82	483	5,5	82	513	5,5	83	543	7,5	83	571	7,5	84	599	7,5	85	627	7,5	85	653	9,2	86	680	9,2	87
	26000	14,1				473	5,5	82	503	7,5	82	532	7,5	83	560	7,5	83	587	7,5	84	613	9,2	85	639	9,2	85	665	9,2	86			
	28000	15,2				495	7,5	83	524	7,5	84	552	7,5	84	578	9,2	84	604	9,2	85	629	9,2	86									
630	26000	11,3				369	5,5	76	400	5,5	77	430	5,5	78	460	5,5	79	489	7,5	80	517	7,5	80	544	7,5	81	571	7,5	82	597	9,2	83
	28000	12,1				383	5,5	77	413	5,5	78	441	7,5	79	469	7,5	80	496	7,5	81	523	7,5	81	549	9,2	82	575	9,2	83	600	9,2	84
	30000	13				398	5,5	79	426	7,5	80	453	7,5	80	480	7,5	81	505	7,5	82	531	9,2	83	556	9,2	83	580	9,2	83	604	11	84
	32000	13,9				414	7,5	80	440	7,5	81	466	7,5	82	491	9,2	82	516	9,2	83	540	11	83	564	11	84	587	11	84	610	11	85

Pažnja: Nivo pritiska zvuka (Lp) sa 1m razdaljine se smanjuje,približno za 7dB ugradnjom u prostorije sa ehom i 11dB sa ugradnjom u otvorene prostorije.

Attention: the sound pressure level (Lp) at 1 m is deducted, with approximation, subtrahend 7dB for installation in riverberating room and 11dB for installation in free field.

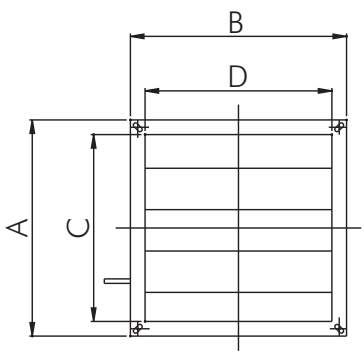


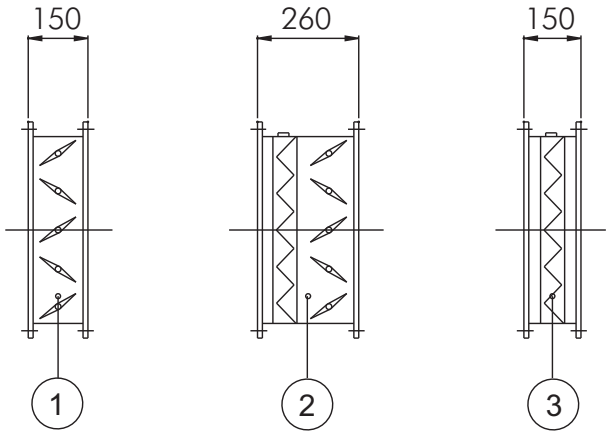
BOX-T

Tip/Type	A	B	H	C	D	E	F	kg
BOX-T 7/7	700	600	465	220	230	185	174	45
BOX-T 9/9	800	650	530	260	300	175	199	60
BOX-T 10/10	800	650	580	290	330	160	219	80
BOX-T 12/12	950	700	660	340	400	150	249	100
BOX-T 15/15	1100	900	760	400	470	215	289	120
BOX-T 18/18	1265	1100	900	480	560	270	349	165
BOX-T 500	1400	1200	1070	630	630	285	369	195
BOX-T 560	1650	1350	1190	700	700	325	419	350
BOX-T 630	1760	1500	1314	800	800	350	443	460

Dimenzije u mm/Dimensions in mm

DODATNI DELOVI / ACCESSORIES BOX-T





Tip/Type	A	B	C	D
7/7	382	517	322	457
9/9	447	567	387	507
10/10	497	567	437	507
12/12	577	617	517	557
15/15	677	817	617	757
18/18	817	1017	757	957
500	987	1117	927	1057
560	1110	1270	1050	1210
630	1230	1420	1170	1360

Dimenzije u mm/Dimensions in mm

1. ŽALUZINA
   SETTING SHUTTER
2. ŽALUZINA SA FILTEROM
   SETTING SHUTTER
   WITH FILTERING SECTION
3. FILTER
   FILTERING SECTION

BOX-TL

Box ventilatori sa dvostrukim ulaznim otvorom i pogonom na klinasti remen

Belt driven double inlet box fans

OSNOVNI PODACI :

Ventilatori serije BOX-TL su pogodni za izvlačenje i filtriranje vazduha.
Glavna prednost im je mali nivo buke, koji ih čini pogodnim za javna mesta (barove, restorane, sportske hale, kancelarije) i u industrijskim objektima gde je potrebno zadovoljiti mali nivo buke.
Ima tih rad zahvaljujući panelnom materijalu koji ima postavu tzv. plenum apsorber zvuka, koji izvanredno smanjuje nivo buke.
Karakteristike BOX-TL čine favoritom ,što se tiče odnosa kvalitet/cena zahvaljujući izboru optimiziranja produkcije u jednom specifičnom radijusu modela i performansi.

KONSTRUKCIJA :

- Unutrašnji ram je izrađen od vučenog aluminijuma, panelni omotač je izrađen od galvanizovane čelične ploče.
- Postava plenuma je od prvoklasnog tehnopolimer materijala.
- Radijalni ventilator sa unapred zakrivljenim lopaticama i dvostrukim ulaznim otvorom, na pogon sa klinastim remenom i podesivom remenicom.Izvedba 14/d. Lopatice i motor se nalaze u kućištu i izolovani su od strukture antivibracionim čeljustima i fleksibilno su povezani na kanalni sistem.
- Zaštita od kiše izrađena od galvanizovane čelične ploče.
- Trofazni asinhroni motor odgovara standardima IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23EEC I ima oznaku kvaliteta CE. Podloga za montiranje je tipa B3, IP55, klase F.
Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).
- Moguća je samo jedna orijentacija (DX-A1)
- Verzije i performanse su limitirane asortimanom prikazanom u ovom katalogu.

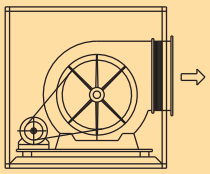
GENERAL DESCRIPTION

The fans of the BOX-TL series are designed for air extraction and filtration systems. Their low noise level makes them ideal in urban environments (bars, restaurants, gymnasiums, offices) and industrial plants where the noise is a problem. Infact, the "Plenum", lined with sound absorbing material allows a remarkable reduction of the noise level. The characteristic of the BOX-TL is the favourable relationship quality/price, due to the choice of optimising the production in one specific range of models and performances.

CONSTRUCTION

- Frame in extruded aluminium profiles with removable panels in galvanized steel sheet.
- Lining of the plenum with techno-polymer class I material.
- Double inlet centrifugal fan with forward curved blades, driven by trapezoidal belts and adjustable pulleys. Execution 14/ D. Fan and motors isolated from the housing by antivibration mounts.
- Rain protection cover in galvanized steel sheet.
- Three-phase asynchronous motor according to IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23EEC standards, CE marked.
Pad mounting type B3, IP55, class F. Suitable for S1 service (continuos working at constant load).
- Only one orientation available (DX-A1)
- Versions and performances limited to the range shown in this catalogue.

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

KONTROLA *INSPECTION* DX	Dx-A1	

Važno: Ostali uglovi su dostupni kod serije BOX -T

Attention: other figures are available only with BOX - T series

PERFORMANSE / PERFORMANCE

BOX-TL

Frekvencija 50 Hz - Temperatura vazduha15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

BOX-TL 7/7

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-TL	7/7	T	4	0,37	1,2	55/F	71

OPERATIVNI LIMIT / Operational limits

rpm	RADNE TAČKE / WORKING POINTS								
	A			B			C		
	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)
Max 1620	1500	31	74	900	33	73	-	-	-
Min* 1350	1800	18	73	1400	21	72	-	-	-

BOX-TL 9/9

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-TL	9/9	T	4	0,75	2	55/F	80

OPERATIVNI LIMIT / Operational limits

rpm	RADNE TAČKE / WORKING POINTS								
	A			B			C		
	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)
Max 1400	3300	36	77	2000	38	70	1500	40	68
Min(*) 1220	3700	18	76	2500	26	71	2000	28	68

BOX-TL 10/10

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-TL	10/10	T	4	1,1	2,8	55/F	90S

OPERATIVNI LIMIT / Operational limits

rpm	RADNE TAČKE / WORKING POINTS								
	A			B			C		
	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)
Max 1230	4300	38	76	3000	40	73	2000	41	69
Min(*) 1015	5000	20	77	3500	25	72	3000	26	70

BOX-TL 12/12

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-TL	12/12	T	4	1,5	3,7	55/F	90L

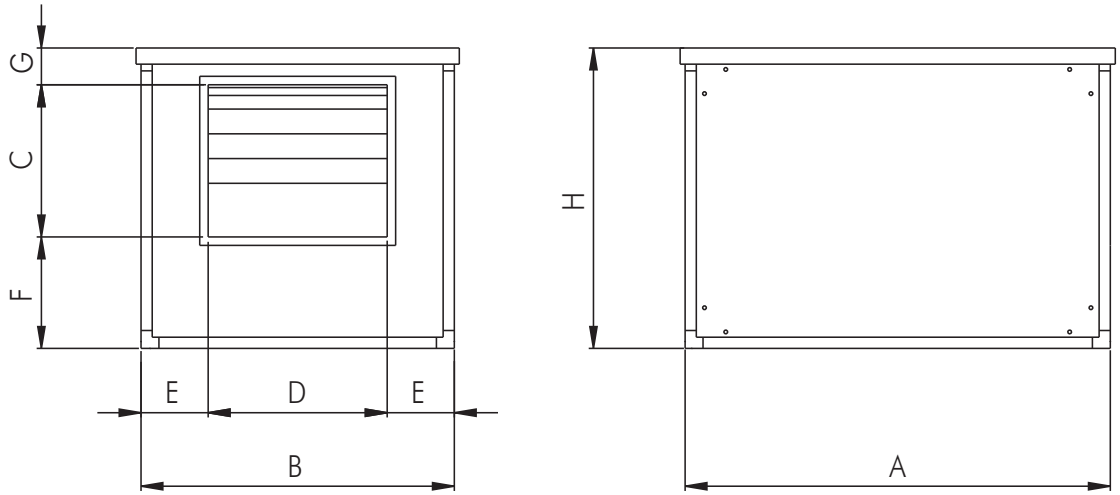
OPERATIVNI LIMIT / Operational limits

rpm	RADNE TAČKE / WORKING POINTS								
	A			B			C		
	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)	Q max (m³/h)	Ps (mm H₂O)	Lw dB(A)
Max 930	6000	26	75	5000	30	73	4000	31	71
Min(*) 760	6500	12	74	4000	20	68	2500	21	64

Važno : Brzina rotacije koja se može dobiti, preuzima rad nad promenjivom remenicom.
Note: rotation speed obtainable taking action on the adjustable pulley

DIMENZIJE / DIMENSIONS

BOX-TL



Tip/Type	A	B	H	C	D	E	F	G	kg
BOX/TL 7/7	700	500	500	222	232	134	194	84	30
BOX/TL 9/9	800	600	600	260	300	150	223	117	40
BOX/TL 10/10	800	600	600	289	333	133.5	247	64	50
BOX/TL 12/12	900	750	750	341	396	177	277	132	80

Dimenzije u mm/Dimensions in mm

BOX-CA

Filter jedinica sa aktivnim ugljem
Active carbon filtering units

OSNOVNI PODACI :

Jedinica BOX-CA je idealno rešenje za filtriranje vazduha i otklanjanje mirisa. Idealan je na javnim mestima (barovi, restorani, itd) kao i u industrijskim pogonima, gde se javlja problem buke i mirisa.
Kvalitet vazduha garantuje više stepeni filter, preko kojeg je vazduh prinuđen proći pre nego što napusti uređaj.
Mali nivo buke obezbeđuje akustični materijal obložen unutar kućišta (na perimetričnim panelima), čiji materijal apsorbuje zvuke.

KONSTRUKCIJA :

- Samodržeći kostur je izrađen od vučenog aluminijuma, omotačke ploče su izrađene od galvanizovanog čelika.
- Postava plenuma je od prvoklasnog technopolymer materijala.
- Radijalni ventilator sa unapred zakrivljenim lopaticama,dvostrukim ulaznim otvorom, na pogon sa klinastim remenom i podesivom remenicom (modeli 300 i 400).
- Motor i ventilator su odvojeni od omotača sa antivibracionim podupiračima.
- Elementi filtera su savijeni prefilter od poliestera, kutije filtera i filter sa patronom aktivnog uglja.
- Trofazni asinhroni motor odgovara standardima IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23EEC I ima oznaku kvaliteta CE. Podloga za montiranje je tipa B3, IP55, klase F.
Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DELOVI :

- Zaštita od kiše.
- Spoljašnja priključnica sa zaštitom od kiše i rešetkom.
- Regulacione žaluzine.

NA ZAHTEV :

- Trofazni motor sa 4/6 polova.
- Inox panel ploče.
- Aluminijumske panel ploče.
- Različite performanse.

GENERAL DESCRIPTION

The BOX-CA units are the ideal solution for air filtering and deodorizing.
Ideal for residential environments (bar, restaurants, etc). and industrial plants where noise and bad smells are a problem. The quality of the air is granted by a series of filtering sections crossed by the fluid before going out of the unity. The low noise level is granted by the acoustic material which lines the inside of the panels.

CONSTRUCTION

- *Frame in extruded aluminium profiles and double panelling in galvanized steel sheet.*
- *Lining of the plenum with techno-polymer class I material.*
- *Double inlet centrifugal fan with forward curved blades driven by trapezoidal belts and pulleys. Fan and motor isolated from the housing by antivibration supports.*
- *Filtering battery composed by filter in polyester waved section, pocket filter and carbon filter in cartridges.*
- *Three-phase asynchronous motor according to IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23EEC standards, CE marked. Pad mounting type B3, IP55, class F. Suitable for S1 service (continuos working at constant load).*

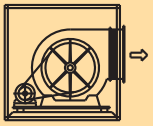
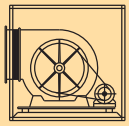
ACCESSORIES

- Rain protection cover.
- Outlet rain protection terminal with guard.
- Setting shutter.

UPON REQUEST

-3 Three-phase two-polarity motors version (4/6 poles).
- Inox panels.
- Aluminium panels.
- Different performance.

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

KONTROLA *INSPECTION* DX	Dx-A1 
KONTROLA *INSPECTION* SX	Sx-A1 

Važno : standard ugla ispuštanja DX-A1
Note: *standard discharge angles* DX-A1

PERFORMANSE / PERFORMANCE

BOX-CA

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3

Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

BOX-CA 300

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-CA	300	T	4	1,1	2,8	55/F	90S

Q.t• aktivni ugalj/Q.ty actived carbon: 31kg

OPERATIVNI LIMIT / Operational limits

Tip Type	Model Model	Qmax (m^3/h)	Ps (mm H_2O)	rpm	Lp dB(A)
BOX-CA	300	3000	20	1550	65

BOX-CA 450

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-CA	450	T	4	1,5	3,7	55/F	90L

Q.t• aktivni ugalj/Q.ty actived carbon: 52kg

OPERATIVNI LIMIT / Operational limits

Tip Type	Model Model	Qmax (m^3/h)	Ps (mm H_2O)	rpm	Lp dB(A)
BOX-CA	450	4500	20	1300	66

BOX-CA 600

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL (Gr)	Mot.
BOX-CA	600	T	4	2,2	5,3	55/F	100

Q.t• aktivni ugalj/Q.ty actived carbon: 62

OPERATIVNI LIMIT / Operational limits

Tip Type	Model Model	Qmax (m^3/h)	Ps (mm H_2O)	rpm	Lp dB(A)
BOX-CA	600	6000	25	1080	67

BOX-CA 750

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL (Gr)	Mot.
BOX-CA	750	T	4	3	6,7	55/F	100

Q.t• aktivni ugalj/Q.ty actived carbon: 83

OPERATIVNI LIMIT / Operational limits

Tip Type	Model Model	Qmax (m^3/h)	Ps (mm H_2O)	rpm	Lp dB(A)
BOX-CA	750	7500	25	1140	67

BOX-CA 900

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-CA	900	T	4	3	7	55/F	100

Q.t• aktivni ugalj/Q.ty actived carbon: 104 kg

OPERATIVNI LIMIT / Operational limits

Tip Type	Model Model	Qmax (m^3/h)	Ps (mm H_2O)	rpm	Lp dB(A)
BOX-CA	900	9000	20	880	70

BOX-CA 1200

Tip Type	Model Model	Alim.	Poli	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)
BOX-CA	1200	T	4	4	9,4	55/F	112M

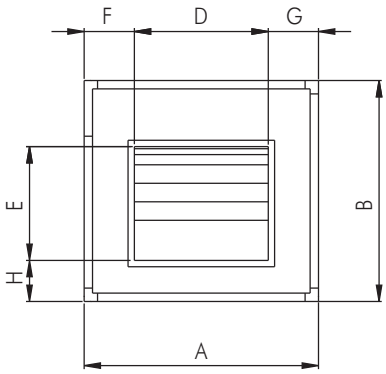
Q.t• aktivni ugalj/Q.ty actived carbon: 124

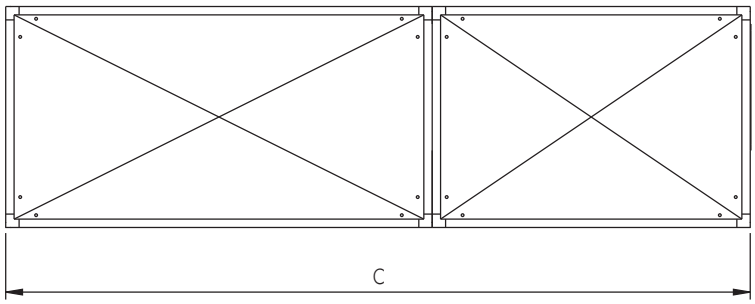
OPERATIVNI LIMIT / Operational limits

Tip Type	Model Model	Qmax (m^3/h)	Ps (mm H_2O)	rpm	Lp dB(A)
BOX-CA	1200	12000	20	850	72

DIMENZIJE / DIMENSIONS

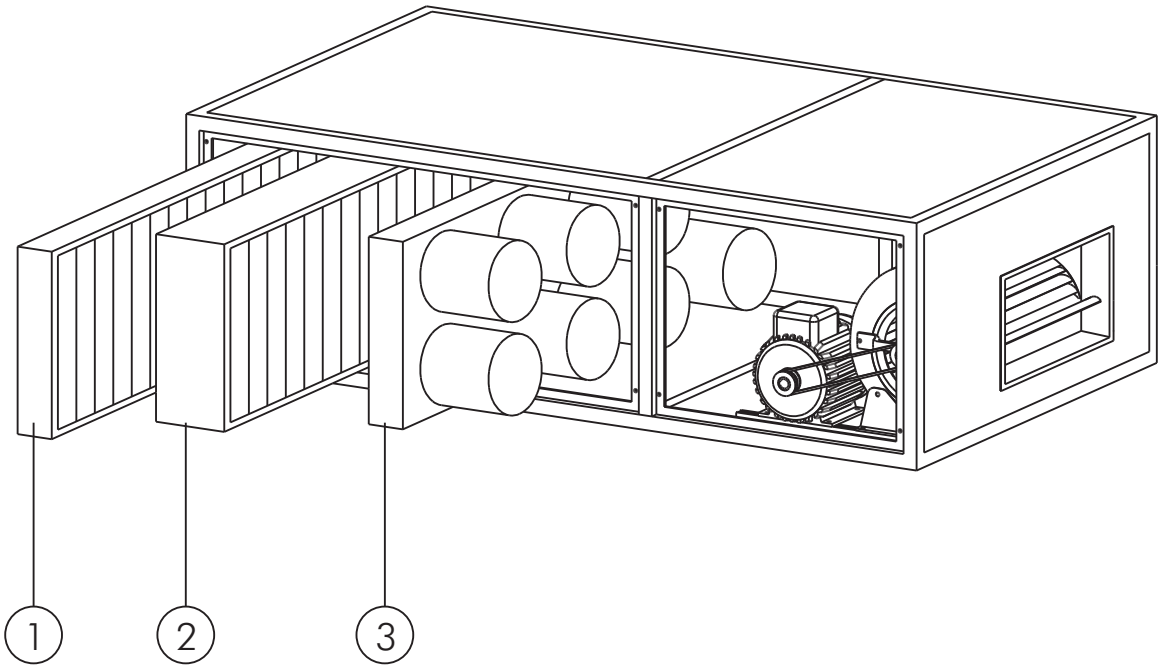
BOX-CA





Tip/Type	A	B	C	D	E	F	G	H	kg
BOX-CA 300	670	670	2000	330	290	170	170	260	155
BOX-CA 450	1080	750	2100	400	340	340	340	300	200
BOX-CA 600	1280	800	2275	470	400	405	405	320	290
BOX-CA 750	1680	800	2275	470	400	405	405	320	330
BOX-CA 900	1280	1080	2440	560	480	360	360	370	360
BOX-CA 1200	1280	1280	2440	560	480	360	360	370	420

Dimenzije u mm/*Dimensions in mm*



1.)Predfilter od poliestera za jednokratnu upotrebu, sa talasastom sekcijom. Efikasnost težinskog odvajanja (test gravimetrije) ASHRAE 52- 76 (STD)/ EUROVENT 4-5 je jednak 84%, klase EU4. Okvir od galvanizovane čelične ploče, električno zavarena galvanizovana rešetka sa pregradom.

2.)Filter visoke efikasnosti za jednokratnu upotrebu.
Filter od zapaljivog staklenog mikro vlakna klase 2.
Efikasnost težinskog odvajanja (test gravimetrije) ASHRAE 52-76 (STD)/ EUROVENT 4-5 je jednak 80/85%, klase EU7.

3.) Patroni sadrže vučeni treset, fizički aktiviran.Visoka apsorbciona kapacitivnost omogućuje apsorbciju mirisa od razređivača, farbe.
- Teoretska gustina (suvo stanje) 470g/l.
- Dijametar cilindra 4mm
- Vlažnost omota 2 Wt %
- Otpornost na habanje (ASTM) 97%
- Unutrašnja površina određena metodom B.E.T. odnos benzola m2/g.
- Temperatura paljenja od 450°C.

1) Prefilter with not reusable section in polyester, with waved section. Efficiency of weighting separation (gravimetric test) ASHRAE 52-76 (STD)/EUROVENT 4-5 equal to 84% class EU4. Frame in galvanized steel sheet, electro-welded galvanized guards to contain the septum.

2) High efficiency pocket filetrs, not reusable. Filtering in flammable micro-fibres of glass class 2 . Efficiency of weighting separation (gravimetric test) ASHARE 52-76 (STD) /EUROVENT 4-5 equal to 80/85% class EU7.

3) Cartridges containing extruded peat carbon, physically activated. The high absorbing capacity allows to use it for the absorption of smells from painting thinners.
- theoretical density (dry condition) 470 g/l.
- Diameter cylinders 4 mm.
- Humidity to the package 2 Wt %.
- Abrasion resistance (ASTM) 97%.
- Internal superficial area determined with the B.E.T method. and relative to benzene 900 sq.m./g.
- Ignition temperature of 450°C.

DA-T

Ventilatori sa dvostrukim otvorom bez motora
Double inlet fans without motor

OSNOVNI PODACI :

Članovi serije DA-T su ventilatori pogodni za izvlačenje, kondiciranje i filtriranje , kao i za grejanje čistog vazduha. Mogu se koristiti do maksimalne temperature od 80°C.
Za pravilno funkcionisanje je potrebna adekvatna materija (plenum). Ventilatori se smeju koristiti sa vrednostima datim u relevantnoj tabeli.

KONSTRUKCIJA :

- Kućište je izrađeno od galvanizovane čelične ploče.
- Ima dva otvora, sa unapred zakrivljenim lopaticama, čelična osa je smeštena na kugličnim ležajima.

DODATNI DELOVI :

- Podupirači za fiksiranje
- Za izvedbu14/D potpora motora.

NA ZAHTEV :

- Verzija "CUBIK"
- Verzija "CUBIK" aranžiran u dva ili tri dela

GENERAL DESCRIPTION

The fans of the DA series are suitable in plants of ventilation and conditioning, filtering, heating. They can only treat clean air up to the maximum temperature of 80°C and to work they require a containing structure (plenum). The fans must be used within the limits shown in the relevant table.

CONSTRUCTION

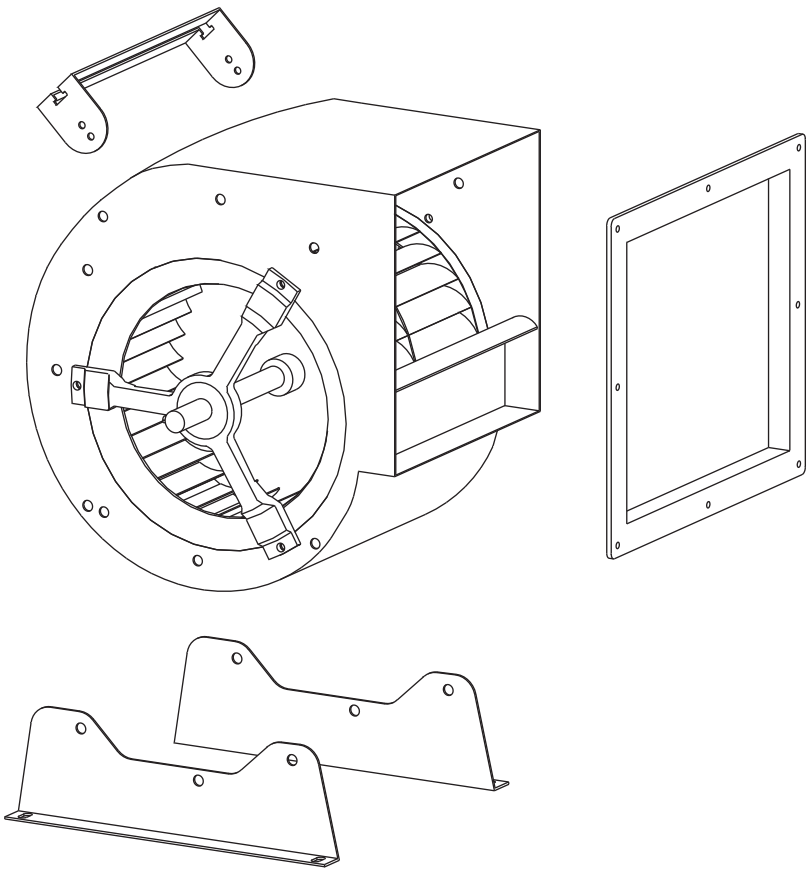
- Volute in galvanized steel sheet.
- Double inlet forward curved impeller, crossed by a steel shaft supported by two ball bearings

ACCESSORIES

- Fixing brackets.
- Motor support for execution 14/D.

UPON REQUEST

- "CUBIK" version.
- Version "CUBIK" arranged in two or three pieces.



UGLOVI ISPUŠTANJA / DISCHARGE ANGLES DA-T

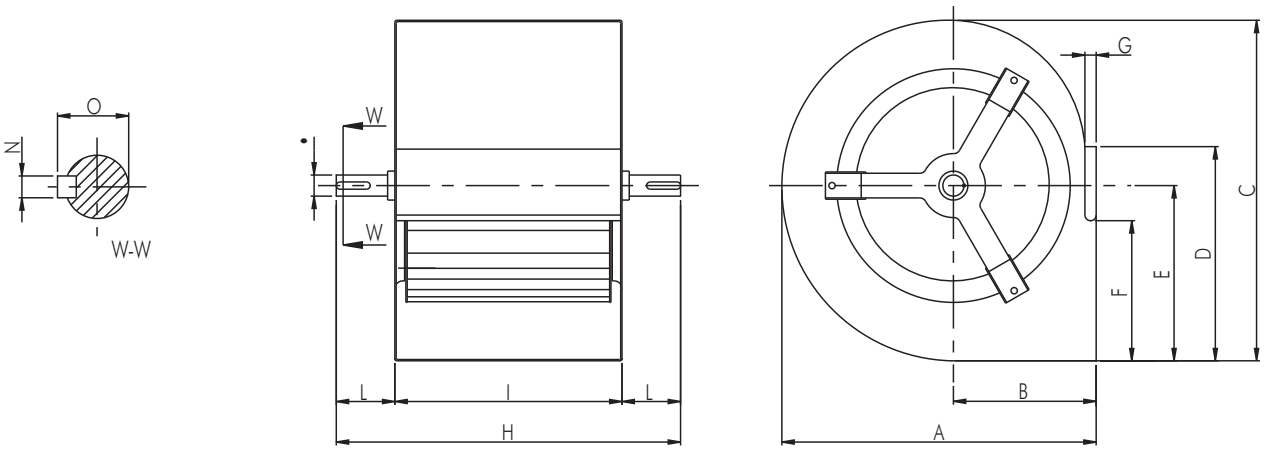
Važno : Rotacija sa podupiračima za fiksiranje./Arrangements with fixing brackets

Rotacija *Rotation* RD				
Forma/*Form*	0°	90°	180°	270°
Rotacija *Rotation* LG				

OPERATIVNI LIMIT / OPERATIONAL LIMITS DA-T

Tip/Type	7/7	9/7	9/9	10/8	10/10	12/9	12/12	15/11	15/15	18/13	18/18
rpm max	2400	2400	2200	1800	1800	1600	1400	1300	1200	1000	1000
Pm max (kw)	1	3	3	2,2	2,2	2,2	3	5,5	5,5	7,7	7,5
PD^2 (kgm^2)	0,008	0,030	0,040	0,050	0,070	0,120	0,140	0,240	0,300	0,580	0,710

DIMENZIJE / DIMENSIONS DA-T



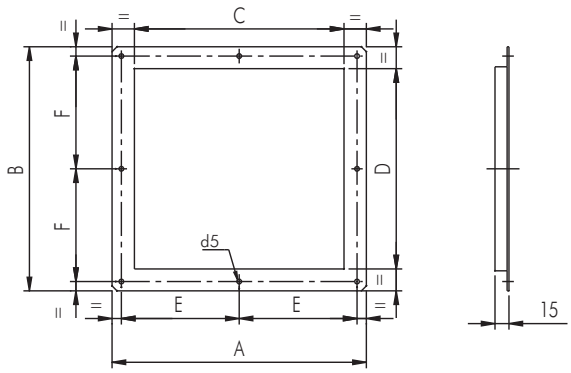
Tip/Type	A	B	C	D	E	F	G	H	I	L	N (*)	O (*)	d	Kg
7/7	307	146	321	222	180	145	29	330	232	49	6	22,5	20	5
9/7	380	184	392	260	218	180	37	390	232	79	6	22,5	20	8
9/9	380	184	392	260	218	180	37	420	300	60	6	22.5	20	9
10/8	422	201	441	289	247	213	37	390	266	62	6	22.5	20	10
10/10	422	201	441	289	247	213	37	460	333	63.5	6	22.5	20	11
12/9	493	229	524	341	293	240	40	430	311	59.5	8	28	25	14
12/12	493	229	524	341	293	240	40	536	396	70	8	28	25	16
15/11	573	267	613	403	343	270	40	536	373	81.5	8	28	25	20
15/15	573	267	613	403	343	270	40	615	473	71	8	28	25	22
18/13	685	314	743	479	418	290	40	580	436	72	8	28	25	28
18/18	685	314	743	479	418	290	40	692	556	68	8	28	25	23

Dimenzije u mm/Dimensions in mm - (*) UNI 6604

OBRUČ IZLAZNOG OTVORA / OUTLET FLANGE

Obruč je montiran na izlazni otvor ventilatora tako da se lako povezuje sa kanalom.

The flange is mounted on the outlet of the fan for an easy connection to the duct.



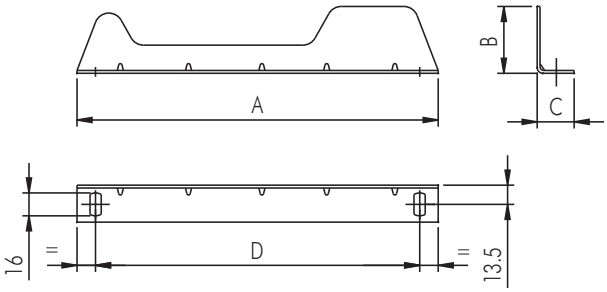
Tip/Type	A	B	C	D	E	F
7/7	273	262	225	215	126,5	121
7/9	340	249	292	202	160	114,5
9/7	273	300	225	253	126,5	140
9/9	340	300	292	253	160	140
10/8	317	340	260	282	146,5	158
10/10	383	340	326	282	179,5	158
12/9	365	395	304	333	170,5	187
12/12	450	395	388	333	213	187
15/11	426	460	365	395	201	218
15/15	526	460	465	395	251	218
18/13	498	544	428	474	234	257
18/18	618	544	548	474	294	257

Dimenzije u mm/Dimensions in mm

FIKSIRNI PODUPIRAČI / FIXING BRACKETS

Montirani su sa strane ventilatora i omogućuju usidravanje ventilatora do eventualne podrške.
Mogućnost usmeravanja izlaznog otvora 90°.

They are assembled to the sides of the casing to allow the anchorage of the fan itself to eventual supports. Possibility of orientation on the outlet side in steps of 90°.



Tip/Type	A	B	C	D
7/	254	47	26	227
9/	325	102	26	297
10/	363	102	26	339
12/	434	144	26	407
15/	521	164	26	494
18/	635	186	26	608

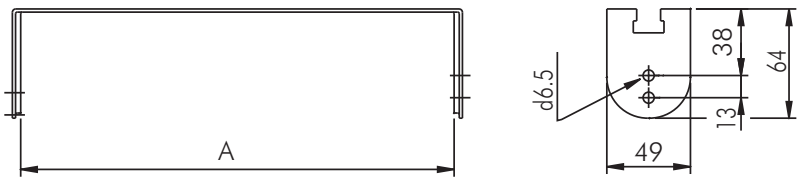
Dimenzije u mm/Dimensions in mm

SEK. 9

STALAK MOTORA / MOTOR SUPPORT

Namešten je preko omota omogućavajući priključivanje motora u izvedbi14/D.

It is arranged across the casing allowing the assembly of the motor in execution 14/D



Tip/Type	A
7/7	232
9/7	232
9/9	300
10/8	266
10/10	333
12/12	396
15/11	373
15/15	473
18/13	436
18/18	556

Dimenzije u mm/Dimensions in mm

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct (BOX/CA).
NOTE: (BOX/T & BOX/TL) The sound pressure level (Lp) at 1 meter is deducted, with approximation subtrahend 7 dB for installation in reverberating room and 11 dB for installation in free field.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Ugao Ispuštanja / Discharge angles	Performanse / Performances
	BOX-T	12/12	DX-P1	5000-30 (m^3/h-mm/H_2O)

Primer / Example:	Tip / Type	Model / Model
	BOX-TL	12/12

Primer / Example:	Tip / Type	Model / Model
	BOX-CA	600

Primer / Example:	Tip / Type	Model / Model
	DA-T	12/12

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fax (++39) 030 9913766
E-mail dynair@dynair.it - www.dynair.it
Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

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E-mail: info@avit.co.yu www.avit.co.yu

Antikorozivni ventilatori
Anticorrosion fans

10

PR-AC

str. 2.10

Plastični radialni ventilatori
Centrifugal fans in plastic material

str. 7.10

FC-AC

Plastični krovni ventilatori
Roof fans in plastic material

str. 9.10

DIC-INOX

Centrifugalni ventilatori malih dimenzija od nerđajućeg čelika
Small size centrifugal fans in stainless steel

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PR-AC

Plastični radijalni ventilatori
Centrifugal fans in plastic material

OSNOVNI PODACI :

Serija ventilatora PR-AC je dizajnirana za transport visoke vlažnosti i korozivnog dima, pare do temperature od maksimalnih 60°C. PR-AC serija centrifugalnih ventilatora unazad zakrivljenih lopatica sa svojim tehničkim i mehaničkim karakteristikama garantuje dugotrajan radni vek (ako se korektno-po uputstvima koristi, praktično je neuništiv). Upoređujući sa ventilatorima gde su lopatice unapred zakrivljene ,ova serija obećava veću delotvornost i tiši rad.
U slučaju isteka fabričkoga radnog veka , PR-AC ventilatori izrađeni su od materijala koji se lako recikliraju.

KONSTRUKCIJA :

- Spiralni omotač od polyethylen- skog (PE) materijala.
- Na ulaznom otvoru je radno kolo sa unazad zakrivljenim lopaticama od polypropylen-a, i aluminijumska glavčina.
- Postolje motora od epoxy farbanog čeličnog lima.
- Trofazni ili monofazni asinhroni motor odgovara propisima IEC34-IEC72 i 89/392 EEC-89/336EEC-73/23EEC. I ima oznaku kvaliteta CE. Podloga za montiranje je tipa B3/5, IP55, klase F.
Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Ima zaštitnu rešetku sa unutrašnje i spoljašnje strane koji odgovara propisu UNI9219DIN31001.
- Antivibracioni priključci za ulazne i izlazne otvore
- Gravitaciona žaluzina.
- Žaluzina sa ručnim podešavanjem.

NA ZAHTEV :

- Verzija sa omotačem od PP, polypropylen-a. (PR-AC/PP).
- Verzija sa omotačem od PER materijala, antistatični i sa samogašenjem (PR-AC/PER).
- Verzija sa potporom motora od nerđajućeg čelika AISI304 (PR-AC/INOX).
- Verzija otporna na eksploziju, sa asinhronim trofaznim ili monofaznim motorom EEx-d IIB T3,u skladu sa internacionalnim standardima IEC34-IEC72-IEC79 i 89/392 EEC-89/336EEC-73/23EEC, sa CESI sertifikatom, CE kvalifikovan,IP 55, klase F (PR-AC/ATEX).

GENERAL DESCRIPTION

The PR-AC series is particularly designed for conveying smoke and corrosive/ high humidity vapours and smokes, with maximal fluid temperature of 60°C. The PR-AC is a centrifugal backward bladed fan with technical and mechanical characteristics which grant a long lasting operation (if used correctly it is practically indestructible). The backward bladed impeller gives to this series better characteristics of low noise and efficiency against versions using forward bladed impellers. The PR-AC fan, when its lifetime is ended, is easy to dispose thanks to the recyclable materials it is manufactured with.

CONSTRUCTION

- Volute in polyethylene (PE).
- Single inlet impeller, in Polypropylene (PP), with backward curved blades and aluminium hub.
- Motor support in epoxy painted steel sheet.
- Asynchronous three-phase or mono-phase motor according to IEC34-IEC72 and 89/392 EEC-89/336EEC-73/23EEC rules and marked CE. Form B3/5, IP55 class F. Suitable to a S1 service (continuous working at constant load).

ACCESSORIES

- Inlet and outlet protection guard according to UNI9219-DIN31001 standard
- Anti-vibration joint for inlet and outlet sides.
- Gravity shutter.
- Manual setting shutter.

UPON REQUEST

- Version with casing in PP, Polypropylene (PR-AC/PP).
- Version with casing in PER, anti static and self-extinguishing polyethylene (PR-AC/PER).
- Version with motor support in stainless steel AISI304 (PR-AC/INOX).
- Explosion-proof version, with asynchronous three-phase or mono-phase motor EEx-d IIB T3, according to international standards IEC34-IEC72-IEC79 and 89/392 EEC-89/336EEC-73/23EEC, with CESI certificate and CE mark. IP55, class F (PR-AC/ATEX)

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES

Rotacija *Rotation* RD						
Forma/*Form*	0	45°	90°	135°	270°	315°
Rotacija *Rotation* LG						

Važno: standardni ugao ispuštanja LG270°
Note: standard discharge angles LG 270°

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

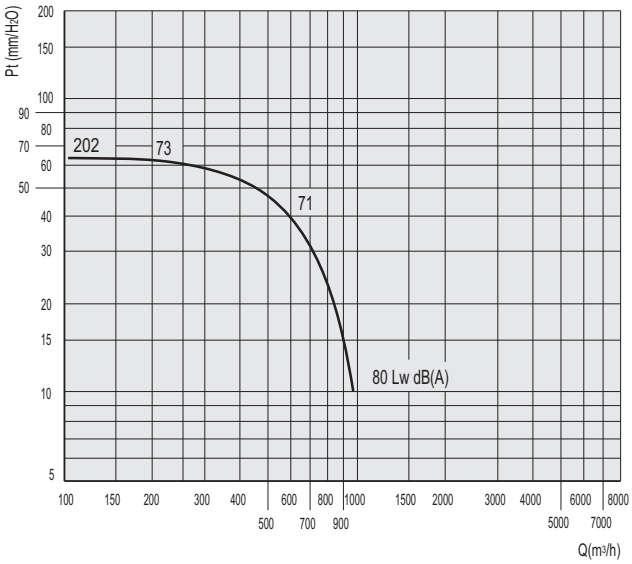
PR-AC 20

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	202	T	2	0,18	0,58	55/F	62
PR-AC	202	M	2	0,18	1,28	55/F	62

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-AC	202	1000	13,12	0,02	0,013	63

$Pd = 0,06218 \times (Q/72,38)^2 = mm\ H_2O$



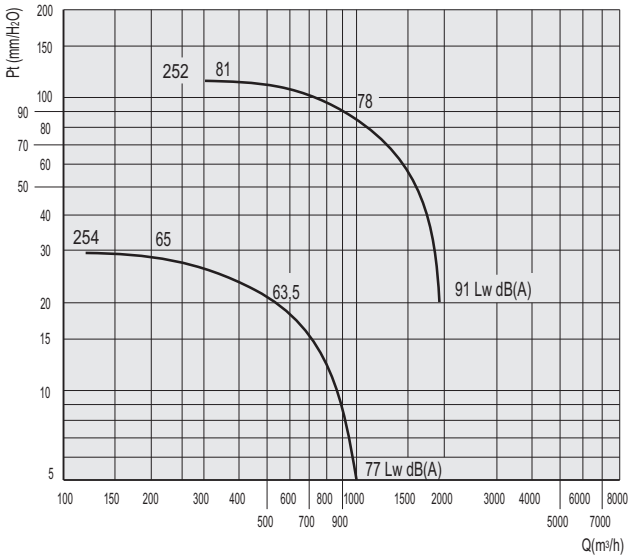
PR-AC 25

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	254	T	4	0.12	0,52	55/F	62
PR-AC	254	M	4	0.12	1,1	55/F	62
PR-AC	252	T	2	0.37	1,2	55/F	62
PR-AC	252	M	2	0.37	3	55/F	62

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-AC	254	1000	8.82	0.0314	0,032	63
PR-AC	252	2000	16.8	0.0314	0,032	71

$Pd = 0,06218 \times (Q/113,09)^2 = mm\ H_2O$



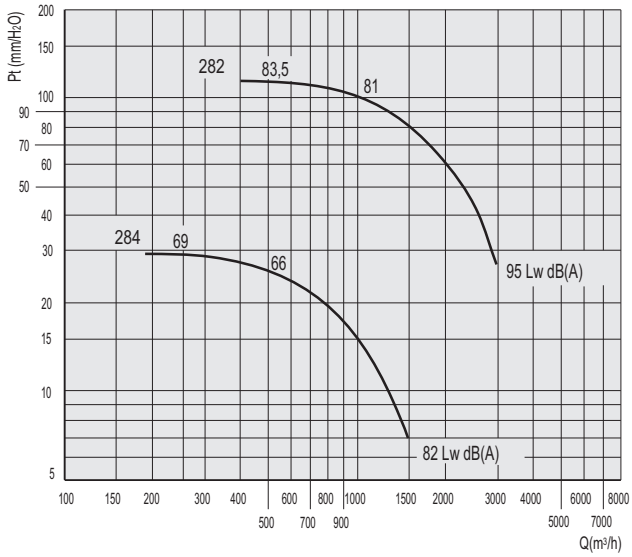
PR-AC 28

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	284	T	4	0.18	0,65	55/F	55
PR-AC	284	M	4	0.18	1,6	55/F	55
PR-AC	282	T	2	0.75	1,9	55/F	72
PR-AC	282	M	2	0.75	5,2	55/F	72

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-AC	284	1500	10,4	0,04	0,069	63
PR-AC	282	3000	20.9	0,04	0,069	80

$Pd = 0,06218 \times (Q/143,14)^2 = mm\ H_2O$



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

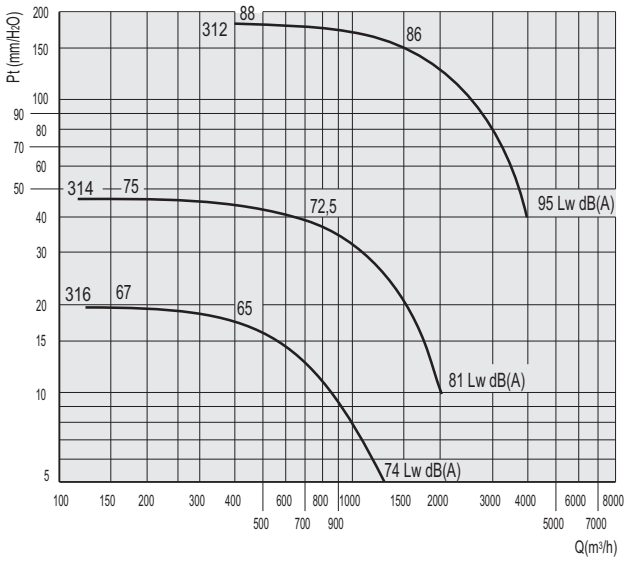
PR-AC 31

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	316	T	6	0,18	0,82	55/F	53
PR-AC	314	T	4	0,25	0,96	55/F	60
PR-AC	314	M	4	0,25	2,4	55/F	60
PR-AC	312	T	2	1,5	3,4	55/F	76
PR-AC	312	M	2	1,5	10	55/F	76

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-AC	316	1500	7,07	0,049	0,106	71
PR-AC	314	2000	11,32	0,049	0,106	71
PR-AC	312	4000	22,64	0,049	0,106	90S/L

$Pd = 0,06218 \times (Q/176,71)^2 = mm\ H_2O$



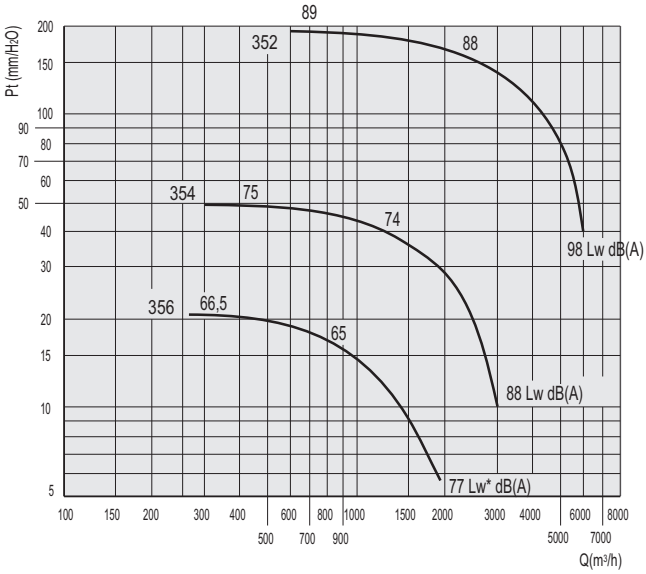
PR-AC 35

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	356	T	6	0,18	0,82	55/F	54
PR-AC	354	T	4	0,37	1,2	55/F	62
PR-AC	354	M	4	0,37	2,9	55/F	62
PR-AC	352	T	2	2,2	5,1	55/F	78

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-AC	356	2000	8,86	0,062	0,062	71
PR-AC	354	3000	13,52	0,062	0,062	71
PR-AC	352	6000	27,05	0,062	0,062	90L

$Pd = 0,06218 \times (Q/221,76)^2 = mm\ H_2O$



SEK. 10

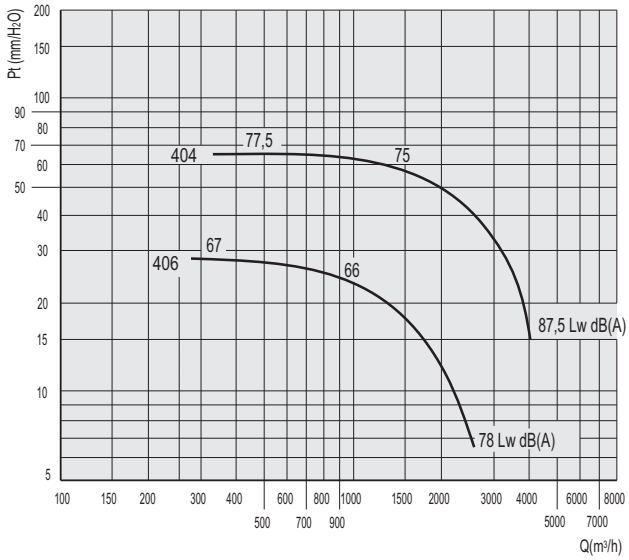
PR-AC 40

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	406	T	6	0,25	1,1	55/F	56
PR-AC	404	T	4	0,55	1,6	55/F	65
PR-AC	404	M	4	0,55	4,3	55/F	65

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-AC	406	3000	9.34	0.078	0,078	71
PR-AC	404	4000	14.26	0.078	0,078	80

$Pd = 0,06218 \times (Q/280,55)^2 = mm\ H_2O$



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

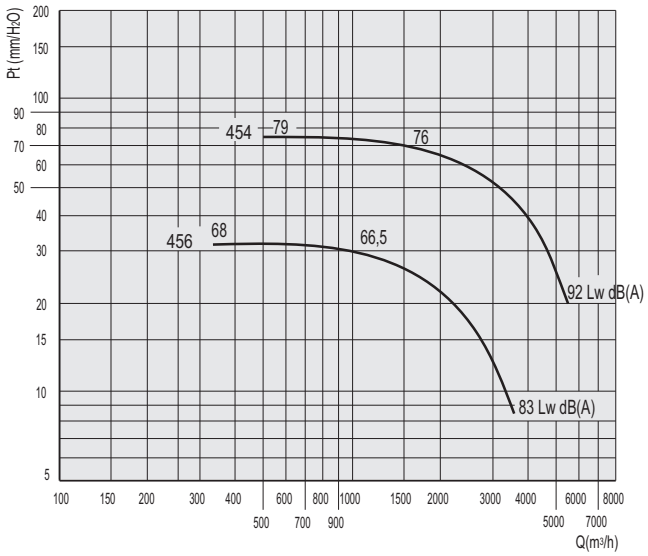
PR-AC 45

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	456	T	6	0,37	1,2	55/F	57
PR-AC	454	T	4	1,1	2,8	55/F	66

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
PR-AC	456	4000	10,1	0,099	0,515	80
PR-AC	454	6000	15,44	0,099	0,515	90S

$Pd = 0{,}06218 \times (Q/72{,}38)^2 = mm\ H_2O$



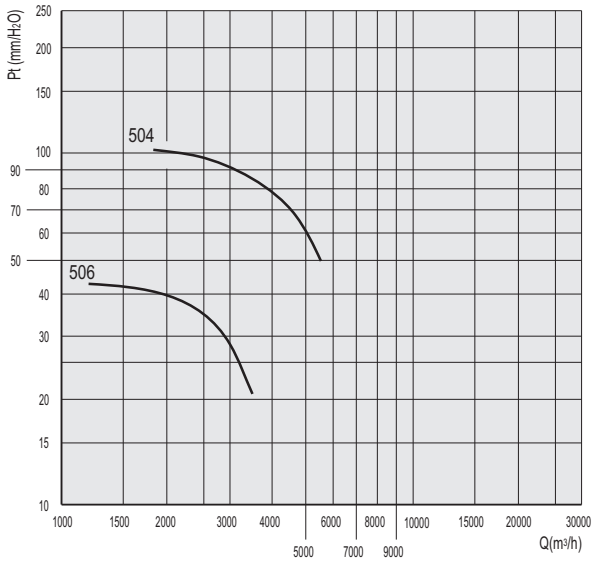
PR-AC 50

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	506	T	6	0,75	2,5	55/F	59
PR-AC	504	T	4	2,2	5,3	55/F	69

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Motore (Gr)
PR-AC	506	4000	8,59	0,136	90S
PR-AC	504	6000	13,13	0,136	100L

$Pd = 0{,}06218 \times (Q/418{,}87)^2 = mm\ H_2O$



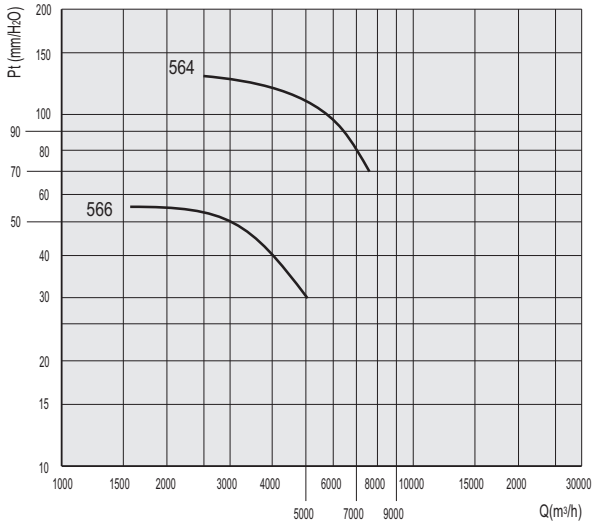
PR-AC 56

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	566	T	6	1,5	4,2	55/F	60
PR-AC	564	T	4	4	9,4	55/F	72

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Mot. (Gr)
PR-AC	566	5000	8,73	0,159	100
PR-AC	564	8000	13,97	0,159	112

$Pd = 0{,}06218 \times (Q/525{,}12)^2 = mm\ H_2O$



PERFORMANSE / PERFORMANCE PR-AC

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

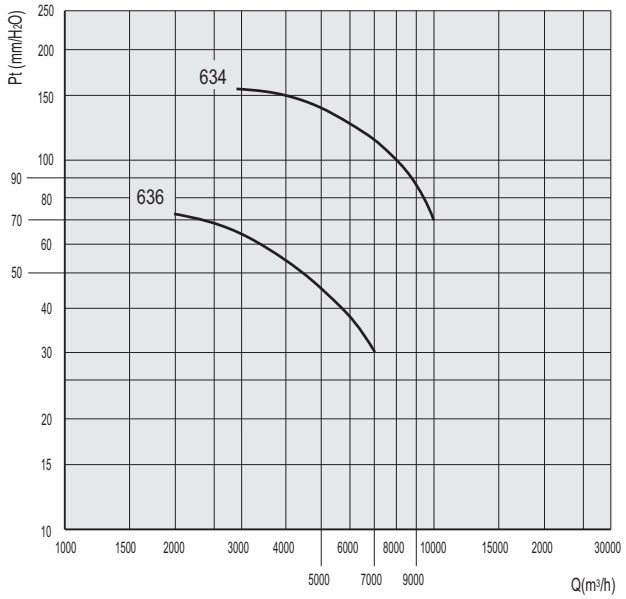
PR-AC 63

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
PR-AC	636	T	6	2,2	5,3	55/F	62
PR-AC	634	T	4	5,5	12	55/F	79

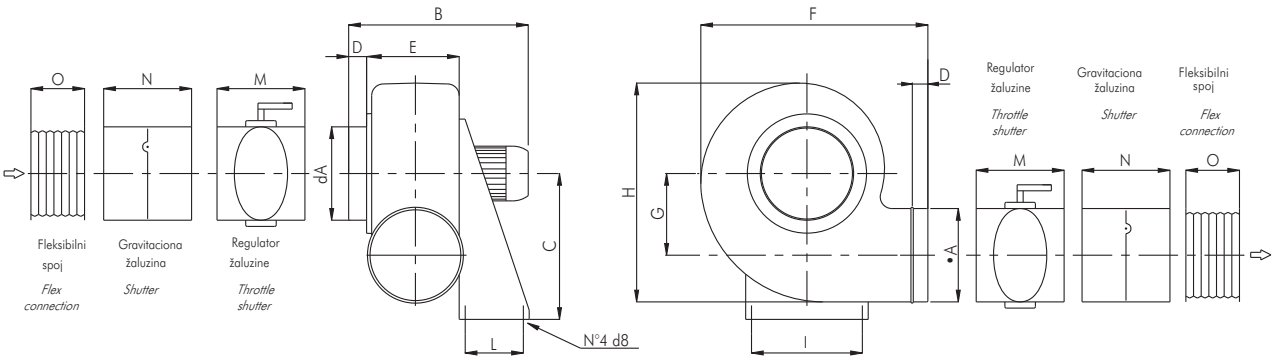
OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	C max (m/s)	S (m^2)	Mot. (Gr)
PR-AC	636	7000	9,92	0,196	112M
PR-AC	634	10000	14,17	0,196	132S

$Pd = 0{,}06218 \times (Q/658{,}89)^2 = mm\ H_2O$



DIMENZIJE / DIMENSIONS PR-AC



Tip/Type	dA	B	C	D	E	F	G	H	I	L	M	N	O	Kg
20	160	400	250	30	150	400	140	400	195	100	120	210	170	10
25	200	440	310	30	180	480	183	500	252	100	120	250	170	12
28	225	490	350	30	190	520	208	560	277	120	120	275	170	22
31	250	500	410	40	200	560	240	670	315	150	120	300	170	31
35	280	520	445	40	220	600	260	700	345	150	150	330	170	38
40	315	550	495	40	240	675	290	790	325	170	150	365	170	38
45	355	630	550	40	265	730	324	870	370	170	150	405	170	46
50	400	655	630	50	355	796	360	956	289	197	150	-	170	115
56	450	725	710	50	365	870	410	1045	289	237	590	-	170	130
63	500	810	800	50	408	1030	445	1200	337	237	640	-	170	175

Dimenzije u mm/Dimensions in mm

FC-AC

Plastični krovni ventilatori
Roof fans in plastic material

OSNOVNI PODACI :

Porodica krovnih ventilatora FC-AC je dizajnirana pre svega za izvlačenje korizivnog dima i pare maksimalne temperature do 60°C. Dizajnirani su za ventilaciju pogona gde izvlačenje dima sa kiselinama predstavlja problem, pare sa velikom koncentracijom soli u hemijskim pogonima, laboratorijama, pogonima galvanizacije.

KONSTRUKCIJA :

- Okvir oslonca je od PVC materijala.
- Zaštitna rešetka od čelične šipke zaštićena plastičnim materijalom.
- Jedan otvor, radno kolo sa unazad zakrivljenim lopaticama od polypropylen-a (PP) i glavčina od aluminijuma.
- Gornji poklopac je od techno-polymer-a, sa odgovarajućim otvorima za pogodno hlađenje motora.
- Trofazni ili monofazni asinhroni motor odgovara propisima IEC34-IEC72 i 89/392 EEC-89/336EEC-73/23EEC. Ima oznaku kvaliteta CE. Podloga za montiranje je tipa B3/5, IP55, klase F.Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Ima zaštitnu rešetku sa unutrašnje strane koja odgovara propisu UNI9219-DIN31001, za zaštitu od atmosferskih uticaja.
- Servisni prekidač.

NA ZAHTEV :

- Verzija sa protiveksplozivnom zaštitom, sa trofaznim ili jednofaznim asinhronim motorom tipa EEx-d IIB T3, koji odgovara internacionalnim propisima IEC34-IEC72- IEC79 i 89/392EEC-89/336EEC-73/23EEC, sa sertifikatom CESI i oznakom CE , IP55, klase F (FC-AC ATEX).

GENERAL DESCRIPTION

The FC-AC series centrifugal roof fans are particularly designed for conveying corrosive vapours and smokes up to a maximal temperature of 60°C. They are designed for ventilation plants of: chemical industries, laboratories, galvanic industries and wherever it is required the exhausting of acid fumes, in presence of high concentration of water vapour or saline steams.

CONSTRUCTION

- Base frame in Polyvinyl-chloride (PVC).
- Protection guard in steel rod protected with plastic material.
- Single inlet, backward bladed impleller in Polypropylene (PP) and aluminium hub.
- Upper cover in techno-polymer, with suitable slots for proper motor cooling.
- Asynchronous three-phase or mono-phase motor according to IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC standards, CE marked. Form B3/5, IP55, class F. Suitable for S1 service (continuous working at constant load).

ACCESSORIES

- Inlet protection guard manufactured according to UNI9219-DIN31001 standard and protected against the atmospheric agents.
- Service switch.

UPON REQUEST

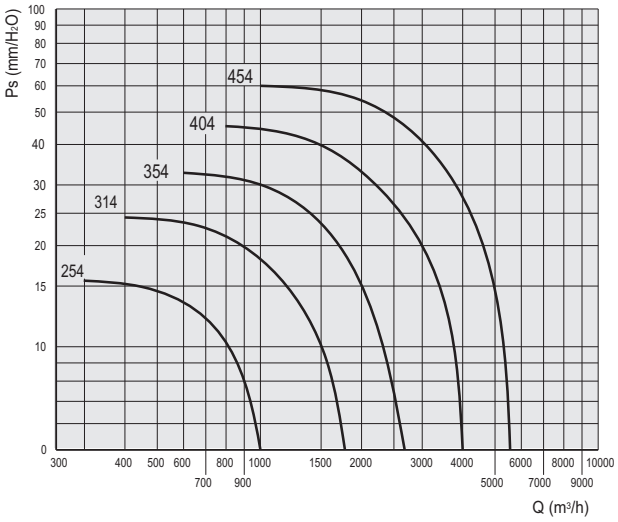
- Explosion proof version, with three-phase or mono phase asynchronous motor type EEx-d IIB T3, according to international standards IEC34-IEC72- IEC79 and 89/392EEC-89/336EEC-73/23EEC, with CESI certificate and marked CE, IP55, class F (FC-AC ATEX).

PERFORMANSE / PERFORMANCE FC-AC

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

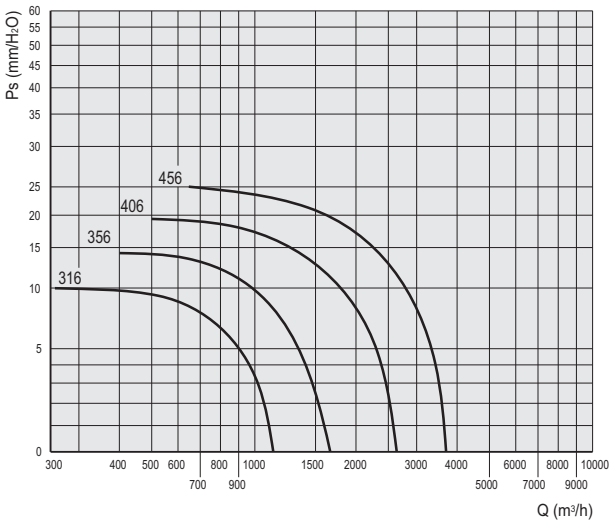
4 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
FC-AC	254	T	4	0,09	0,46	55/F	56	45
FC-AC	254	M	4	0,09	0,09	55/F	56	45
FC-AC	314	T	4	0,24	0,76	55/F	63	53
FC-AC	314	M	4	0,24	2,35	55/F	71	53
FC-AC	354	T	4	0,37	1,35	55/F	71	57
FC-AC	354	M	4	0,37	3,15	55/F	71	57
FC-AC	404	T	4	0,55	1,6	55/F	80	61
FC-AC	404	M	4	0,55	4,65	55/F	80	61
FC-AC	454	T	4	1,1	3,15	55/F	90S	66
FC-AC	454	M	4	1,1	8,2	55/F	90L	66

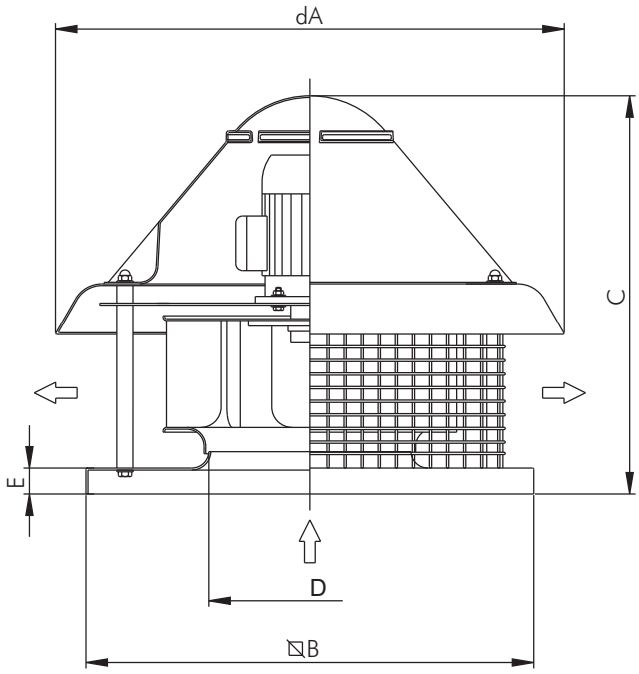


6 pola / poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
FC-AC	316	T	6	0,18	0,81	55/F	71	46
FC-AC	316	M	6	0,18	1,5	55/F	71	46
FC-AC	356	T	6	0,18	0,81	55/F	71	48
FC-AC	356	M	6	0,18	1,5	55/F	71	48
FC-AC	406	T	6	0,26	0,95	55/F	71	50
FC-AC	456	T	6	0,37	1,35	55/F	80	52



DIMENZIJE / DIMENSIONS FC-AC



Tip/Type	dA	B	C	•D	E	Kg
25	600	400	505	160	60	16
31	600	400	540	200	60	20
35	755	500	610	220	60	22
40	910	600	625	250	60	32
45	910	600	650	280	60	38

Dimenzije u mm/Dimensions in mm

DIC-INOX

Centrifugalni ventilatori malih dimenzija od nerđajućeg čelika
Small size centrifugal fans in stainless steel

OSNOVNI PODACI :

Centrifugalni ventilatori serije DIC su dizajnirani za transport korozivnog dima do maksimalne temperature od 80°C. Ugrađuju se u industrijske objekte , gde je zahtev " manja vazdušna zapremina uz ograničeni vazdušni pritisak ". Motor je direktno spregnut. Kućište se lako okreće, u položaju od 45°, 180 °i 225 °.

KONSTRUKCIJA :

- Spiralno kućište od AISI304 nerđajuće čelične ploče.
- Jedan ulazni otvor,radno kolo sa unapred zakrivljenim lopaticama , od nerđajućeg čelika AISI304 sa konstantnom debljinom.
- Izvedba 5 (direktno spajanje sa rotorom pomoću okvira motora)rotacija LG270°.
- Trofazni ili monofazni asinhroni motor koji odgovara propisima IEC34-IEC72 i 89/392EEC-89/336EEC-73/23EEC, sa oznakom kvaliteta CE.

Kalup B3,IP55, klase F. DIC 100 T i M,motor sa kalupom B14, klase B. Pogodni su za S1 režim (neprekidan rad pri stalnom opterećenju).

DODATNI DELOVI :

- Zaštitna rešetka na ulaznom otvoru odgovara propisu UNI9219-DIN31001, od AISI304 nerđajućeg čelika.
- Zaštitna rešetka na izlaznom otvoru odgovara propisu UNI9219DIN31001, od AISI304 nerđajućeg čelika.
- Stalak motora od čelične ploče za zaštitu protiv atmosferskih agenasa.

NA ZAHTEV :

- DIC 100 sa trofaznim ili monofaznim asinhronim motorom odgovara internacionalnim propisima IEC34-IEC72 i 89/392EEC-89/336EEC-73/23EEC i ima oznaku CE. Kalup B3/5, IP55, klase F (DIC 100 MEC-INOC).
- Verzija sa eksplozivnom zaštitom sa trofaznim ili monofaznim asinhronim motorom tipa EEx-d IIB T3, odgovara internacionalnim propisima IEC34-IEC72 i 89/392EEC-89/336EEC-73/23EEC, sa sertifikatom CESI I oznakom CE, IP55, klase F (DIC-ATEX).

INSTALACIJA :

Centrifugalni ventilatori sa unapred zakrivljenim lopaticama i sa radijalnim lopaticama, uvek moraju biti povezani na kanalni sistem, koji preko prigušivača ili svojom otpornošću mogu ograničiti protok vazduha da bi dostigli usisno strujanje nominalne vrednosti motora.
Kod pravilno dizajniranog sistema takav način rada se uspostavlja u radnoj tački.

GENERAL DESCRIPTION

The centrifugal fans of the DIC series are designed for conveyance of corrosive smoke, up to maximum temperature of 80°C. They are installed in all the industrial applications where little air volumes and limited pressures are required. The motor is directly coupled. The case is easily revolving, also at site, by 45° steps, 180° and 225° included.

CONSTRUCTION

- Volute in folded stainless steel AISI304 sheet.
- Single inlet forward bladed impeller (sirocco), in stainless steel AISI304, with constant width.
- Execution 5 (direct coupling with impeller protruding on flanged motor), rotation LG270°.
- Three-phase or mono-phase asynchronous motor according to IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC standards, CE marked. Form B3/5, IP55, class F. DIC 100 T e M with motor form B14, IP44, class B. All suitable for S1 service (continuous working at constant load).

ACCESSORIES

- Inlet protection guard according to UNI9219-DIN31001 standard, in stainless steel AISI304.
- Outlet protection guard according to UNI9219-DIN31001 standard, in stainless steel AISI304.
- Motor support in steel sheet protected against atmospheric agents.

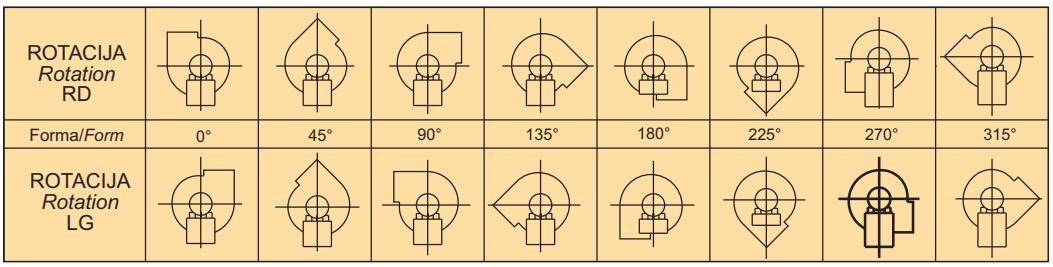
UPON REQUEST

- DIC 100 with three-phase or mono-phase asynchronous motor according to international standards IEC34-IEC72 and 89/392EEC-89/336EEC-73/23EEC and marked CE. Form B3/5, IP55, class F (DIC 100 MEC-INOX).
- Explosion proof version, with three-phase or mono-phase asynchronous motor type EEx-d IIB T3, according to international standards IEC34-IEC72- IEC79 and 89/392EEC-89/336EEC-73/23EEC, with CESI certificate and marked CE. IP55, class F (DIC-ATEX).

INSTALLATION

The centrifugal fans with forward curved blades and radial blades must always be connected to ducts, or systems, which, with their own resistance or through dampers, can limit the air flow to reach the absorbed current values rated on the motor plate. In a system correctly designed such condition corresponds to the working point.

UGLOVI ISPUŠTANJA / DISCHARGE ANGLES — DIC-INOX



Važno : standard ugla ispuštanja LG270°/ Note: stantard discharge angles

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

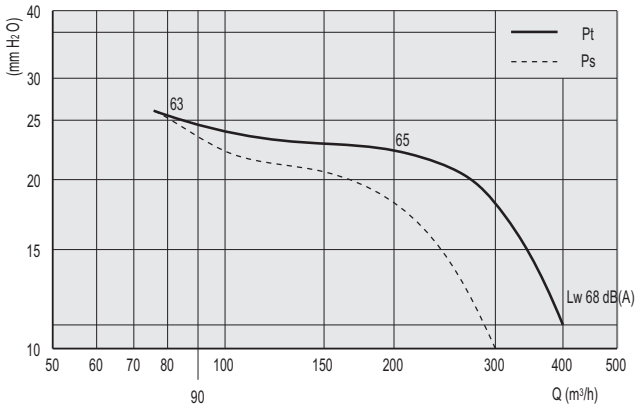
DIC-INOX 100

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC-INOX	100/2	T	2	0,05	0,17	44/B	54
DIC-INOX	100/2	M	2	0,05	0,36	44/B	54

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC-INOX	100/2	400	11	17,4	0,0064	0,0016	50

$Pd = 0,06218 \times (Q/22,98)^2$ = mm H_2O



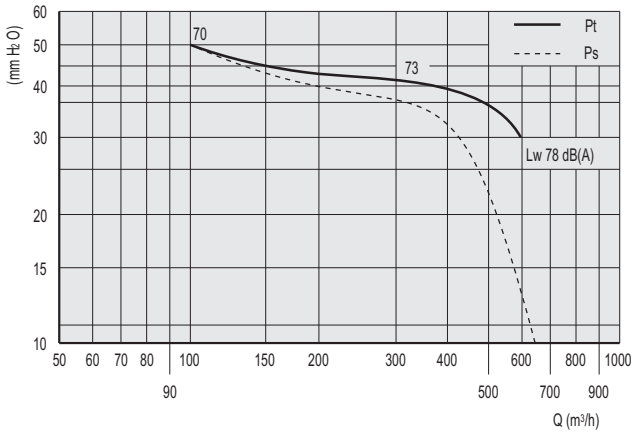
DIC-INOX 120

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC-INOX	120/2	T	2	0,25	0,78	55/F	63
DIC-INOX	120/2	M	2	0,25	1,7	55/F	63

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC-INOX	120/2	600	30	16	0,0104	0,0036	63

$Pd = 0,06218 \times (Q/37,45)^2$ = mm H_2O



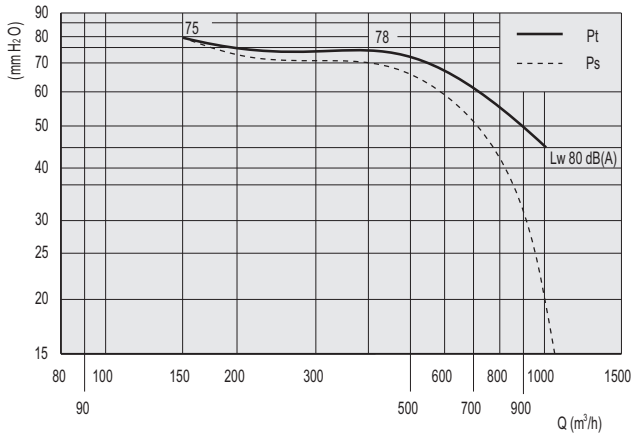
DIC-INOX 140

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC-INOX	140/2	T	2	0,37	1	55/F	68
DIC-INOX	140/2	M	2	0,37	4	55/F	68

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC-INOX	140/2	1000	45	19,9	0,014	0,0064	71

$Pd = 0,06218 \times (Q/50,13)^2$ = mm H_2O



PERFORMANSE / PERFORMANCE DIC-INOX

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

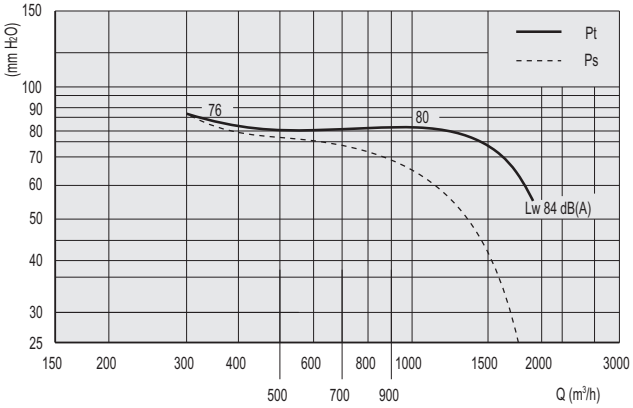
DIC-INOX 160

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC-INOX	160/2	T	2	0,75	1,9	55/F	70
DIC-INOX	160/2	M	2	0,75	7,1	55/F	70

OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC-INOX	160/2	1800	55	27,4	0,018	0,0104	80

$Pd = 0,06218 \times (Q/65,61)^2 = mm\ H_2O$



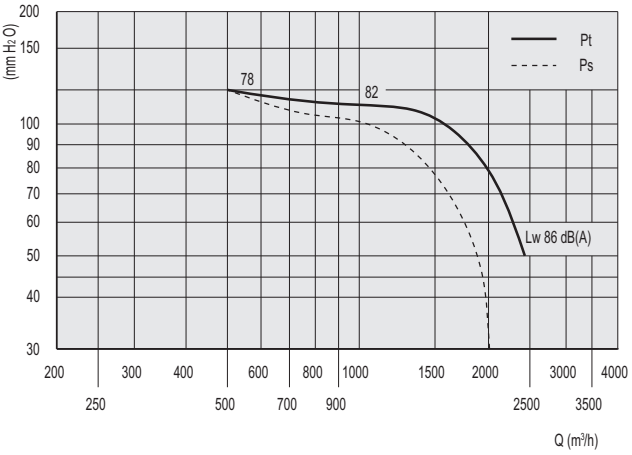
DIC-INOX 180

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Lp dB(A)
DIC-INOX	180/2	T	2	1,1	2,8	55/F	72
DIC-INOX	180/2	M	2	1,1	7,9	55/F	72

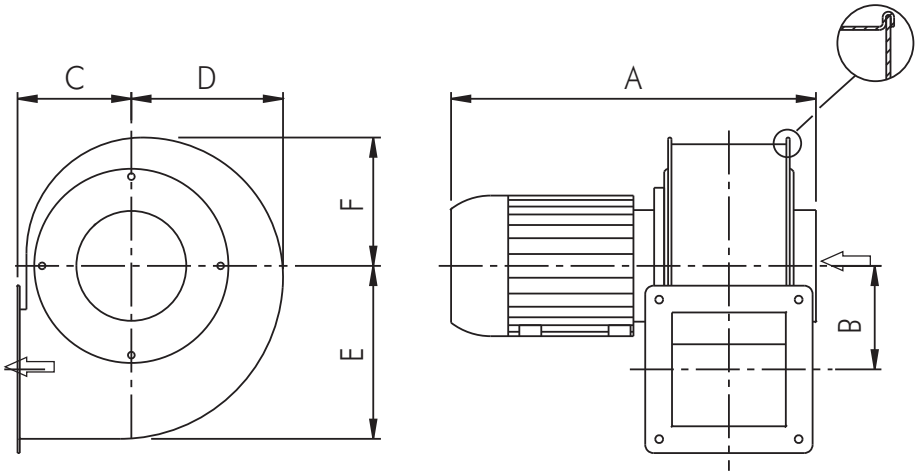
OPERATIVNI LIMIT / OPERATIONAL LIMITS

Tip Type	Model Model	Q max (m^3/h)	Pt min. (mm H_2O)	C max (m/s)	S (m^2)	Pd^2 (Kgm^2)	Mot. (Gr)
DIC-INOX	180/2	2400	60	30,4	0,022	0,02	80

$Pd = 0,06218 \times (Q/78,85)^2 = mm\ H_2O$



DIMENZIJE / DIMENSIONS DIC-INOX



Tip/Type	A	B	C	D	E	F	Kg
DIC-INOX 100	285	82	89	112	130	99	4
DIC-INOX 120	325	97	102	137	156	116	7
DIC-INOX 140	350	115	123	158	184	136	8
DIC-INOX 160	425	132	143	175	207	148	15
DIC-INOX 180	445	140	152	200	227	171	18

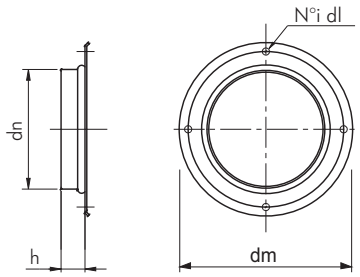
Dimenzije u mm/Dimensions in mm

Važno: DIC 100 standard ne zahteva podršku motora , u slučaju potrebe koristiti IC 100 MEC.
Note: DIC 100 standard doesn't foresee the motor support, in case of necessity use DIC 100 MEC.

DIMENZIJE / DIMENSIONS

DIC-INOX

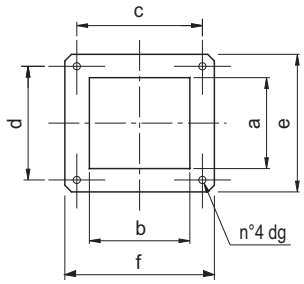
ULAZNI OTVOR / INLET



Tip/Type	dn	h	dm	di	l
100	100	20	130	4	6
120	125	20	160	4	6
140	125	30	180	4	6
160	160	40	222	8	6
180	160	40	222	8	6

Dimenzije u mm/Dimensions in mm

IZLAZNI OTVOR / OUTLET



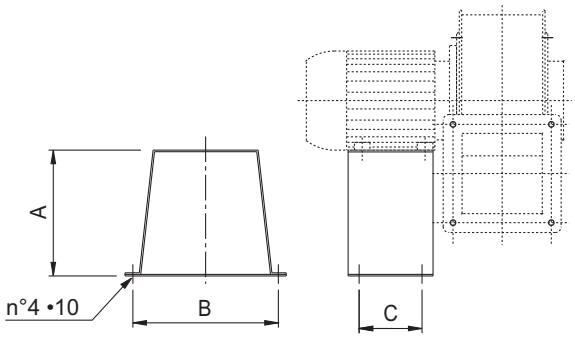
Tip/Type	a	b	c	d	e	f	dg
100	76	84	105	95	115	125	6
120	102	102	125	125	150	150	7
140	118	118	148	148	175	175	8
160	135	135	165	165	195	195	8
180	148	148	180	180	210	210	8

Dimenzije u mm/Dimensions in mm

DODATNI DELOVI / ACCESSORIES

DIC-INOX

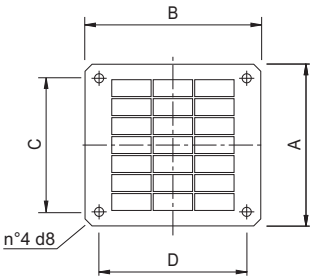
STALAK MOTORA / MOTOR SUPPORT



Tip/Type	A	B	C	Kg
100	120	140	71	1
120	160	185	80	1,3
140	160	185	80	2
160-180	180	230	100	2,5

Dimezije u mm/Dimensions in mm

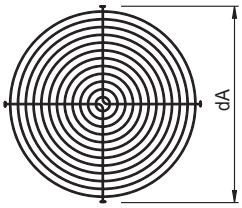
REŠETKA NA ULAZNOM OTVORU / INLET GUARD



Tip/Type	A	B	C	D	Kg
100	115	125	95	105	0,06
120	150	150	125	125	0,12
140	175	175	148	148	0,13
160	195	195	165	165	0,15
180	210	210	180	180	0,2

Dimenzije u mm/Dimensions in mm

REŠETKA NA IZLAZNOM OTVORU / OUTLET GUARD



Tip/Type	dA	Kg
100	100	0,04
120-140	125	0,06
160-180	160	0,07

Dimenzije u mm/Dimensions in mm

	Materijal / Material			
ČINILAC / AGENT	PVC	PE	PP	AISI 304
Aceton/Acetone	3	2	3	1
Sirćetna kiselina/Acetic acid	2	1	1	1
Limunska kiselina/Citric acid	1	1	1	1
Hromska kiselina/Chromic acid	1	1	1	3
Mlečna kiselina/Lactic acid	2	1	1	2
Fosforna kiselina/Phosphoric acid	1	2	1	2
Vinska kiselina/Tartaric acid	2	1	1	n.d.
H2O	1	1	1	1
Etil alkohol/Alcohol ethylic	2	3	3	1
Alluminijum/Alumionium				
Hlorid/Chloride	1	1	n.d.	1
Sulfat/Sulphate	1	1	1	1
Hidroksid/Hydroxide	1	n.d.	n.d.	1
Amonijak/Ammoniac				
Hlorid/Chloride	1	1	n.d.	3
Sulfat/Sulphate	1	1	1	1
Hidroksid/Hydroxide	1	n.d.	n.d.	1
Srebro/Argent				
Nitrat/Nitrate	2	1	1	1
Barium/Barium				
Hlorid/Chloride	1	1	1	1
Sulfat/Sulphate	1	1	1	1
Hidroksid/Hydroxide	1	1	1	n.d.
Benzen /Benzene	3	3	3	1
Benzin/Gasoline	1	1	3	1
Brom /Bromine liquid	3	3	3	3
Kalcium/Calcium				
Hlorid/Chloride	1	1	n.d.	2
Carbonat/Carbonate	1	1	1	1
Karbonio/Carbon				
Monoksid/Monossido	1	1	1	1
Tetrachlorid/Tetrachloride	3	3	3	3
Hlor/Chlorine				
Gas/Gas dry	3	n.d.	3	3
Gas- tečno stanje/Gas moist	2	n.d.	3	3
Hlorbenzol/Chlorobenzene	3	n.d.	3	1
Fenol/Phenol	2	1	1	1
Gvožđe/Iron				
Nitrat/Nitrate	1	1	n.d.	2
Sulfat/Sulphate	1	1	n.d.	2

	Materijal/Material			
ČINILAC / AGENT	PVC	PE	PP	AISI 304
Formaldehid/Formaldehyde	2	1	1	1
Furfural/Furfural	3	2	2	1
Hidrogen/Hydrogen				
Peroksid/Peroxide	1	2	2	2
Surfur/Surphur	2	1	1	1
Magnizijum/Magnesium				
Klor/Choride	1	1	1	1
Karbonat/Carbonate	1	n.d.	1	1
Nitrat/Nitrate	1	1	1	1
Nafta/Naphtha	3	3	3	1
Nikel/Nickel				
Hlorid/Chloride	1	1	1	2
Solfat/Sulphate	1	2	1	1
Nitrat/Nitrate	1	1	1	1
Kalijum/Potassium				
Hlorid/Chloride	1	1	1	1
Cianid/Cyanide	1	1	1	1
Nitrat/Nitrate	1	1	1	1
Sulfat/Sulphate	1	1	1	1
Bakar/Copper				
Cianid/Cyanide	3	n.d.	1	1
Hlorid/Chloride	1	1	1	3
Nitrat/Nitrate	2	1	1	1
Sulfat/Sulphate	1	1	3	1
Natrijum/Sodium				
Acetat/Acetate	1	1	1	1
Carbonat/Carbonate	1	1	1	1
Hlorid/Chloride	2	1	1	2
Hlorid/Chlorate	1	1	1	1
Fosfat/Phosphate	1	1	1	1
Flurid/Fluoride	1	1	n.d.	2
Nitrat/Nitrate	1	1	1	1
Sulfat/Sulphate	1	1	1	1
Cink/Zinc				
Hlorid/Chloride	1	1	1	3
Nitrat/Nitrate	1	n.d.	1	n.d.
Sulfat/Sulphate	1	1	1	1

PAŽNJA: U tabeli date indikacije treba uzeti kao vodeću smernicu za brzi uvid istih, ne uzimajući u obzir koncentraciju vodenog rastvora hemijskih agenasa (u slučaju da je i agens u vodenom rastvoru) i temperaturu rada.
1: otpor DOBAR - 2: otpor OGRANIČEN - 3: otpor NIKAKAV n.d.: NEPOZNAT

ATTENTION: the indications in the table have to be considered as guideline for immediate reading of the same, without taking into consideration the concentration of the watery solution of the chemical agent (in case the agent can be also in a solution) and the working temperature.
1: resistance "GOOD" - 2: resistance "LIMITED" - 3: resistance "NONE" - n.d.: unknown

LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
CI = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
CI = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: (PR/AC e IC/INOX) the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.
Attention: (FC/AC) the sound pressure level is measured in free field at 6 m from the fan centre, in any direction, with ducted inlet and free outlet.

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage	Ugao ispuštanja / Discharge angle
	PR-AC	454	T	LG 270°

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	FC-AC	454	T

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage	Ugao ispuštanja / Discharge angle
	DIC-INOX	120/2	T	LG

Tel. (++39) 030 9913575 (5 linee r.a.)
fax (++39) 030 9913766
E-mail dynair@dynair.it - www.dynair.it
Dynair S.r.l. - 25017 Lonato (Bs) - ITALY

Predstavnik za Srbiju :
AVIT
21000 Novi Sad, Temerinski put br.8
Tel. +381-21- 64- 10 -160 , Fax: +381-21-64-10-159
E-mail: info@avit.co.yu www.avit.co.yu

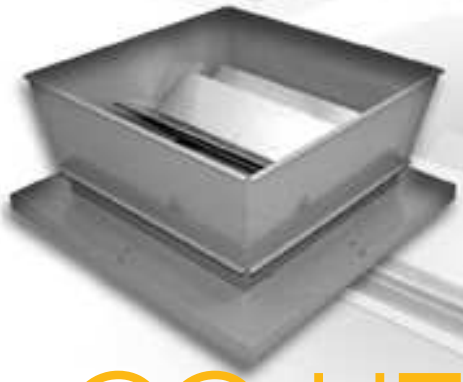
Ventilatori za odstranjivanje dima
Smoke extract fans

11

str. 2.11

FC 2V-HT & FCV 2V-HT

Dvobrzinski centrifugalni krovni ekstraktori 400°C/2h ,200°C
Double speed centrifugal roof extractors



TAV-HT

str. 5.11

Aksijalni krovni ventilatori otporni na visoke temperature (za odstranjivanje dima)
400°C/2h ,200°C/2h ,300°C/1h
Axial roof fans

CC-HT

str. 7.11

Kanalni aksijalni ventilatori otporni na visoke temperature (za odstranjivanje dima)
400°C/2h ,200°C/2h ,300°C/1h
Ducted Axial Fans

SQ-HT

str. 10.11

Centrifugalni ventilatori otporni na visoke temperature (za odstranjivanje dima)sa unazad zakrivljenim lopaticama 400°C/2h
Backward curved blade centrifugal fans

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FC 2V-HT & FCV 2V-HT

Dvobrzinski centrifugalni krovni ekstraktori
Double speed centrifugal roof extractors

FC 2V - HT

FCV 2V - HT

400°C/2h

SEK. **11**

OSNOVNI PODACI :

Serija FC-HT je rešenje za odvođenje dima velike temperature. Zato je izvanredan za izvlačenje u slučaju požara. U nekim evropskim zemljama je već uključen u propise o sistemima sigurnosti u slučaju požara, a u bliskoj budućnosti biće zakonom propisan unutar evropske unije. Razni testovi i svedočenja vatrogasaca su dokazala da je u slučaju požara iz prostorija korisno izvlačiti dim.
Prednosti izvlačenja u slučaju požara:
1.) U slučaju zatvorenih prostorija,moguće je lako dostići temperaturu od 1000C° ,prouzrokovavši sagorevanje bilo kog materijala samo radi zračenja vreline,stanje koje će učiniti beskorisnim bilo koju eksternu uništavajuću operaciju.Održavati temperaturu relativno niskom(300C°-400 C°),izbacivanjem vrelog vazduha radi izbegavanja lomljenja-urušavanja nosećih konstrukcija objekata u datoj okolini; povećanjem vrednosti kiseonika dolazi do boljeg sagorevanja,prema tome kod većine materijala i do smanjenja stvaranja toksičnog dima.
2.) Nasilno izvlačenje stvara vakum ,tako sprečavajući širenje dima u druge prostorije.
Bolji uslovi vida omogućuju lakše spasavanje/bekstvo lica koja su ostala u zgradi,i pomoć u radu vatrogasaca.
3.) Pogodne vrednosti snage ventilatora, omogućuju izvlačenje na više mesta preko kanalnog ventilacionog sistema (serija FC-HT se lako ugrađuje u sistem).
4.) Intenzivno izvlačenje omogućuje povlačenje hladnog dimnog gasa koji je izuzetno opasan za čoveka.
5.) Serija FC-HT zahvaljujući radu u dve različite brzine, može se koristiti za tihu ventilaciju vazduha uz normalne dnevne aktivnosti, kao i u slučaju opasnosti za izvlačenje uz veliku snagu. Naravno, treba misliti i o odgovarajućim senzorima i uređajima sigurnosne tehnike.
Sposobnost rada na temperaturi od 200C° neprekidnog rada i 400C° na 2 sata, sertifikovane od strane kvalifikovanih autonomnih vlasti.

KONSTRUKCIJA :

- Ram je izrađen od galvanizovane čelične ploče.
- Zaštitna rešetka od čelične šipke zaštićena od atmosferskih agensa.
- Sa visokim stepenom efikasnosti i tihim radom,radno kolo sa unazad zakrivljenim lopaticama izrađeno je od galvanizovane čelične ploče.
- Gornji poklopac je od technopolymer-a, sa odgovarajućim otvorima za pogodno hlađenje motora.
- Transporter u technopolymer-u (FCV).
- Trofazni asinhroni motor odgovara propisima IEC34-IEC72 i 89/392 EEC-89/336EEC-73/23EEC. Ima oznaku kvaliteta CE. Podloga za montiranje je tipa B3/5, IP55, klase F.
Dvobrzinski rad pomoću prekidača zvezda/delta.

DODATNI DELOVI:

- Montiranje na suprotnu stranu (CB).
- Rešetka na unutrašnjem otvoru (RA).
- Servisni prekidač.

GENERAL DESCRIPTION

FC-HT series is the solution to the problems related to the evacuation of high temperature smoke; ideal therefore for emergency exhaust in case of fire. This feature is already mandatory in fire safety systems of several European and extra-European countries and in the near future it will become an official standard in the European Community .
It is already proved by various studies and tests that in case of fire it is worth to exhaust from the involved premises.
Such advantages can be summarised in a few points:
1) In case of closed premises, it is possible to easily exceed 1000° C, causing the combustion of any material just for heat radiation, condition that would make useless any external extinguish operation. To keep the temperature relatively low (300° -400 ° C) by extracting hot air means to avoid the collapse of the supporting static structures of the involved area; in addition, the higher oxygen rate will cause a better combustion and thus , in most of materials, a lower production of toxic smoke.
2) The forced exhausting allows the placing in depression of the room, thus preventing the diffusion of smoke into other rooms, creating better conditions of escape for the occupants and making the identification of the hotbed easier for the fire men.
3) The forced exhausting allows the location of the outlets in places different from the controlled one, being the FC-HT series easy to duct.
4) The forced exhausting allows the extraction of the cold smoke, extremely dangerous for the occupants.
5) The forced exhausting through the FC-HT fans allows the ventilation of the premises also in normal activity situations (clean air) giving the possibility of using the double speed motor in low speed for normal ventilation (lower noise level) and high speed for emergency conditions. It is necessary to install an electric line of dedicated power that automatically operates in case of fire.
The capability of our roof fans series FC-HT to work at 200°C continuosly or at 400°C for 2 hours is certified by a qualified independent authority.

CONSTRUCTION

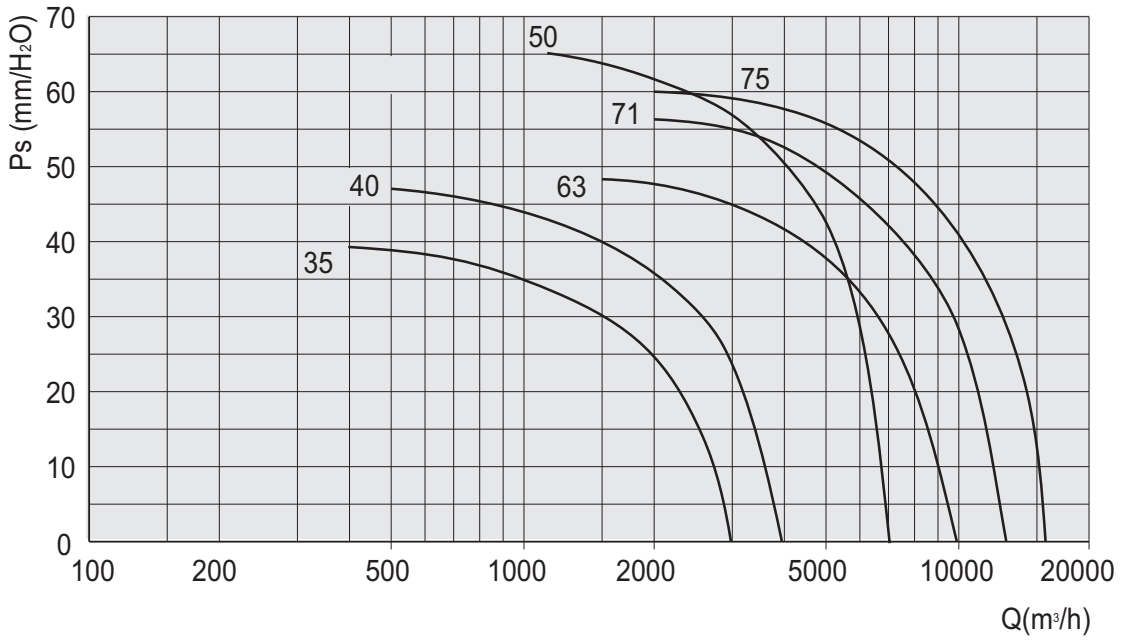
- Base frame in galvanized steel sheet.
- Protection grid in drawn steel rod protected against atmospheric agents.
- High efficiency and low noise backward bladed impeller, in galvanized steel sheet.
- Protective techno-polymer covering, with suitable slots for proper motor cooling.
- Conveyor (FCV) in techno-polymer.
- Three-phase asynchronous motor according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC and marked CE. IP55, class F. Double speed by delta/star switching.

ACCESSORIES

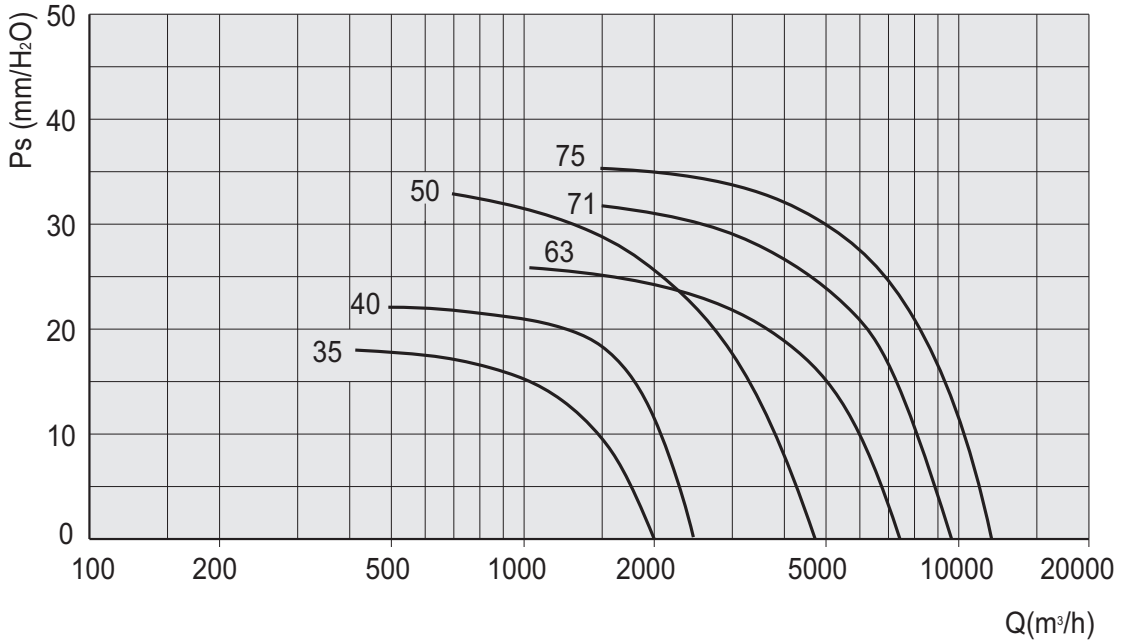
- Counter-base to be walled-up (CB).
- Inlet side grid (RA).
- Service switch.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

Velika brzina / High speed (s)

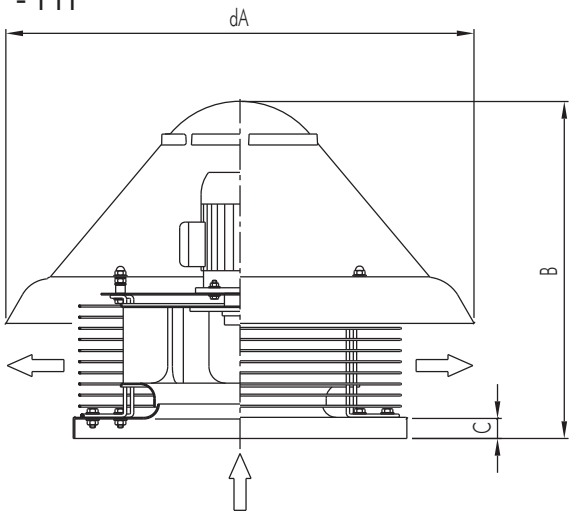


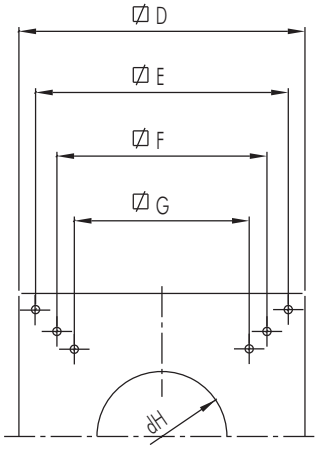
Mala brzina / Low speed (⅄)



Tip Type	Model Model	U	rpm s	rpm ⅄	Pm (kW)	In (A) s	In (A) ⅄	Mot. (Gr)	Lp dB(A) s	Lp dB(A) ⅄
FC 2V-HT/FCV 2V-HT	35	T	1450	950	0,26	0,93	0,53	71	56	48
FC 2V-HT/FCV 2V-HT	40	T	1450	950	0,55	1,2	0,7	80	61	50
FC 2V-HT/FCV 2V-HT	50	T	1450	950	1,1	2,6	1,4	90S	67	56
FC 2V-HT/FCV 2V-HT	63	T	950	700	1,1	2	1,2	90L	61	54
FC 2V-HT/FCV 2V-HT	71	T	950	700	1,5	3,9	2,2	100L	65	57
FC 2V-HT/FCV 2V-HT	75	T	950	700	1,8	5	2,9	100L	67	58

FC 2V - HT

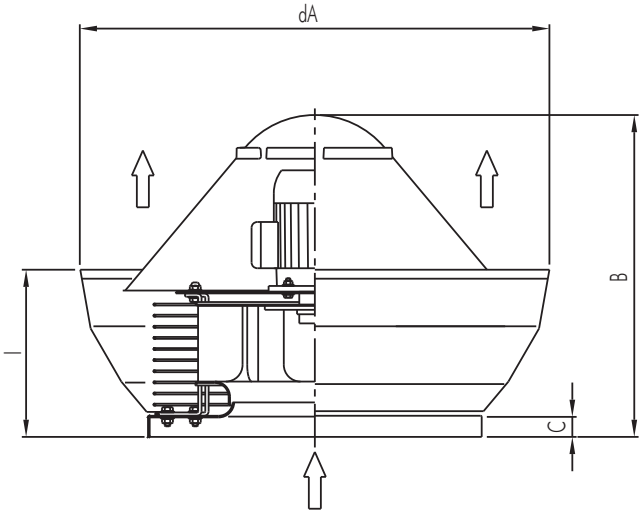


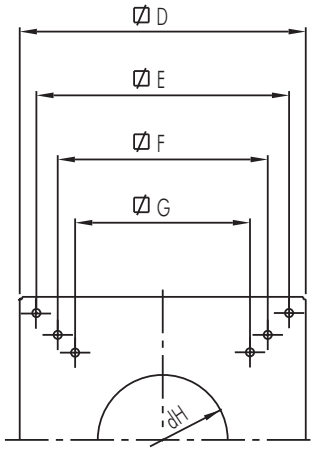


Tip / Type	dA	B	C	D	E	F	G	dH	kg.
FC 2V-HT 35	750	580	38	500	450	/	380	270	27
FC 2V-HT 40	900	640	38	650	600	530	471	296	32
FC 2V-HT 50	1100	750	38	760	710	650	550	370	58
FC 2V-HT 63	1300	850	38	930	870	775	665	430	80
FC 2V-HT 71	1300	880	38	930	870	775	665	480	100
FC 2V-HT 75	1300	880	38	930	870	775	665	480	115

Dimenzije u mm / Dimensions in mm

FCV 2V - HT





Tip/Type	dA	B	C	D	E	F	G	dH	I	kg.
FCV 2V-HT 35	800	580	38	500	450	/	380	270	340	28
FCV 2V-HT 40	980	640	38	650	600	530	471	296	400	33
FCV 2V-HT 50	1200	750	38	760	710	650	550	370	490	59
FCV 2V-HT 63	1400	850	38	930	870	775	665	430	540	82
FCV 2V-HT 71	1400	880	38	930	870	775	665	480	540	103
FCV 2V-HT 75	1400	880	38	930	870	775	665	480	540	118

Dimenzije u mm/Dimensions in mm

TAV-HT

Aksijalni krovni ventilatori otporni na visoke temperature (za odstranjivanje dima)
Axial roof fans

400°C/2h

200°C/2h

300°C/1h

OSNOVNI PODACI :

Serija TAV-HT je rešenje za odvođenje dima velike temperature. Zato je izvanredan za izvlačenje u slučaju požara. U nekim evropskim zemljama je već uključen u propise o sistemima sigurnosti u slučaju požara, a u bliskoj budućnosti biće zakonom propisan unutar evropske unije. Razni testovi i svedočenja vatrogasaca su dokazala da je u slučaju požara iz prostorija korisno izvlačiti dim.
Prednosti izvlačenja u slučaju požara:
1.) U slučaju zatvorenih prostorija,moguće je lako dostići temperaturu od 1000C° ,prouzrokovavši sagorevanje bilo kog materijala samo radi zračenja vreline,stanje koje će učiniti beskorisnim bilo koju eksternu uništavajuću operaciju.Održavati temperaturu relativno niskom(300C°-400 C°),izbacivanjem vrelog vazduha radi izbegavanja lomljenja-urušavanja nosećih konstrukcija objekata u datoj okolini; povećanjem vrednosti kiseonika dolazi do boljeg sagorevanja,prema tome kod većine materijala i do smanjenja stvaranja toksičnog dima.
2.) Nasilno izvlačenje stvara vakum ,tako sprečavajući širenje dima u druge prostorije. Bolji uslovi vida omogućuju lakše spasavanje/bekstvo lica koja su ostala u zgradi,i pomoć u radu vatrogasaca.
3.) Pogodne vrednosti snage ventilatora, omogućuju izvlačenje na više mesta preko kanalnog ventilacionog sistema (serija TAV-HT se lako ugrađuje u sistem).
4.) Intenzivno izvlačenje omogućuje povlačenje hladnog dimnog gasa koji je izuzetno opasan za čoveka.
5.) Serija TAV-HT zahvaljujući radu u dve različite brzine, može se koristiti za tihu ventilaciju vazduha uz normalne dnevne aktivnosti, kao i u slučaju opasnosti za izvlačenje uz veliku snagu. Naravno, treba misliti i o odgovarajućim senzorima i uređajima sigurnosne tehnike.
Sposobnost rada na temperaturi od 400C° na 2 sata,200 na 2 sata,300 na 1 sat sertifikovane od strane kvalifikovanih autonomnih vlasti za (TAV-HT seriju).

KONSTRUKCIJA :

- Spoljašnji deflektor je izrađen od galvanizovanog čelika u vidu panela.
- Dvokrilna gravitaciona aluminijumska žaluzina.
- Ploča za priključivanje ventilatoru sa obojenom čeličnom pločom.
- Ima zaštitnu rešetku na spoljašnjoj strani koja odgovara propisu UNI9219-DIN31001, za zaštitu protiv atmosferskih agenasa.
- Cilindrična verzija aksijalnog ventilatora (serije CC-HT), sa zaštitom protiv atmosferskih uticaja sa premazom epoxi-ja. Pogon sa radnim kolom aerofoličnog profila od aluminijuma, sa podesivim nagibnim uglom u stanju mirovanja.
- Motor specijalne konstrukcije sa sertifikatom za različite stepene požara (400°C/2h, 200°C/2h, 300°C/1h, itd), trofazni asinhroni motor ispunjuje internacionalne propise IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, ima oznaku kvaliteta CE, B3, IP55, klase H.

GENERAL DESCRIPTION

TAV-HT series is the solution to the problems related to the evacuation of high temperature smoke; ideal therefore for emergency exhaust in case of fire. This feature is already mandatory in fire safety systems of several European and extra-European countries and in the near future it will become an official standard in the European Community. It is already proved by various studies and tests that in case of fire it is worth to exhaust from the involved premises. Such advantages can be summarised in a few points:
6) In case of closed premises, it is possible to easily exceed 1000° C, causing the combustion of any material just for heat radiation, condition that would make useless any external extinguish operation. To keep the temperature relatively low (300° -400 ° C) by extracting hot air means to avoid the collapse of the supporting static structures of the involved area; in addition, the higher oxygen rate will cause a better combustion and thus , in most of materials, a lower production of toxic smoke.
7) The forced exhausting allows the placing in depression of the room, thus preventing the diffusion of smoke into other rooms, creating better conditions of escape for the occupants and making the identification of the hotbed easier for the fire men.
8) The forced exhausting allows the location of the outlets in places different from the controlled one, being the FC-HT series easy to duct.
9) The forced exhausting allows the extraction of the cold smoke, extremely dangerous for the occupants.
10) The forced exhausting through the TAV-HT fans allows the ventilation of the premises also in normal activity situations (clean air). It is necessary to install an electric line of dedicated power that automatically operates in case of fire. Fan and outer deflector /shutter are provided in separate pieces; for that reason the capacity of these roof fans to work at 400°for 2 hours, 200° for 2 hours and 300° for 1 hour, it is defined by the certification of the TAV-HT series.

CONSTRUCTION

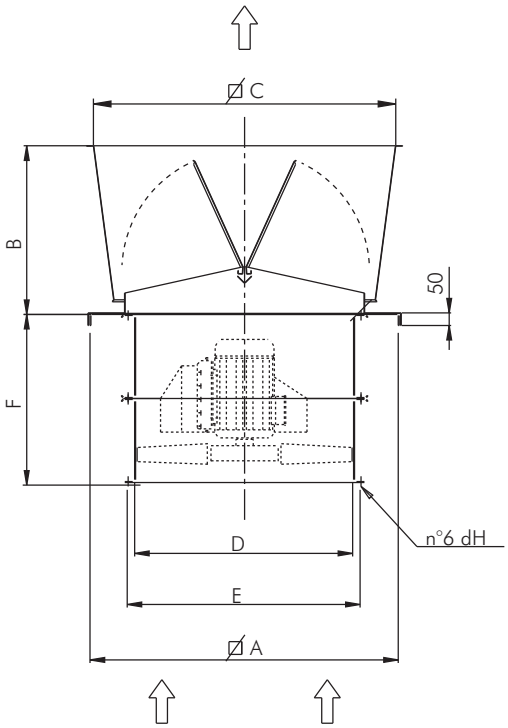
- Outside deflector in galvanized steel sheet panels, with base in painted steel sheet.
- Double wing aluminium gravity shutter.
- Coupling plate to the fan in painted steel sheet.
- Outlet protection grid according to rules UNI9219 - DIN31001 and protected against atmospheric agents.
- Cylindrical case axial fan (CC-HT series), protected against the atmospheric agents by epoxy paint. Aerofoil profile bladed impeller completely in aluminium, variable pitch angle in still position.
- Special construction motor certified to various fire ratings (400°C/2h, 200°C/2h, 300°C/1h, etc), asynchronous three-phase according to international rules IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC and marked CE, B3, IP55, class H.

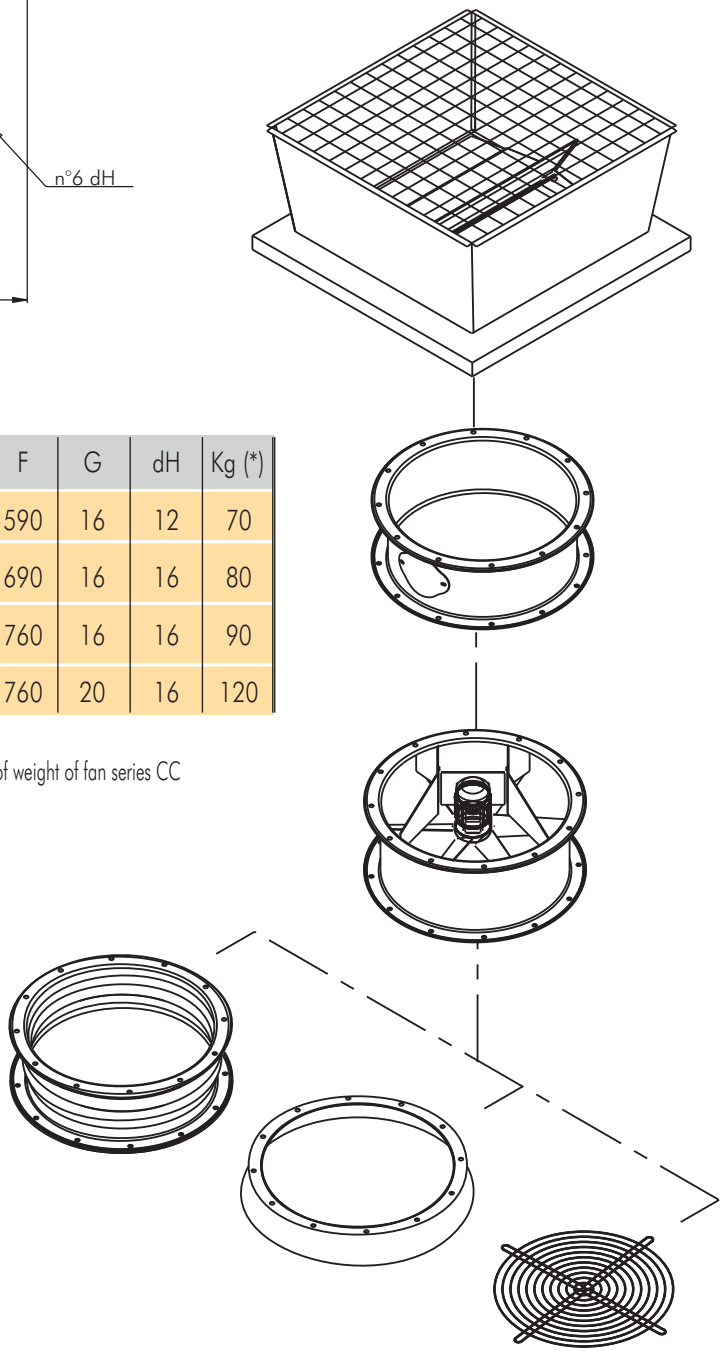
PERFORMANSE / PERFORMANCE TAV-HT

Videti performanse CC serije (sekcija 4). Veličine 800,900,1000,1120, verzije sa 4 I 6 polova. Razmotrite gubitke snage prouzrokovane žaluzinom za polovinu dinamičkog pritiska CC serije ventilatora.

See performances of the CC series (section 4). Sizes 800, 900, 1000, 1120, 4 and 6 pole versions. Consider a loss of load caused by the shutter of about half of the dynamic pressure of the CC series fan.

DIMENZIJE / DIMENSIONS TAV-HT





Tip/Type	A	B	C	dD	dE	F	G	dH	Kg (*)
TAV-HT 800	1180	630	1140	800	860	590	16	12	70
TAV-HT 900	1280	700	1260	900	970	690	16	16	80
TAV-HT 1000	1430	500	1300	1000	1070	760	16	16	90
TAV-HT 1120	1580	550	1470	1120	1190	760	20	16	120

Dimenzije u mm/Dimensions in mm

Važno: dodajte težinu serije CC ventilatoraCC / Note: add the of weight of fan series CC

CC-HT

Kanalni aksijalni ventilatori otporni na visoke temperature (za odstranjivanje dima)
Ducted Axial Fans

U skladu sa najnovijim propisima EN 12101/3

400°C/2h

200°C/2h

300°C/1h

OSNOVNI PODACI :

Serija CC-HT je rešenje za odvođenje dima velike temperature. Zato je izvanredan za izvlačenje u slučaju požara. U nekim evropskim zemljama je već uključen u propise o sistemima sigurnosti u slučaju požara, a u bliskoj budućnosti biće zakonom propisan unutar evropske unije. Razni testovi i svedočenja vatrogasaca su dokazala da je u slučaju požara iz prostorija korisno izvlačiti dim.
Prednosti izvlačenja u slučaju požara:
1.) U slučaju zatvorenih prostorija,moguće je lako dostići temperaturu od 1000C° ,prouzrokovavši sagorevanje bilo kog materijala samo radi zračenja vreline,stanje koje će učiniti beskorisnim bilo koju eksternu uništavajuću operaciju.Održavati temperaturu relativno niskom(300C°,400 C°),izbacivanjem vrelog vazduha radi izbegavanja lomljenja-urušavanja nosećih konstrukcija objekata u datoj okolini; povećanjem vrednosti kiseonika dolazi do boljeg sagorevanja,prema tome kod većine materijala i do smanjenja stvaranja toksičnog dima.
2.) Nasilno izvlačenje stvara vakum ,tako sprečavajući širenje dima u druge prostorije. Bolji uslovi vida omogućuju lakše spasavanje/bekstvo lica koja su ostala u zgradi,i pomoć u radu vatrogasaca.
3.) Pogodne vrednosti snage ventilatora, omogućuju izvlačenje na više mesta preko kanalnog ventilacionog sistema (serija CC-HT se lako ugrađuje u sistem).
4.) Intenzivno izvlačenje omogućuje povlačenje hladnog dimnog gasa koji je izuzetno opasan za čoveka.
5.) Serija CC-HT zahvaljujući radu u dve različite brzine, može se koristiti za tihu ventilaciju vazduha uz normalne dnevne aktivnosti, kao i u slučaju opasnosti za izvlačenje uz veliku snagu. Naravno, treba misliti i o odgovarajućim senzorima i uređajima sigurnosne tehnike.Sposobnost rada na temperaturi od 400C° na 2 sata,200C° na 2 sata i 300C° na 1 sat, sertifikovane od strane kvalifikovanih autonomnih vlasti.

KONSTRUKCIJA :

- Kućište od čelične ploče, sa fiksiranim obručom u skladu sa propisima UNI ISO 6580 - EUROVENT .Epoxy premaz je zaštita protiv atmosferskih agenasa.
- Aerofoličan profil radnog kola sa glavčinom od aluminijuma, podesiv ugao nagiba u stanju mirovanja.
- Izvedba 4. sa radnim kolom direktno spoljenih na osovinu motora i transport vazduha od radnog kola prema motoru.
- Specijalna konstrukcija motora sa ovlašćenjem za različite vrednosti požara (400°C/2h, 200°C/2h, 300°C/1h, itd), trofazni asinhroni motor ispunjuje internacionalne propise IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, ima oznaku kvaliteta CE, B3, IP55, klase H.

DODATNI DELOVI :

- Dodatak sa kontrolnim vratima (Ccpro).
- Ravna zaštitna rešetka (CCr).
- Konusna zaštitna rešetka (CCrc).
- Podupirač za fiksiranje (CCst).
- Konus na uvodnom otvoru (CCbo).
- Suprotan bok (CCf).
- Suprotan bok sa prstenom (CCfc).

NA ZAHTEV :

- Različite performanse od standardnog.
- Galvanizovano kućište sa zaštitom protiv atmosferskih agenasa.
- Fleksibilno priključivanje za vrlo visoke temperature.
- Spoljašnji priključni ormarić.

GENERAL DESCRIPTION

CC-HT series is the solution to the problems related to the evacuation of high temperature smoke; ideal therefore for emergency exhaust in case of fire. This feature is already mandatory in fire safety systems of several European and extra-European countries and in the near future it will become an official standard in the European Community .
It is already proved by various studies and tests that in case of fire it is worth to exhaust from the involved premises.
Such advantages can be summarised in a few points:
1) In case of closed premises, it is possible to easily exceed 1000° C, causing the combustion of any material just for heat radiation, condition that would make useless any external extinguish operation. To keep the temperature relatively low (300° ,400 ° C) by extracting hot air means to avoid the collapse of the supporting static structures of the involved area; in addition, the higher oxygen rate will cause a better combustion and thus , in most of materials, a lower production of toxic smoke.
2) The forced exhausting allows the placing in depression of the room, thus preventing the diffusion of smoke into other rooms, creating better conditions of escape for the occupants and making the identification of the hotbed easier for the fire men.
3) The forced exhausting allows the location of the outlets in places different from the controlled one, being the FC-HT series easy to duct.
4) The forced exhausting allows the extraction of the cold smoke, extremely dangerous for the occupants.
5) The forced exhausting through the CC-HT fans allows the ventilation of the premises also in normal activity situations (clean air) giving the possibility of using the double speed motor in low speed for normal ventilation (lower noise level) and high speed for emergency conditions. It is necessary to install an electric line of dedicated power that automatically operates in case of fire.
The capability of the CC-HT series to work at 400°C for 2 hours; 200°C for 2 hours and 300°C for 1 hour, is certified by a qualified autonomous authority.

CONSTRUCTION

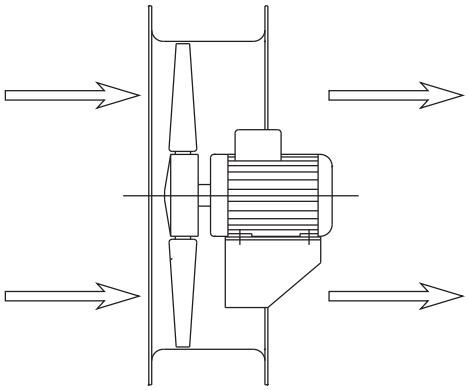
- Casing in steel sheet, with fixing flanges manufactured according to UNI ISO 6580 - EUROVENT 1/2 standards. Protected against the atmospheric agents by epoxy paint.
- Aerofoil profile impeller with die-cast aluminium hub. Variable pitch angle in still position.
- Execution 4 with impeller directly coupled to motor shaft and airflow from impeller to motor.
- Special construction motor certified to various fire ratings (400°C/2h, 200°C/2h, 300°C/1h, etc), asynchronous three-phase according to international rules IEC34-IEC72 e 89/392 EEC-89/336 EEC-73/23 EEC and marked CE, B3, IP55, class H.

ACCESSORIES

- Extension with inspection door (CCpro).
- Flat protection grid (CCr).
- Conic protection grid (CCrc).
- Fixing brackets (CCst).
- Inlet cone (CCbo).
- Counter-flange (CCf).
- Counter-flange with collar (CCfc).

UPON REQUEST

- Performances different from the standard.
- Casing protected against the atmospheric agents by galvanizing.
- High temperature special flexible connection.
- External terminal box.



Protok vazduha ka motoru
Airflow IMPELLER to MOTOR

PERFORMANSE / PERFORMANCE CC-HT

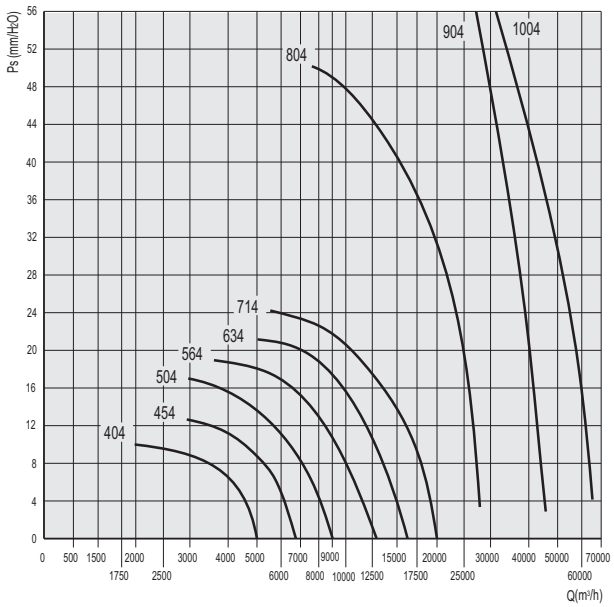
Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

Napomena: u ovom katalogu se nalazi izbor performansi ostvarljiv sa serijom CC-HT, koji su sposobni da odgovore većini zahteva i izabrani su na osnovu odnosa cene / performanse i vremena dostave. Na zahtev, naša tehnička služba je u mogućnosti da projektuje nekoliko različitih konfiguracija i instalacija, zasnovanu na klijentovim željama.

Attention: In this catalogue it is represented a selection of the obtainable performances with the CC-HT series, able to solve several demands, chosen to the purpose to combine cost/performances and delivery time. Upon request our technical service is able to design several different configurations and installation demands.

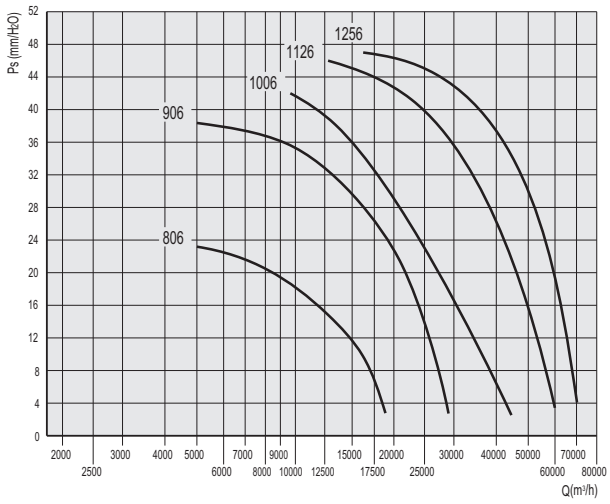
4 pola/poles

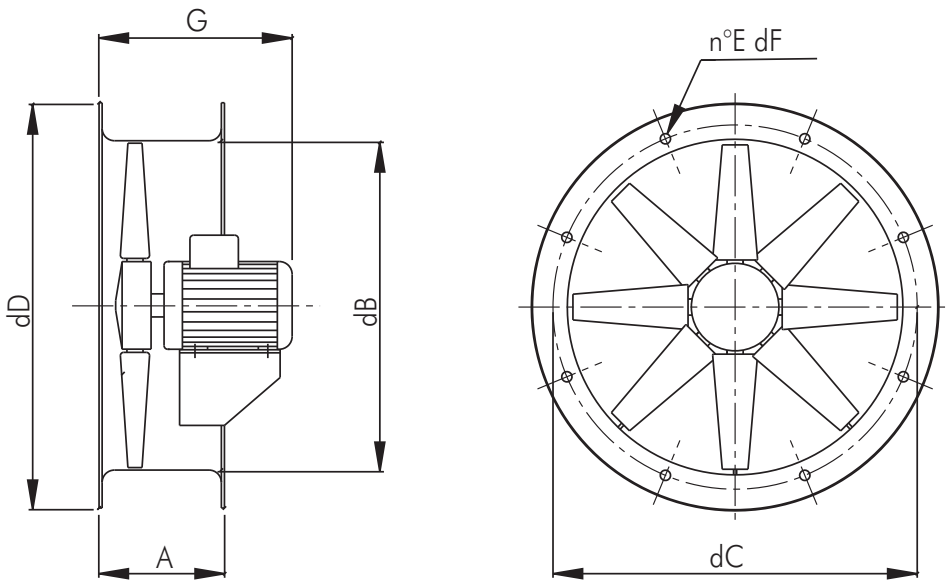
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC-HT	404/A	T	4	0,55	2	55/F	80	61
CC-HT	454/A	T	4	0,55	2	55/F	80	65
CC-HT	504/A	T	4	0,55	2	55/F	80	67
CC-HT	564/A	T	4	0,75	2,1	55/F	80	70
CC-HT	634/A	T	4	1,1	2,75	55/F	90S	73
CC-HT	714/A	T	4	2,2	5,1	55/F	100L	77
CC-HT	804/A	T	4	4	8,8	55/F	112M	81
CC-HT	904/B	T	4	7,5	16,1	55/F	132M	85
CC-HT	1004/A	T	4	15	32	55/F	160L	91



6 pola/poles

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
CC-HT	806/A	T	6	1,5	3,75	55/F	100L	70
CC-HT	906/A	T	6	3	7,2	55/F	132S	75
CC-HT	1006/A	T	6	5,5	12,9	55/F	132M	80
CC-HT	1126/A	T	6	7,5	17,4	55/F	160M	83
CC-HT	1256/A	T	6	11	25,5	55/F	160L	87





Tip/Type	A	dB	dC	dD	E	dF	G	Kg
CC-HT 40	230	400	450	496	8	12	430	30
CC-HT 45	230	450	500	546	8	12	430	38
CC-HT 50	250	500	560	598	12	12	440	39
CC-HT 56	250	560	620	658	12	12	440	42
CC-HT 63	250	630	690	730	12	12	470	52
CC-HT 71	250	710	770	810	16	12	520	66
CC-HT 80	350	800	860	910	16	12	580	125
CC-HT 90	350	900	970	1030	16	16	680	180
CC-HT 100	350	1000	1070	1130	16	16	750	215
CC-HT 112	350	1120	1190	1250	20	16	750	205
CC-HT 125	350	1250	1320	1380	20	16	750	235

Dimenzije u mm/Dimensions in mm

SQ 2V-HT

Centrifugalni ventilatori otporni na visoke temperature (za odstranjivanje dima) sa unazad zakrivljenim lopaticama
Backward curved blade centrifugal fans

400°C/2h

OSNOVNI PODACI :

Pogodan je za transport čistog vazduha ili vazduha sa malo prašine do maksimalne temperature od 400°C na 2 sata.
Glavna karakteristika serije SQ-HT je četvorougaona konstrukcija koja omogućuje upotrebu u 4 orijentacije (0°-90°-180°-270°) sa istim ventilatorom.
Dimenzije su ograničene zahvaljujući eliminaciji oslonca motora.
Serija SQ-HT je rešenje za odvođenje dima velike temperature. Zato je izvanredan za izvlačenje u slučaju požara. U nekim evropskim zemljama je već uključen u propise o sistemima sigurnosti u slučaju požara, a u bliskoj budućnosti biće zakonom propisan unutar evropske unije. Razni testovi i svedočenja vatrogasaca su dokazala da je u slučaju požara iz prostorija korisno izvlačiti dim.
Prednosti izvlačenja u slučaju požara:
1.) U slučaju zatvorenih prostorija,moguće je lako dostići temperaturu od 1000C° ,prouzrokovavši sagorevanje bilo kog materijala samo radi zračenja vreline,stanje koje će učiniti beskorisnim bilo koju eksternu uništavajuću operaciju.Održavati temperaturu relativno niskom(300C°-400 C°),izbacivanjem vrelog vazduha radi izbegavanja lomljenja-urušavanja nosećih konstrukcija objekata u datoj okolini; povećanjem vrednosti kiseonika dolazi do boljeg sagorevanja,prema tome kod većine materijala i do smanjenja stvaranja toksičnog dima.
2.) Nasilno izvlačenje stvara vakum ,tako sprečavajući širenje dima u druge prostorije. Bolji uslovi vida omogućuju lakše spasavanje/bekstvo lica koja su ostala u zgradi,i pomoć u radu vatrogasaca.
3.) Pogodne vrednosti snage ventilatora, omogućuju izvlačenje na više mesta preko kanalnog ventilacionog sistema (serija CC-HT se lako ugrađuje u sistem).
4.) Intenzivno izvlačenje omogućuje povlačenje hladnog dimnog gasa koji je izuzetno opasan za čoveka.
5.) Serija CC-HT zahvaljujući radu u dve različite brzine, može se koristiti za tihu ventilaciju vazduha uz normalne dnevne aktivnosti, kao i u slučaju opasnosti za izvlačenje uz veliku snagu. Naravno, treba misliti i o odgovarajućim senzorima i uređajima sigurnosne tehnike.Sposobnost rada na temperaturi od 400C° na 2 sata, sertifikovane od strane kvalifikovanih autonomnih vlasti.

KONSTRUKCIJA :

- Četvorougaono kućište izrađeno od galvanizovane čelične ploče.
- Vrlo efikasan ventilator sa radnim kolom i unazad zakrivljenim lopaticama izrađenim od galvanizovane čelične ploče i glavčine od livenog aluminijuma.
- Izvedba 5 (direktan pogon sa isturenim rotorom na ivici motora sa osloncem kućišta). Rotacija RD.
- Trofazni asinhroni motor odgovara propisima IEC34-IEC72 i 89/392 EEC-89/336 EEC-73/23 EEC, ima oznaku kvaliteta CE, B3, IP55, klase F.
Dvostruka brzina sa prekidačem trougao/delta.

DODATNI DELOVI :

- Zaštitna rešetka ulaznog otvora odgovara normi UNI9219-DIN31001 i zaštićen je od atmosferskih agenasa.
- Zaštitna rešetka izlaznog otvora odgovara normi UNI9219DIN31001 i zaštićen je od atmosferskih agenasa.

GENERAL DESCRIPTION

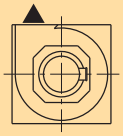
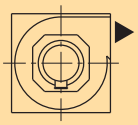
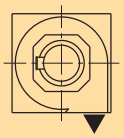
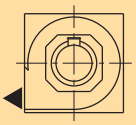
Suitable to convey clean or lightly dusty air up to a maximum temperature of 400°C for 2h. The main characteristic of the SQ-HT series is the quadrangular construction, which allows to obtain 4 orientations (0°-90°-180°-270°) with the same fan. The dimensions are limited thanks to the elimination of the motor support.
SQ-HT series is the solution to the problems related to the evacuation of high temperature smoke; ideal therefore for emergency exhaust in case of fire. This feature is already mandatory in fire safety systems of several European and extra-European countries and in the near future it will become an official standard in the European Community. It is already proved by various studies and tests that in case of fire it is worth to exhaust from the involved premises. Such advantages can be summarised in a few points:
1) In case of closed premises, it is possible to easily exceed 1000° C, causing the combustion of any material just for heat radiation, condition that would make useless any external extinguish operation. To keep the temperature relatively low (300° -400° C) by extracting hot air means to avoid the collapse of the supporting static structures of the involved area; in addition, the higher oxygen rate will cause a better combustion and thus , in most of materials, a lower production of toxic smoke.
2) The forced exhausting allows the placing in depression of the room, thus preventing the diffusion of smoke into other rooms, creating better conditions of escape for the occupants and making the identification of the hotbed easier for the fire men.
3) The forced exhausting allows the location of the outlets in places different from the controlled one, being the FC-HT series easy to duct.
4) The forced exhausting allows the extraction of the cold smoke, extremely dangerous for the occupants.
5) The forced exhausting through the SQ-HT fans allows the ventilation of the premises also in normal activity situations (clean air) giving the possibility of using the double speed motor in low speed for normal ventilation (lower noise level) and high speed for emergency conditions. It is necessary to install an electric line of dedicated power that automatically operates in case of fire.
The capability of the SQ-HT series to work at 400°C for 2 hours is certified by a qualified independent authority.

CONSTRUCTION

- Volute with quadrangular frame in galvanized steel sheet.
- High efficiency single width backward curved wheel, in galvanized steel sheet and die-cast aluminium hub.
- Execution 5 (direct drive with protruding impeller on flanged motor, supported by the casing), rotation RD.
- Three-phase asynchronous motor according to international standards IEC34-IEC72 and 89/392 EEC-89/336 EEC-73/23 EEC and marked CE, IP55, class F. Double speed by delta/star switch.

ACCESSORIES

- Inlet protection guard according to UNI9219-DIN31001 norm and protected against the atmospheric agents.
- Outlet protection guard according to UNI9219-DIN31001 norm and protected against the atmospheric agents.

Rotacija *Rotation* RD				
Forma/*Form*	0°	90°	180°	270°

PERFORMANSE / PERFORMANCE SQ -HT

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

SQ - HT 35

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	354	T	4	0,25	0,96	55/F	71	60

$Pd = 0,06218 \times (Q/209)^2 = mm\ H_2O$

SQ - HT 40

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	404	T	4	0,37	1,2	55/F	71	62

$Pd = 0,06218 \times (Q/279,2)^2 = mm\ H_2O$

SQ - HT 45

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	454	T	4	0,75	2	55/F	80	64

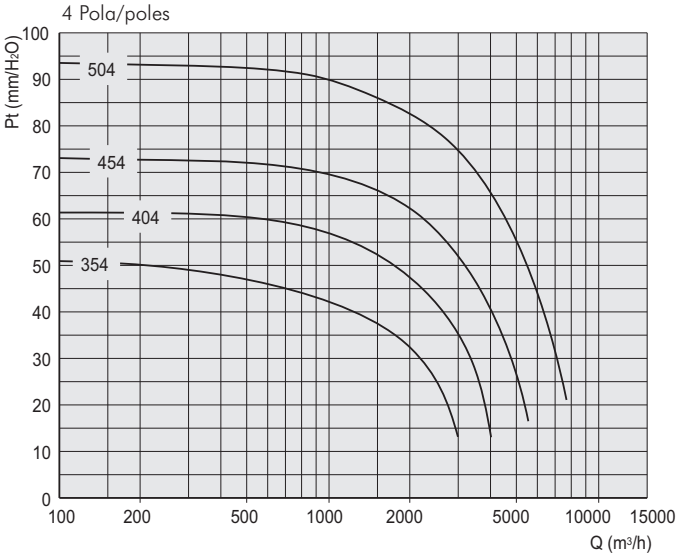
$Pd = 0,06218 \times (Q/343,4)^2 = mm\ H_2O$

SQ - HT 50

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	504	T	4	1,1	2,8	55/F	90S	66

$Pd = 0,06218 \times (Q/400)^2 = mm\ H_2O$

4 Pola/poles



SQ - HT 56

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	566	T	6	0,55	1,8	55/F	80	60

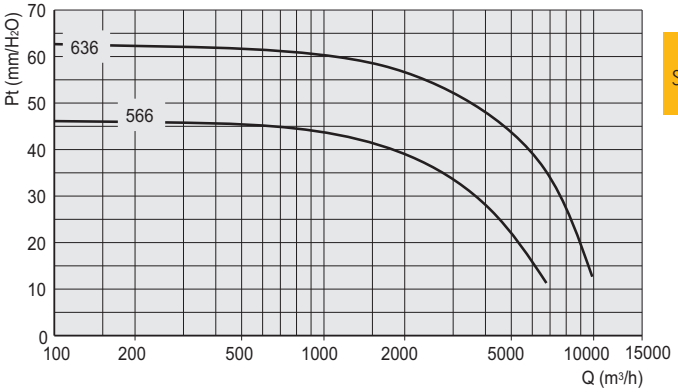
$Pd = 0,06218 \times (Q/518,4)^2 = mm\ H_2O$

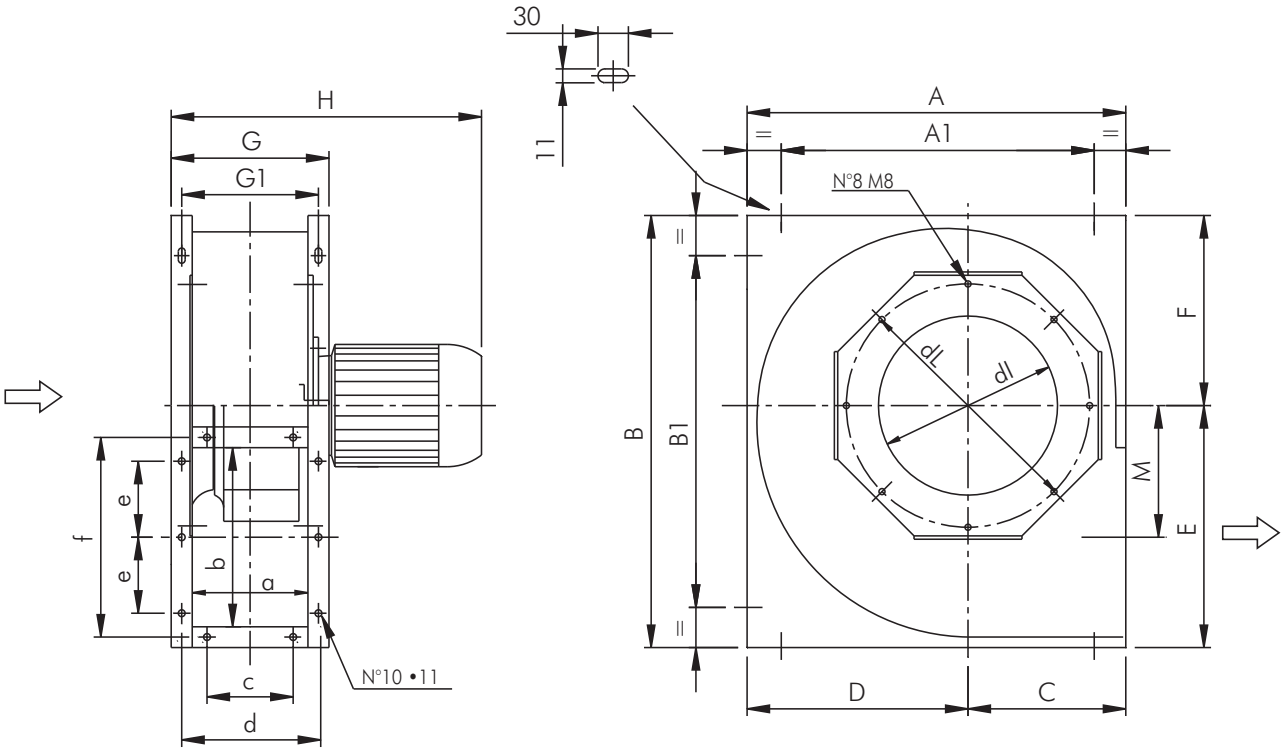
SQ - HT 63

Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	636	T	6	1,1	3,4	55/F	90L	63

$Pd = 0,06218 \times (Q/679,3)^2 = mm\ H_2O$

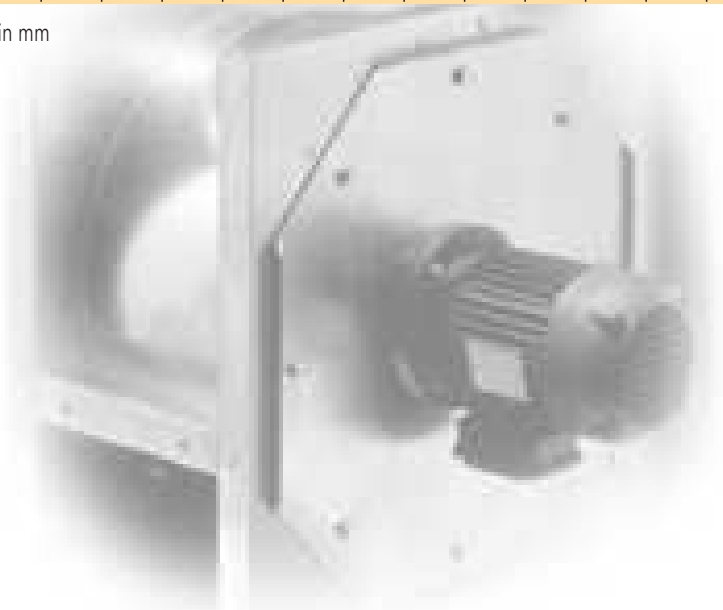
6 Pola/poles

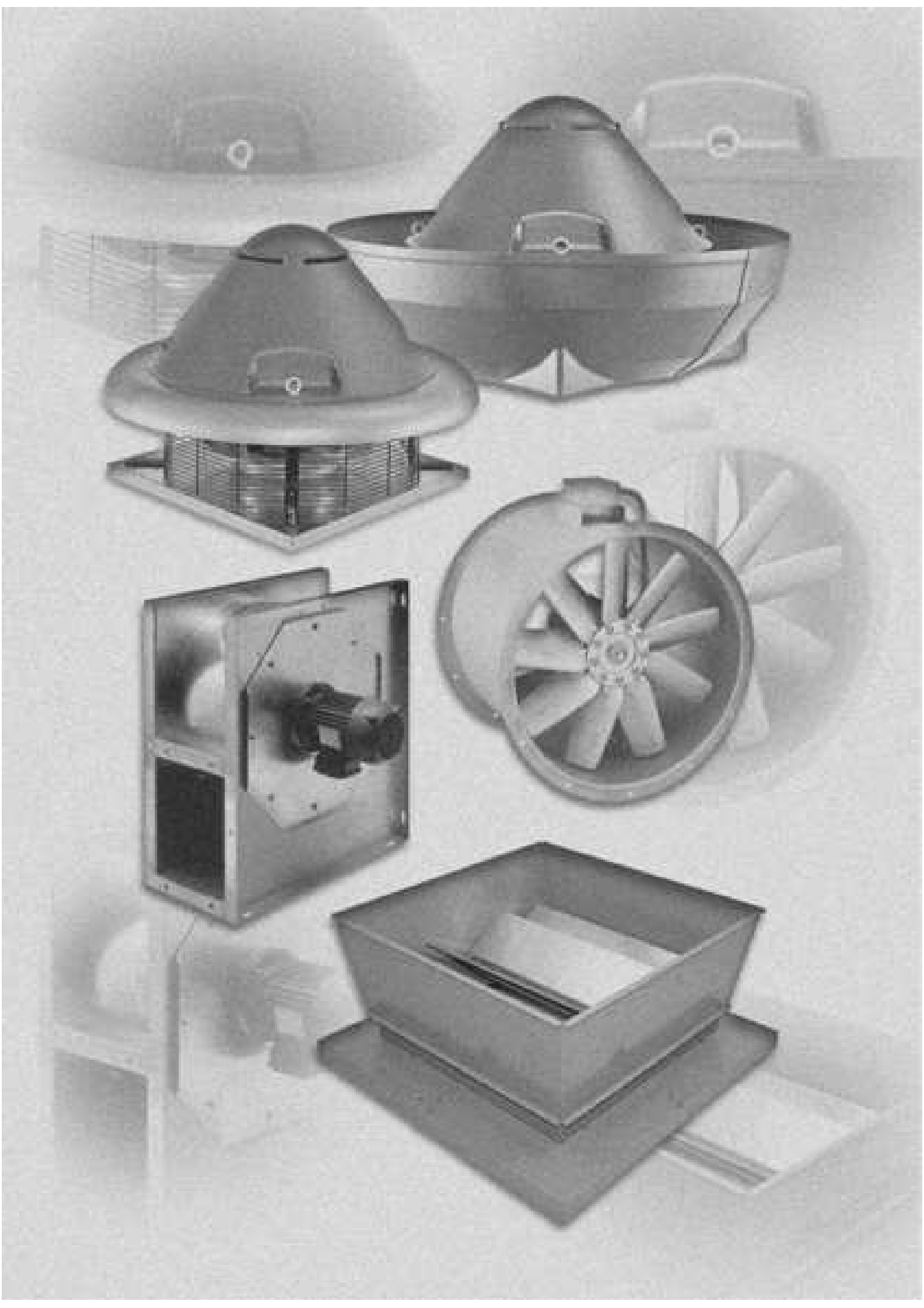




Tip/Type	A	A1	B	B1	C	D	E	F	G	H	dl	dL	M	a	b	c	d	e	f	Kg
35	620	520	650	550	295	325	370	280	285	470	230	420	178	215	315	140	250	130	350	40
40	680	580	790	690	280	400	450	340	305	490	265	450	238	235	350	160	270	140	385	50
45	740	580	880	720	305	435	490	390	335	550	285	500	261	265	382	180	300	150	417	65
50	820	660	960	800	340	480	525	435	355	610	330	555	281	285	415	200	320	160	450	82
56	890	730	1040	880	370	520	590	450	400	650	370	615	312	320	472	220	360	180	512	100
63	910	750	1100	940	410	500	640	460	450	700	435	690	333	370	532	260	410	200	572	125

Dimenzije u mm/Dimensions in mm





LEGENDA/LEGEND

PS = Statički pritisak (mm/H2O)
PD = Dinamički pritisak (mm/H2O)
Pt = Totalni pritisak (mm/H2O)
Q = Transport vazduha (m3/H2O)
U = Nominalna voltaža (V)
M = Nominalna voltaža i frekvencija mono faze (230 V–50 Hz)
T = Nominalna voltaža i frekvencija tro faze (400 V – 50 Hz)
Rpm = Broj obrataja motora
Pm = Snaga morora (KW)
In = Nominalna apsorbna veličina (A)
IP = Mehanička zaštita motora
Cl = Kategorija izolacije motora
S = Spoljašnja površina (m2)
C = Brzina vazduha (m/s)
Pd2 = Inertni moment (Kgm2)
Lp = Nivo pritiska zvuka (dB)
Lw = Nivo jačine zvuka (dB)
Reg. = Regulator brzine
P = n° Polovi
2 pola = 3000 obrtaja
4 pola = 1500 obrtaja
6 pola = 1000 obrtaja
8 pola = 750 obrtaja

Pažnja ! Nivo pritiska zvuka se meri u slobodnom prostoru od 1.5 m razmaka od centra ventilatora , u bilo kom pravcu sa unutrašnjom i spoljašnjom stranom spoljenom na cevni sistem.

Značajno ! Buka samog ventilatora će biti veća , ukoliko se ne meri u slobodnom prostoru.

Ostvarljivi standardi : testiranje karakteristika je vršeno u skladu sa DIN24163 standardom, testiranje akustike je u skladu sa DIN45635T38 standardom.

Ps = Static pressure (mm/H_2O)
Pd = Dynamic pressure (mm/H_2O)
Pt = Total pressure (mm/H_2O)
Q = Air delivery (m^3/h)
U = Rated voltage (V)
M = Rated voltage and frequency single-phase (230V-50Hz)
T = Rated voltage and frequency three-phase (400V-50Hz)
rpm = Nominal motor speed
Pm = Installed motor power (kW)
In = Nominal absorbed current (A)
IP = Motor mechanical protection
Cl = Motor Insulation class
S = Outlet area (m^2)
C = Air velocity (m/s)
Pd2 = Impeller inertia moment (Kgm^2)
Lp = Sound pressure level (dB)
Lw = Sound power level (dB)
Reg. = Speed regulator
P = n° Poles
2 poles = 3000 nominal rpm
4 poles = 1500 nominal rpm
6 poles = 1000 nominal rpm
8 poles = 750 nominal rpm

Attention: (CC/HT) the sound pressure level is measured in free field at 3 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.
Attention: (SQ/HT) the sound pressure level is measured in free field at 3 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.
Attention: (FC/HT e FCV/HT) the sound pressure level is measured in free field at 6 m from the fan centre, in any direction, with ducted inlet and free outlet

Note: when selecting it is necessary to keep in mind that the noise of the fan, if not measured in free field, will be higher than the shown values.

Standards achieved: Performance tests according to DIN24163 standard - Acoustic tests according to DIN45635T38 standard

FAKTORI PRETVARANJA / CONVERSION FACTORS

Snaga / Power

	W	kW	CV
W	1	0,001	0,00136
kW	1000	1	1,36
CV	735,5	0,7355	1

Pritisak / Pressure

	Pa	mm/H_2O	in.WG
Pa	1	0,101972	0,00401
mm/H_2O	9,807	1	0,0394
in.WG	249,09	25,4	1

Protok vazduha / Flow rate

	m^3/s	m^3/h	cfm
m^3/s	1	3600	2118,88
m^3/h	0,0002778	1	0,5886
cfm	0,0004719	1,6990	1

KAKO NARUČITI / HOW TO ORDER

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	FC 2V-HT	504	T

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	TAV-HT	906	T

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	CC-HT	634/A	T

Primer / Example:	Tip / Type	Model / Model	Voltaža / Voltage
	SQ - HT	504	T

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Regulatori brzine obrtaja
Speed regulators

12

Karakteristike ventilatora je potrebno menjati zbog sledećih razloga:
Fleksibilnost:Mogućnost podešavanja performansi ventilatora u zavisnosti od različitih radnih uslova.
Manji elektromehanički tranzient: Za blagi prelaz uključivanja-islkjučivanja.
Redukcija nlvoa buke.
Ovi razlozi vode do korišćenja regulatora napona, koji se priključuju na sistem, omogućuju promenu brzine ventilatora kreirajući optimalne radne uslove saglasno radnim operativnim zahtevima ili autotransformatori, za jednofazni ili trofazni asinhroni motor sa regulacijom.
Regulatori su proizvedeni prema propisima IEC 17-13/1-EAN60439 i sigurnosnim propisima za električne uređaje i imaju CE oznaku.

The need to change the fan characteristics can be based on various motivations: Flexibility (possibility to conform the performances of the fan to different working conditions), Less electro-mechanical stress (caused by a functioning in on/ off mode), Noise reduction.
Such demands lead to the use of voltage regulators that applied to the system provide to change the speed of the fans creating optimum working conditions according to operative requirements. Our range is composed by electronic and self-transformer type speed regulators suitable for adjustable single-phase and three-phase asynchronous motors. Regulators are manufactured in conformity to 73/23/EEC - 89/336/EEC standards and CE.marked

Jednofazni elektronski regulator brzine
Single phase electronic speed regulators

Tip Type	In max (A)	Strana Page
RVN	1,5	3
RV-1	(min 1)4	
V-27	(min 4)5	

Jednofazni autotransformatorski regulator brzine
Single phase self transformer speed regulators

Tip Type	In max (A)	Strana Page
RVS	0,5	6
RVM	1,5	7
RVM-2	4	8
RVM-3	7	9
RVM-4	12	10

Trofazni elektronski regulator brzine
Three-phase electronic speed regulators

Tip Type	In max (A)	Strana Page
RVT	2	11
RVT-1	4	12
RVT-2	7	13
RVT-3	14	14

I N D E K S / I N D E X

Krovni centrifugalni ventilatori
CENTRIFUGAL ROOF FANS — SEK. 1

Krovni aksijalni ventilatori
AXIAL ROOF FANS — SEK. 2

Ventilatori sa ramom za usmeravanje vazduha
PLATE MOUNTED AND RING AXIAL FANS — SEK. 3

Cevni ventilatori
DUCTED AXIAL FANS — SEK. 4

Centrifugalni ventilatori malih dimenzija sa unapred zakrivljenim lopaticama i centrifugalni ventilatori izrađeni od livenog aluminijuma
SMALL SIZE FORWARD CURVED BLADE AND RADIAL CENTRIFUGAL FANS IN ALUMINIUM — SEK. 5

Centrifugalni ventilatori sa unazad zakrivljenim lopaticama
BACKWARD CURVED BLADE CENTRIFUGAL FANS FOR CLEAN AIR — SEK. 6

In line – redni centrifugalni ventilatori
IN LINE CENTRIFUGAL FANS — SEK. 7

Box ventilatori na direktan pogon sa dva otvora
DIRECT DRIVE DOUBLE INLET BOX FANS — SEK. 8

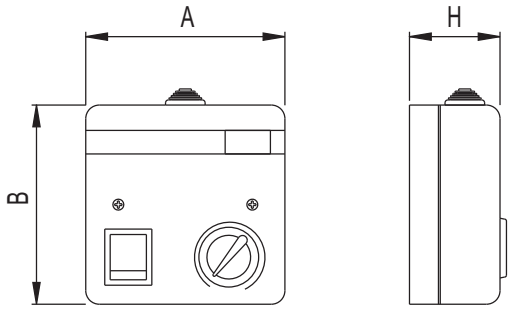
Centrifugalni box ventilatori i ventilatori sa duplim otvorom na remeni pogon
CENTRIFUGAL BOX FANS AND DOUBLE INLET BELT DRIVEN FANS — SEK. 9

Antikorozivni ventilatori
ANTICORROSIVE FANS — SEK. 10

Ventilatori za odstranjivanje dima
SMOKE EXTRACT FANS — SEK. 11

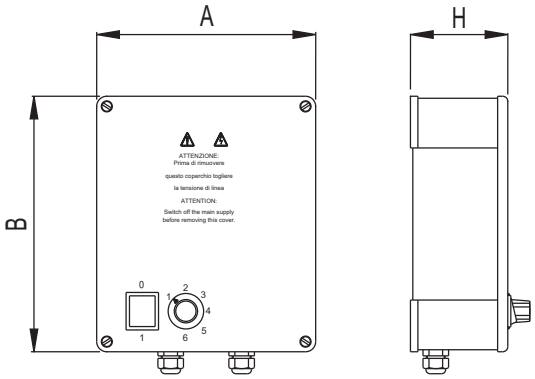
Regulatori brzine obrtaja
SPEED REGULATORS — SEK. 12

Akustično linijski centrifugalni ventilatori i Rekuperator toplote
IN LINE ACOUSTIC CENTRIFUGAL FANS AND HEAT RECUPERATOR — SEK. 13



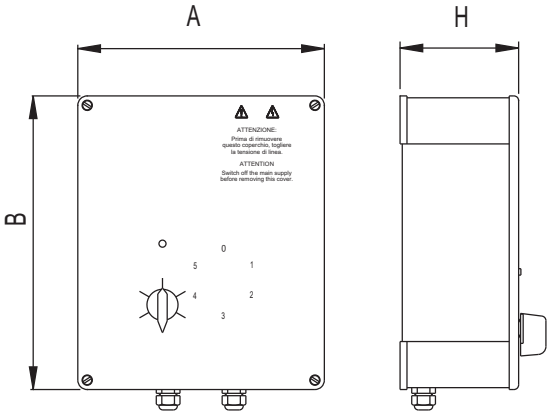
Tip/Type	AxBxH	Težina/Weight (kg)
RVN	110 x 110 x 50	0,5
RV-1	110 x 110 x 50	0,5
RV-2	118 x 118 x 72	0,6
RV-S	118 x 118 x 58	0,7

Dimenzije umm/Dimensions in mm



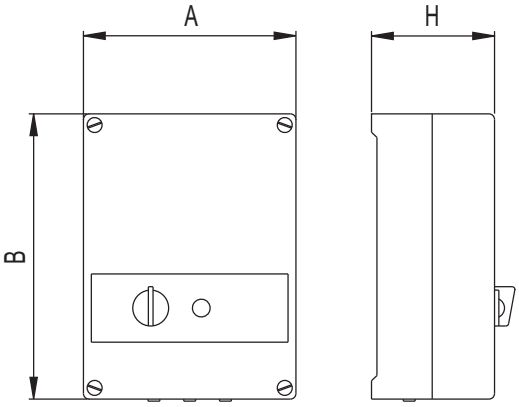
Tip/Type	AxBxH	Težina/Weight (kg)
RVM	142 x 166 x 66	2,5
RVM-2	216 x 252 x 96	5
RVM-3	262 x 312 x 126	8,3

Dimenzije u mm/Dimensions in mm



Tip/Type	AxBxH	Težina/Weight (kg)
RVT-1	262 x 312 x 126	11

Dimenzije u mm/Dimensions in mm



Tip/Type	AxBxH	Težina/Weight (kg)
RVT	190 x 255 x 110	7,5
RVT-2	253 x 316 x 143	20
RVT-3	400 x 290 x 141	24
RVM-4	244 x 309 x 135	14

Dimenzije u mm/Dimensions in mm

RVN

Jednofazni elektronski regulator brzine obrtaja 1,5 A
Single-phase electronic speed regulator 1,5 A

OSNOVNI PODACI :

Manuelni regulator napona sa potenciometrom bez mogućnosti stepenog podešavanja.Ima trijak prekidač faznog prelaza sa zatvorenom petljom.Pogodno je primeniti za jednofazne asinhrone motore sa regulacijom.
Pažnja: Za mali broj obrtaja svi naponski regulatori sa trijakom stvaraju brujanje u motoru.Beleška: Predlažemo da za smanjenje buke koristite ispod 50% od nominalne brzine obrtaja električnog motora. Brujanje električnog motora se može smanjiti korišćenjem trožičnog kondenzatora /spajanjem u zvezdu.

KONSTRUKCIJA :

- Izvor od 230V-1 faza-50/60Hz.
- Nominalna struja max 1,5A
- Topljivi osigurač 2A/250V.
- Podesiva regulacija minimalne brzine.
- EMC filter za radio smetnje.
- Upravljačka lampica.
- Kućište od technopolymer-a RAL 9016 (belo).
- Zaštita IP42

DESCRIPTION

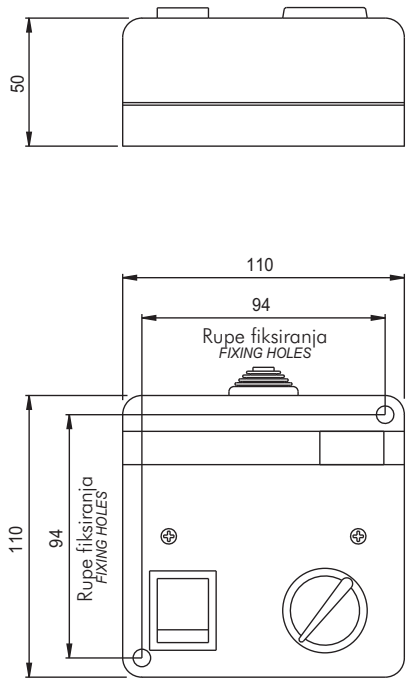
Manual voltage converter with continuous regulation by potentiometer. Electronic tuning by triac phase control closed loop type. Suitable for single-phase asynchronous adjustable motor.
Note: all regulators by triac control can cause electric hum in the motor at low speed. We advise against reducing under 50% the nominal speed of the electric motor. Motor electric hum can be minimized by using 3 wire capacitor/star winding.

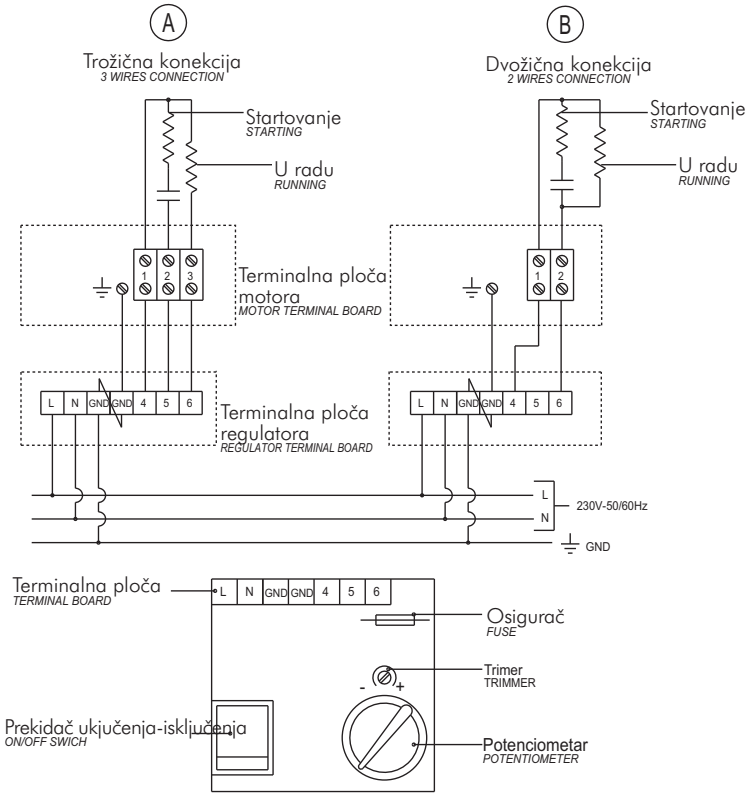
CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 1,5 A.
- Timed protection fuse 2A/250V.
- Minimum speed setting tuner.
- Radio noise filter EMC.
- Pilot light.
- Housing in techno-polymer RAL 9016 (white).
- Protection IP 42.
- Weight Kg 0,5.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM — RVN

Dimenzije u mm/Dimensions in mm





Važno: Za postizanje optimalne regulacije, bolje upotrebite konekciju (A).

Note: to obtain an aptimal regulation it's better to utilize the connection (A)

RV/1

Jednofazni elektronski regulator brzine obrtaja 4 A
Single-phase electronic speed regulator 4 A

OSNOVNI PODACI :

Manuelni regulator napona sa potenciometrom bez mogućnosti stepenog podešavanja.Ima trijak prekidač faznog prelaza sa zatvorenom petljom.Pogodno je primeniti za jednofazne asinhrone motore sa regulacijom.
Pažnja: Za mali broj obrtaja svi naponski regulatori sa trijakom stvaraju brujanje u motoru.Beleška: Predlažemo da za smanjenje buke koristite ispod 50% od nominalne brzine obrtaja električnog motora. Brujanje električnog motora se može smanjiti korišćenjem trožičnog kondenzatora / spajanjem u zvezdu.

KONSTRUKCIJA :

- Izvor od 230V-1 faza-50/60Hz.
- Nominalna struja max 1,5A
- Topljivi osigurač 2A/250V.
- Podesiva regulacija minimalne brzine.
- EMC filter za radio smetnje.
- Upravljačka lampica.
- Kućište od technopolymer-a RAL 9016 (belo).
- Zaštita IP42
- Težina 0,5kg.

DESCRIPTION

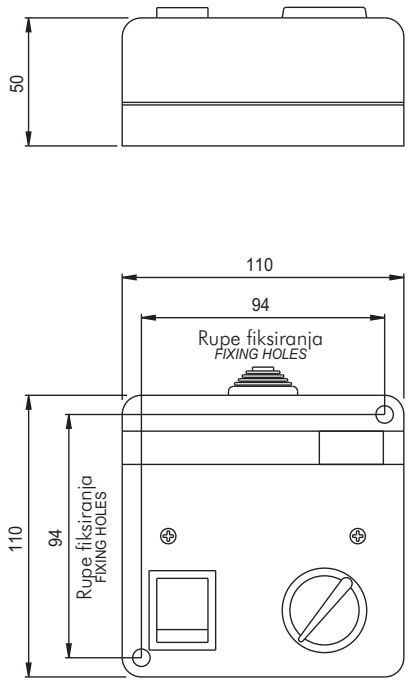
Manual voltage converter with continuous regulation by potentiometer. Electronic tuning by triac phase control closed loop type. Suitable for single-phase asynchronous adjustable motor.
Note: all regulators by triac control can cause electric hum in the motor at low speed. We advise against reducing under 50% the nominal speed of the electric motor. Motor electric hum can be minimized by using 3 wire capacitor/star winding.

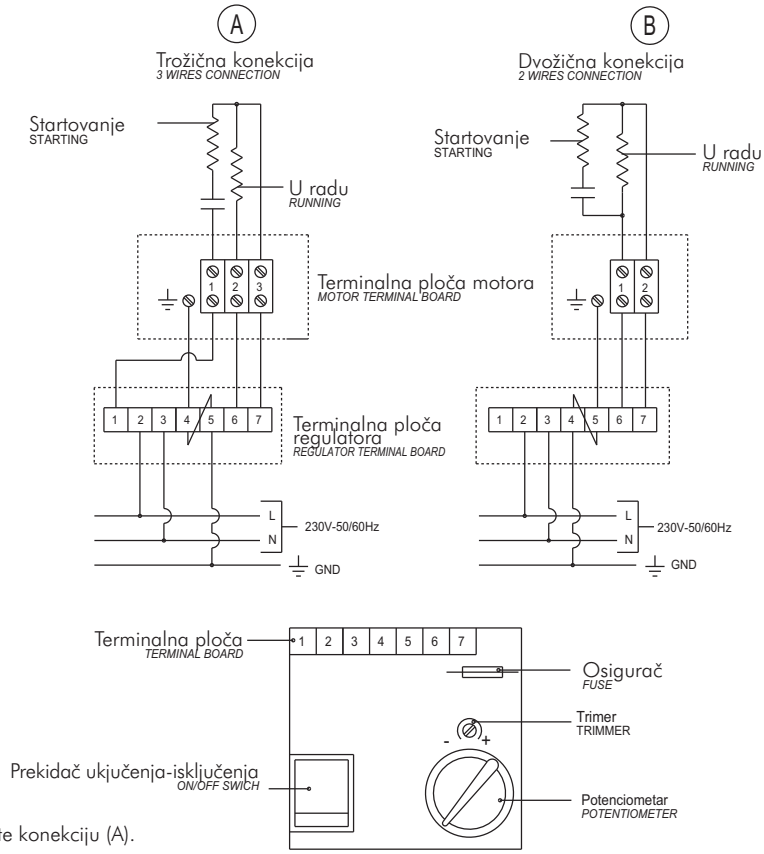
CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 1,5 A.
- Timed protection fuse 2A/250V.
- Minimum speed setting tuner.
- Radio noise filter EMC.
- Pilot light.
- Housing in techno-polymer RAL 9016 (white).
- Protection IP 42.
- Weight Kg 0,5.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RV/1

Dimenzije u mm/Dimensions in mm





Važno: Za postizanje optimalne regulacije, bolje upotrebite konekciju (A).
Note: to obtain an aptimal regulation it's better to utilize the connection (A)

RV/2

Jednofazni elektronski regulator brzine obrtaja 7 A
Single-phase electronic speed regulator 7 A

OSNOVNI PODACI :

Manuelni regulator napona sa potenciometrom bez mogućnosti stepenog podešavanja.Ima trijak prekidač faznog prelaza sa zatvorenom petljom.Pogodno je primeniti za jednofazne asinhrone motore sa regulacijom.
Pažnja: Za mali broj obrtaja svi naponski regulatori sa trijakom stvaraju brujanje u motoru.Beleška: Predlažemo da za smanjenje buke koristite ispod 50% od nominalne brzine obrtaja električnog motora. Brujanje električnog motora se može smanjiti korišćenjem trožičnog kondenzatora /spajanjem u zvezdu.

KONSTRUKCIJA :

- Izvor od 230V-1 faza-50/60Hz.
- Nominalna struja max 7A (min.4 A).
- Topljivi osigurač 8A/250V.
- Podesiva regulacija minimalne brzine.
- EMC filter za radio smetnje.
- Upravljačka lampica.
- Kućište od technopolymer-a RAL 9016 (belo).
- Rebro za hlađenje od vučenog aluminijuma.
- Zaštita IP42
- Težina 0,7 kg.

DESCRIPTION

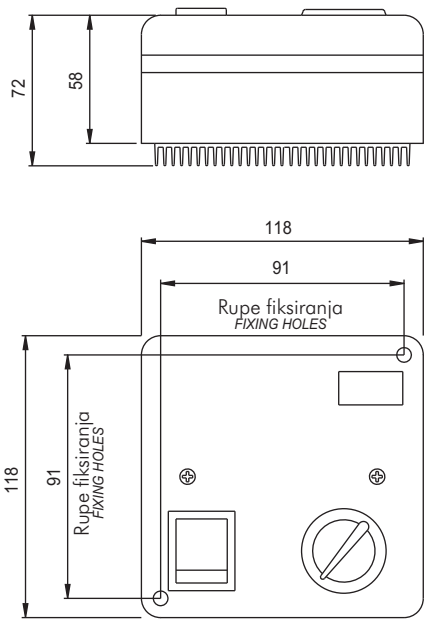
Manual voltage converter with continuous regulation by potentiometer. Electronic tuning by triac phase control closed loop type. Suitable for single-phase asynchronous adjustable motor.
Note: all regulators by triac control can cause electric hum in the motor at low speed. We advise against reducing under 50% the nominal speed of the electric motor. Motor electric hum can be minimized by using 3 wire capacitor/star winding.

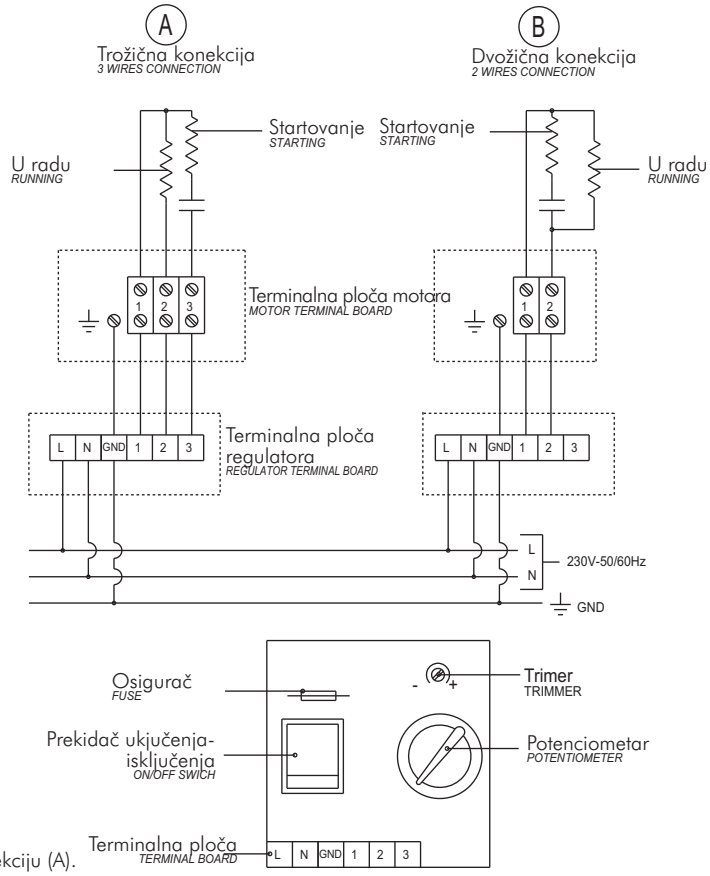
CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 7 A (min. 4 A).
- Timed protection fuse 8A/250V.
- Minimum speed setting tuner.
- Radio noise filter EMC.
- Pilot light.
- Housing in techno-polymer RAL 9016 (white).
- Cooling fin in extruded aluminium.
- Protection IP 42.
- Weight Kg 0,7.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RV/2

Dimenzije u mm/Dimensions in mm





Važno: Za postizanje optimalne regulacije, bolje upotrebite konekciju (A).
Note: to obtain an aptimal regulation it's better to utilize the connection (A)

RVS

Jednofazni autotransformatorski regulator brzine obrtaja 0,5 A

Single-phase self-transformer speed regulator 0,5 A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za jednofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 230V-1 faza-50/60Hz.
- Nominalna struja max 0,5 A.
- Izlazni napon 1(125V)-2(140V)-3(160V) 4(200V)-5(230V)
- Zaštita IP42
- Kućište od technopolymer-a RAL 9016 (belo).
- Težina 0,7 kg.

GENERAL DESCRIPTION

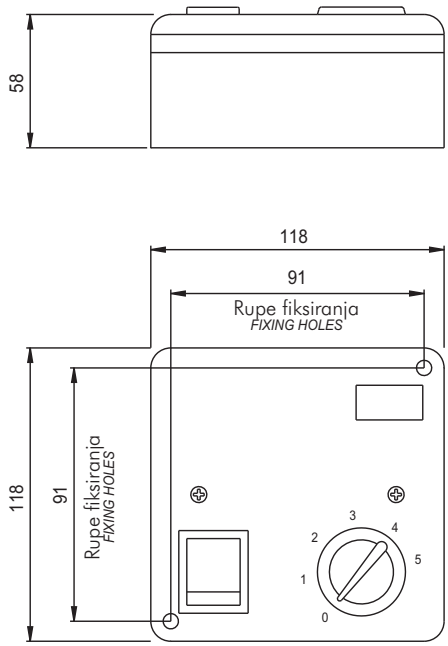
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

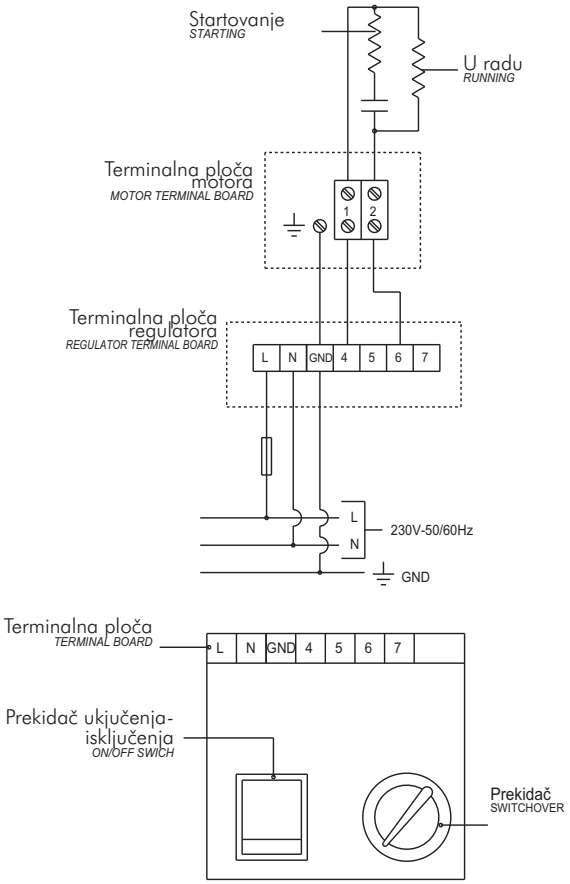
CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 0.5A .
- Output voltage 1(125V)-2(140V)-3(160V)-4(200V)-5(230V).
- Protection IP 42.
- Housing in techno-polymer RAL9016 (white).
- Weight Kg.0,7.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVS

Dimenzije u mm/Dimensions in mm





RVM

Jednofazni autotransformatorski regulator brzine obrtaja 1,5 A

Single-phase self-transformer speed regulator 1,5 A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 6 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za jednofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 230V-1 faza-50/60Hz.
- Nominalna struja max 1,5 A.
- Izlazni napon 1(60V)-2(100V)-3(135V) 4(160V)-5(185V)-6(230V)
- Zaštita IP55.
- Upravljačka lampica.
- Kućište od livenog aluminijuma RAL 7001 (sivo).
- Težina 2,5 kg.

GENERAL DESCRIPTION

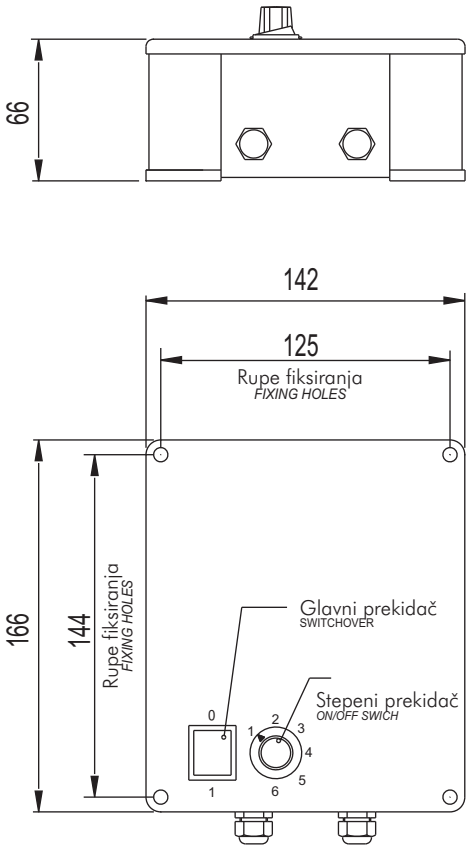
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

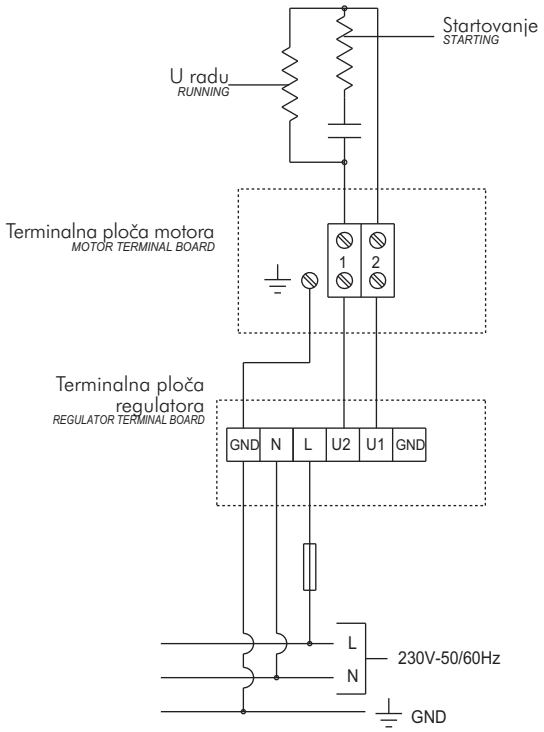
CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 1,5 A.
- Output voltage 1(60V)-2(100V)-3(135V)-4(160V)-5(185V)-6(230V).
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 2,5.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVM

Dimenzije u mm/Dimensions in mm





SEK.12

RVM/2

Jednofazni autotransformatorski regulator brzine obrtaja 4 A

Single-phase self-transformer speed regulator 4A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za jednofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 220/240V-1 faza-50/60Hz.
- Nominalna struja max 4 A.
- Izlazni napon 1(60V)-2(105V)-3(130V) 4(160V)-5(230V)
- Zaštita IP55.
- Upravljačka lampica.
- Kućište od livenog aluminijuma RAL 7001 (sivo).
- Težina 5 kg.

GENERAL DESCRIPTION

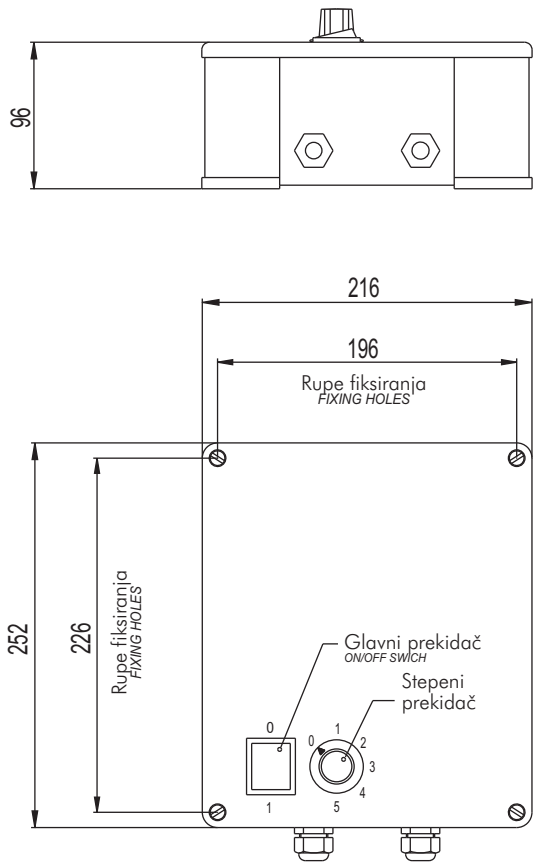
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

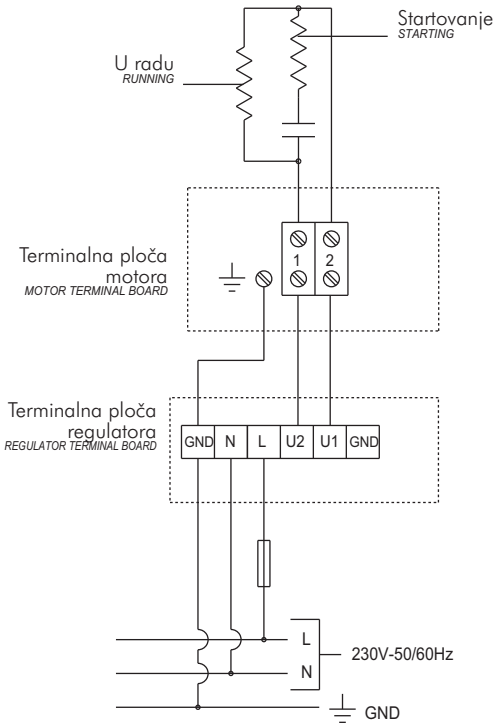
CONSTRUCTION

- Supply 220/240V-1Ph-50/60Hz.
- Nominal current max 4 A.
- Output voltage 1(60V)-2(105V)-3(130V)-4(160V)-5(230V)
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 5.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVM/2

Dimenzije u mm/Dimensions in mm





SEK. 12

RVM/3

Jednofazni autotransformatorski regulator brzine obrtaja 7 A

Single-phase self-transformer speed regulator 7A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za jednofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 220/240V-1 faza-50/60Hz.
- Nominalna struja max 7 A.
- Izlazni napon 1(60V)-2(105V)-3(130V) 4(160V)-5(230V)
- Zaštita IP55.
- Upravljačka lampica.
- Kućište od livenog aluminijuma RAL 7001 (sivo).
- Težina 8,3 kg.

GENERAL DESCRIPTION

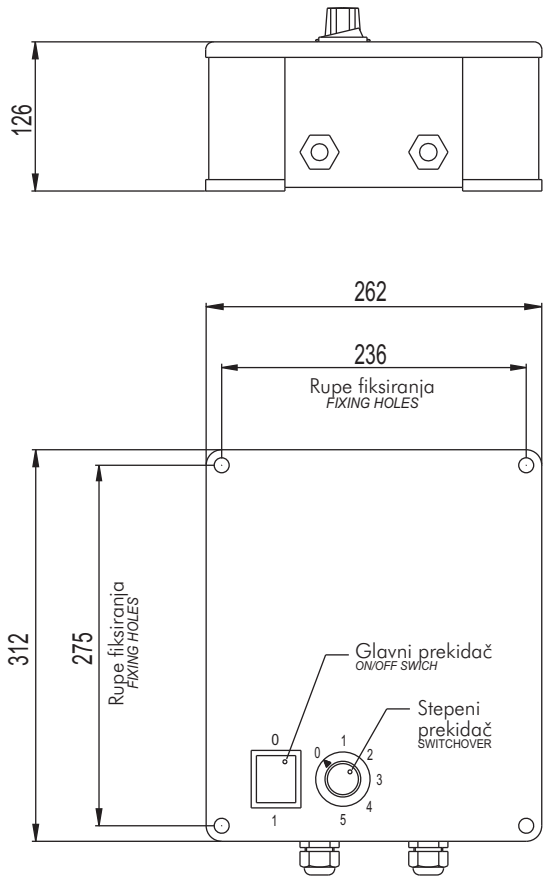
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

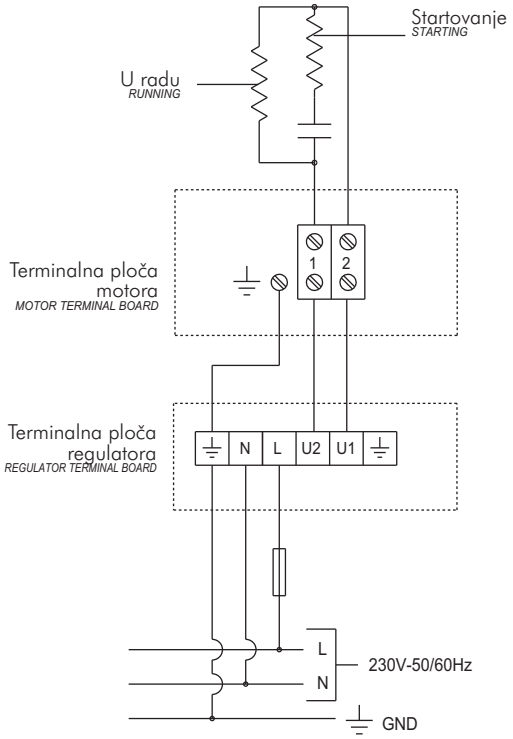
CONSTRUCTION

- Supply 220/240V-1Ph-50/60Hz.
- Nominal current max 7 A.
- Output voltage 1(60V)-2(105V)-3(130V)-4(160V)-5(230V).
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 8,3.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVM/3

Dimenzije u mm/Dimensions in mm





SEK.12

RVM/4

Jednofazni autotransformatorski regulator brzine obrtaja 12 A

Single-phase self-transformer speed regulator 12A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za jednofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 230V-1 faza-50/60Hz.
- Nominalna struja max 12 A.
- Izlazni napon 1(60V)-2(105V)-3(130V) 4(160V)-5(230V)
- Zaštita IP21.
- Upravljačka lampica.
- Kućište od livenog aluminijuma RAL 7001 (sivo) sa zaštitom od plastificirane čelične ploče RAL 7035 (sivo).
- Težina 13,8 kg.

.

GENERAL DESCRIPTION

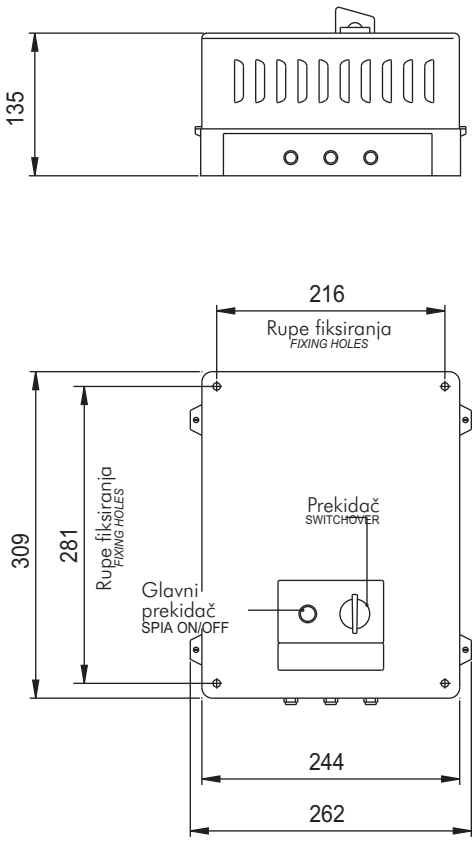
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for single-phase asynchronous adjustable motors.

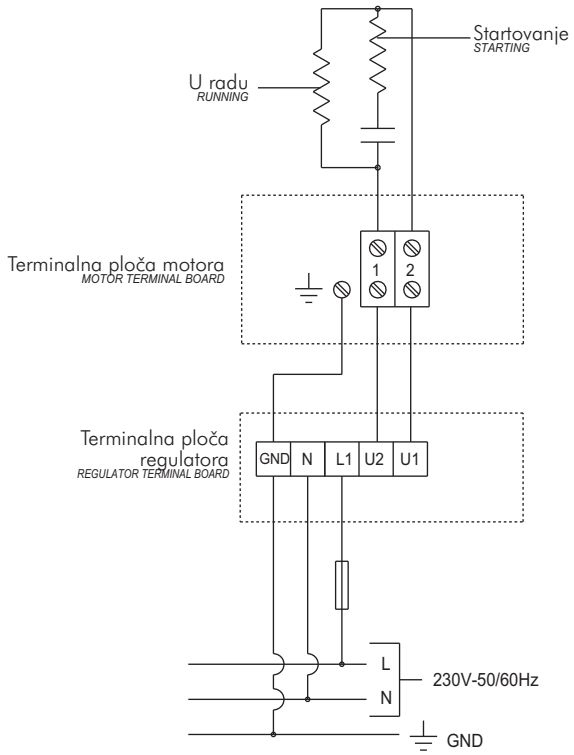
CONSTRUCTION

- Supply 230V-1Ph-50/60Hz.
- Nominal current max 12 A.
- Output voltage 1(60V)-2(105V)-3(130V)-4(160V)-5(230V).
- Protection IP 21.
- Pilot light.
- Housing in die-cast aluminium RAL 7001 (grey) with cover in plasticized steel sheet RAL 7035 (grey).
- Weight Kg 13,8.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM — RVM/4

Dimenzije u mm/Dimensions in mm





RVT

Trofazni autotransformatorski regulator brzine obrtaja 2 A

Three-phase self-transformer speed regulator 2A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za trofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 400V-3 faze-50/60Hz.
- Nominalna struja max 2 A.
- Izlazni napon1(90V)-2(140V)-3(180V) 4(230V)-5(400V)
- Zaštita IP54.
- Upravljačka lampica.
- Kućište od livenog aluminijuma RAL 7001 (sivo) sa zaštitom od plastificirane čelične ploče RAL 7035 (svetlo sivo).
- Težina 7,5 kg.

GENERAL DESCRIPTION

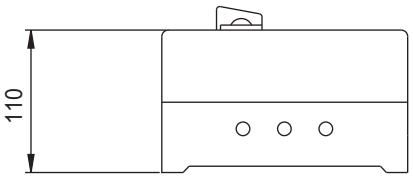
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

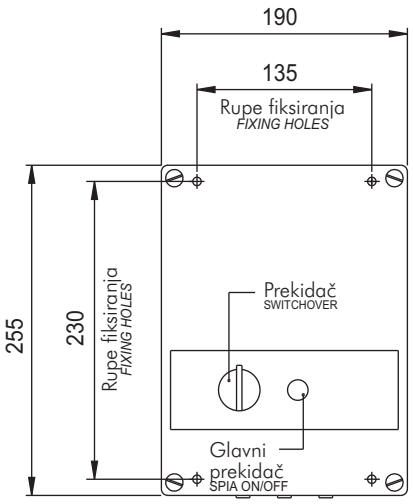
CONSTRUCTION

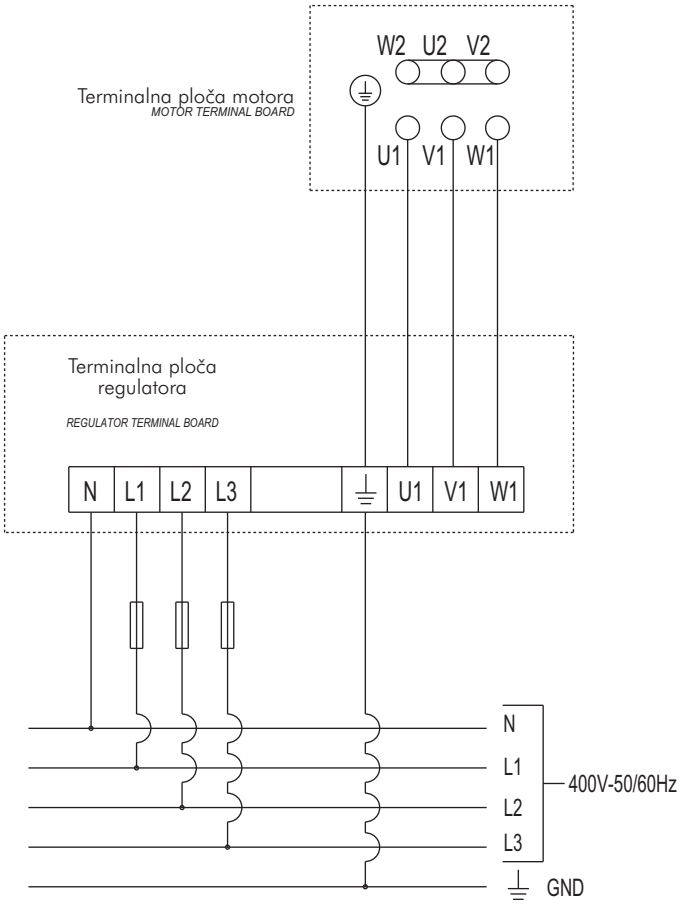
- Supply 400V-3Ph-50/60Hz.
- Nominal current max 2 A.
- Output voltage 1(90V)-2(140V)-3(180V)-4(230V)-5(400V).
- Protection IP 54.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey) with cover in plastic material RAL7035 (light grey).
- Weight Kg 7,5.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVT

Dimenzije u mm/Dimensions in mm







SEK.12

RVT/1

Trofazni autotransformatorski regulator brzine obrtaja 4 A

Three-phase self-transformer speed regulator 4A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za trofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 400V-3 faze-50/60Hz.
- Nominalna struja max 4 A.
- Izlazni napon 1(95V)-2(145V)-3(190V) 4(240V)-5(400V)
- Zaštita IP55.
- Upravljačka lampica.
- Kućište od livenog aluminijuma RAL 7001 (sivo).
- Težina 11 kg.

GENERAL DESCRIPTION

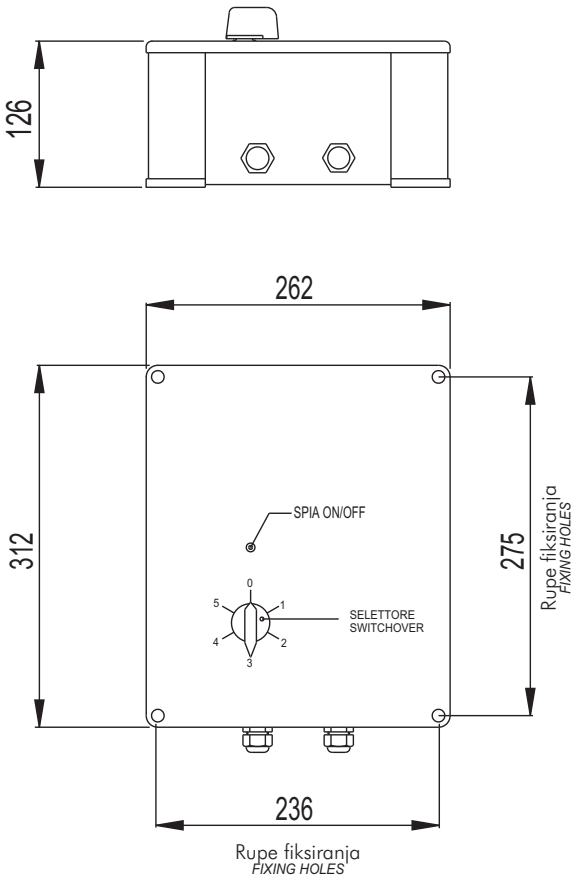
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

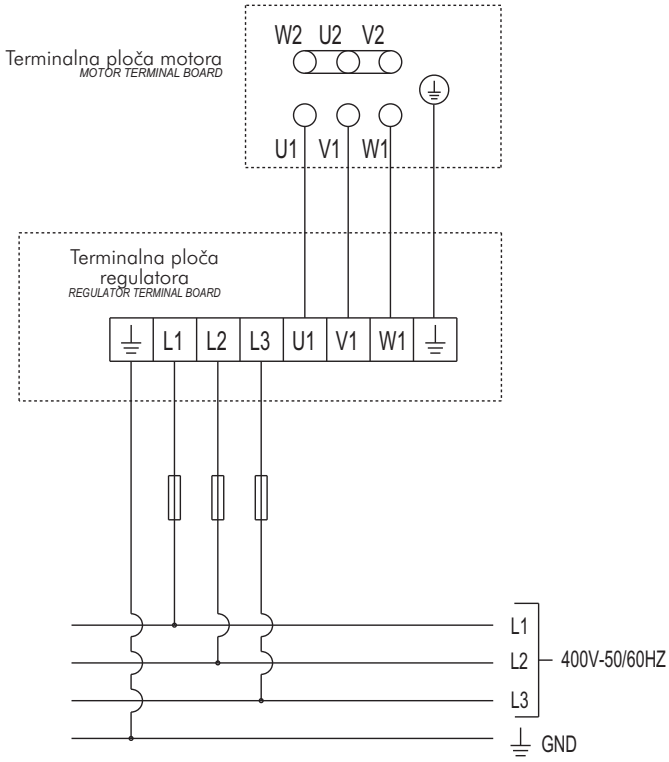
CONSTRUCTION

- Supply 400V-3Ph-50/60Hz.
- Nominal current max 4 A.
- Output voltage 1(95V)-2(145V)-3(190V)-4(240V)-5(400V).
- Protection IP 55.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey).
- Weight Kg 11.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVT/1

Dimenzije u mm/Dimensions in mm





RVT/2

Trofazni autotransformatorski regulator brzine obrtaja 7 A

Three-phase self-transformer speed regulator 7A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za trofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 400V-3 faze-50/60Hz.
- Nominalna struja max 7 A.
- Izlazni napon1(90V)-2(140V)-3(180V) 4(230V)-5(400V)
- Zaštita IP21.
- Upravljačka lampica.
- Kućište od livenog aluminijuma RAL 7001 (sivo) sa zaštitom od plastificirane čelične ploče RAL 7035 (svetlo sivo).
- Težina 20 kg.

GENERAL DESCRIPTION

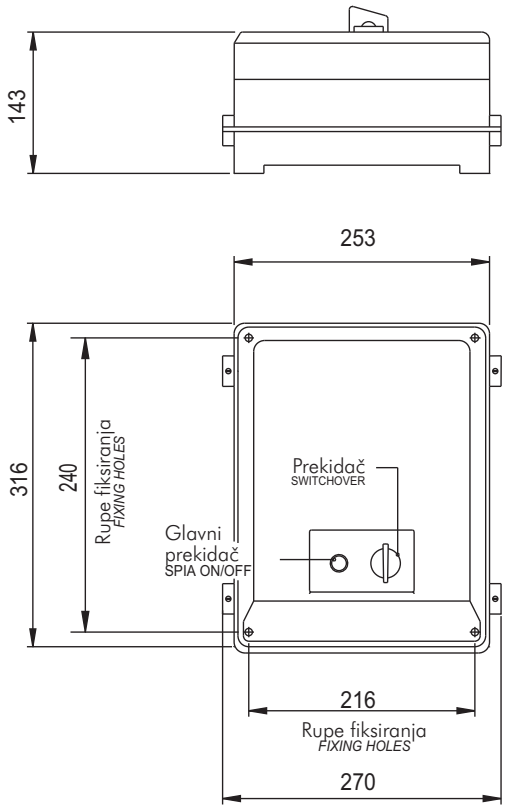
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

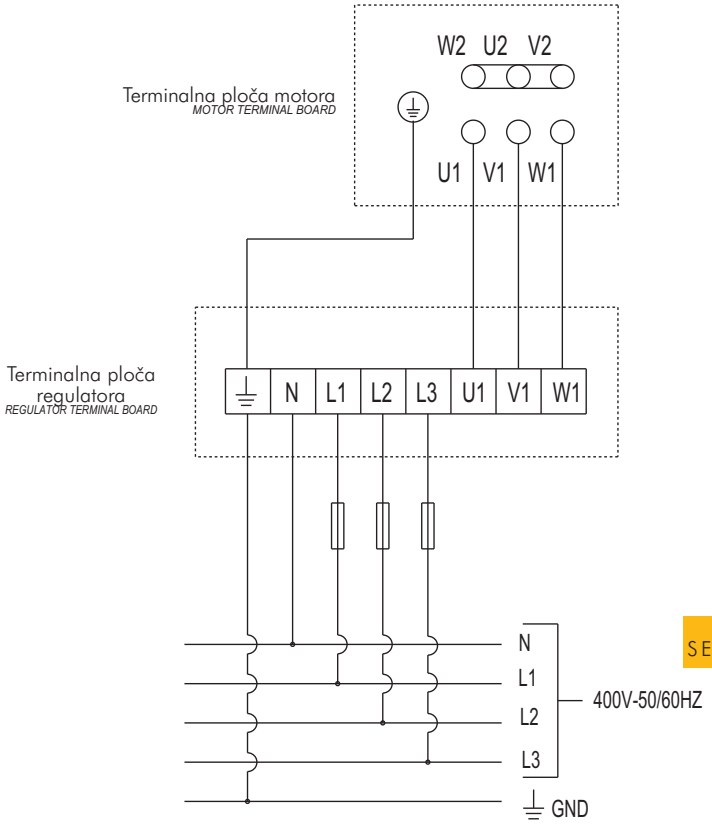
CONSTRUCTION

- Supply 400V-3Ph-50/60Hz.
- Nominal current max 7 A.
- Output voltage 1(90V)-2(140V)-3(180V)-4(230V)-5(400V).
- Protection IP 21.
- Pilot light
- Housing in die-cast aluminium RAL 7001 (grey) with cover in coated steel sheet RAL 7035 (light grey).
- Weight Kg 20.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVT/2

Dimenzije u mm/Dimensions in mm





RVT/3

Trofazni autotransformatorski regulator brzine obrtaja 14 A

Three-phase self-transformer speed regulator 14 A

OSNOVNI PODACI :

Manuelno menjanje napona pomoću autotransformatora sa prekidačem od 5 stepeni. Minimalna magnetno-akustična buka motora.
Pogodan za trofazne asinhrone motore sa regulacijom.

KONSTRUKCIJA :

- Izvor od 400V-3 faze-50/60Hz.
- Nominalna struja max 14 A.
- Izlazni napon 1(90V)-2(140V)-3(180V) 4(230V)-5(400V)
- Zaštita IP21.
- Upravljačka lampica.
- Kućište od čelične ploče obojenog sa epoxy farbom RAL 7035 (svetlo sivo).
- Težina 24 kg.

GENERAL DESCRIPTION

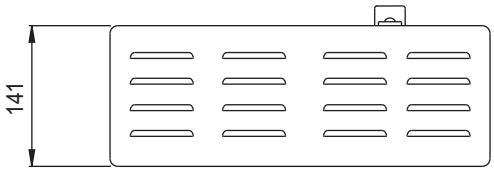
Manual voltage converter by self-transformer switchover, 5 step options. Minimum magneto-acoustic noise in the motor. Suitable for three-phase asynchronous adjustable motors.

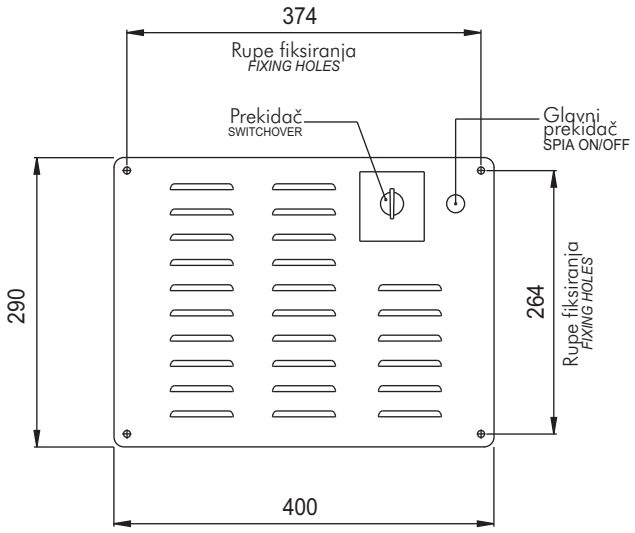
CONSTRUCTION

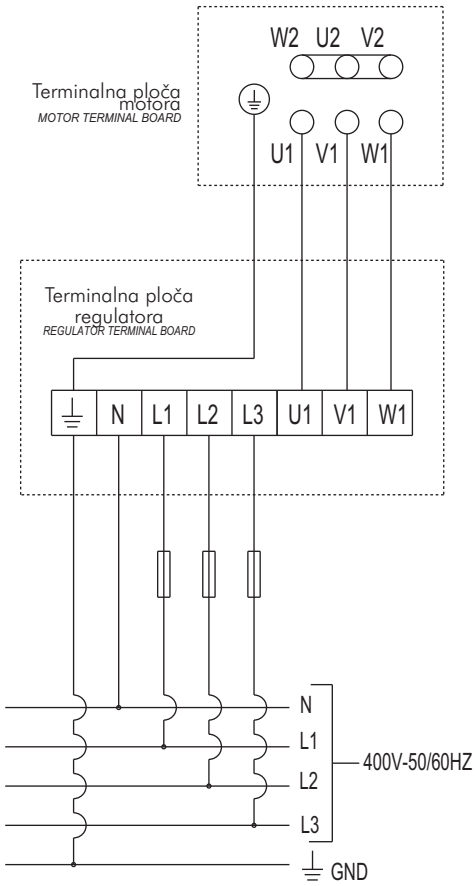
- Supply 400V-3Ph-50/60Hz.
- Nominal current max 14 A.
- Output voltage 1(90V)-2(140V)-3(180V)-4(230V)-5(400V).
- Protection IP 21.
- Pilot light
- Housing in epoxy painted steel sheet RAL 7035 (light grey).
- Weight Kg 24.

DIMENZIJE I ŠEMA POVEZIVANJA / DIMENSIONS AND WIRING DIAGRAM RVT/3

Dimenzije u mm/Dimensions in mm







Akustično linijski centrifugalni ventilatori i Rekuperator toplote
In line acoustic centrifugal fans and heat recuperator

13

MINI-BOX

str. 1.13

Akustično linijski centrifugalni ventilatori
In line acoustic centrifugal fans

REC

str. 6.13

Rekuperator toplote
Heat recuperator

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PLATE MOUNTED AND RING AXIAL FANS — SEK. 3

Cevni ventilatori
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Akustično linijski centrifugalni ventilatori i Rekuperator toplote
IN LINE ACOUSTIC CENTRIFUGAL FANS AND HEAT RECUPERATOR — SEZ. 13

MINI-BOX

Redni akustični centrifugalni ventilatori
In line acoustic centrifugal fans

OSNOVNI PODACI :

MINI-BOX serija je dizajnirana sa jednostavnim ulazom centrifugalnog ventilatora veličine od 100 do 315,u kućištu akustično izolovanom sa kružnim obodom za spajanje na kanalni-cevni sistem.Modularnost,nizak nivo buke ,smanjena dimenzija ove ventilatore čini idealnim za rešavanje problema u nepušačkim javnim prostorijama. Pogodni su za transport čistog vazduha do maksimalne temperature od 60°C.

KONSTRUKCIJA :

- Glavna struktura je od galvanizovane čelične ploče, sa unutrašnjom postavom od akustičnog materijala (debljine od 10mm).
- Jednofazni električni motor, IP44, klase B, sa termo zaštitom, pogodan za regulaciju brzine obrtaja (pomoću regul-latora brzine obrtaja).
- Podupirač za fiksiranje.
- Unazad zakrivljene lopatice, visoke efikasnosti i niskog nivoa buke.
- Spoljašnja priključna kutija IP55.

DODATNI DELOVI :

- Promenjivi filter od polyester- a sa efikasnošću od 90.1%, klase EU4.
- Prigušivači.
- Električni grejači.
- Izmenjivač toplote.
- Leptirasti ventil.
- Spojnice kanala.
- Zaštitna rešetka.

GENERAL DESCRIPTION

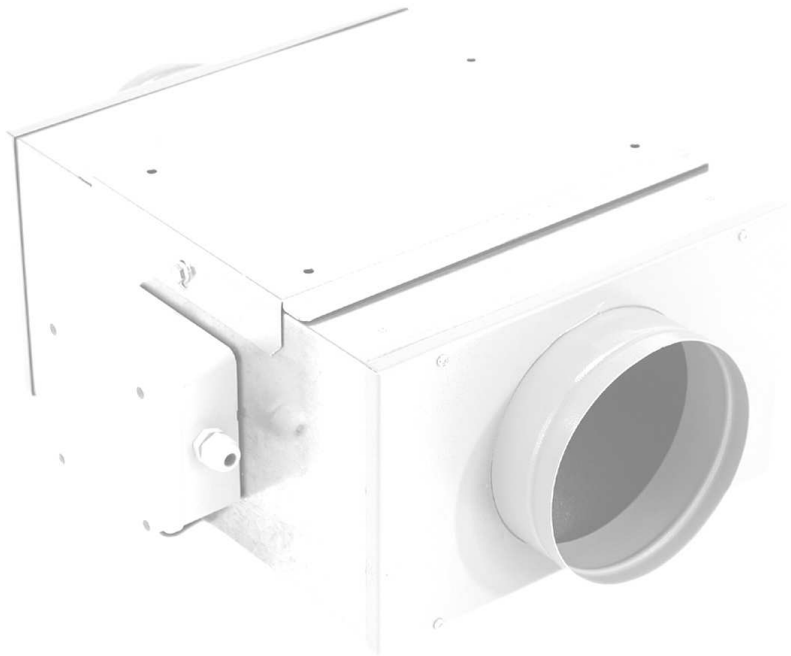
The MINI-BOX series is composed by simple inlet centrifugal fans with size from 100 to 315, built in an acoustically insulated casing with circular flanges to fit to canalization. Modularity, low noise level and reduced dimensions of these fans make them ideal for solving problems related to non-smoking areas in public premises.
They are suitable to convey clean air up to a maximun temperature to 60°C.

CONSTRUCTION

- Main structure in galvanized steel sheet, inside lined with acoustic insulation (thickness 10 mm).
- Single-phase electric motor, IP 44, class B, with thermal protection, suitable for speed regulation (by speed regulators).
- Fitting bracket
- Backward bladed impeller with high efficiency and low noise level.
- Outer terminal box IP 55.

ACCESSORIES

- Polyester removable filter with efficiency 90.1%, class EU4.
- Silencers.
- Electric heaters.
- Heat exchangers.
- Backdraught shutters.
- Duct clamps.
- Protection guards.

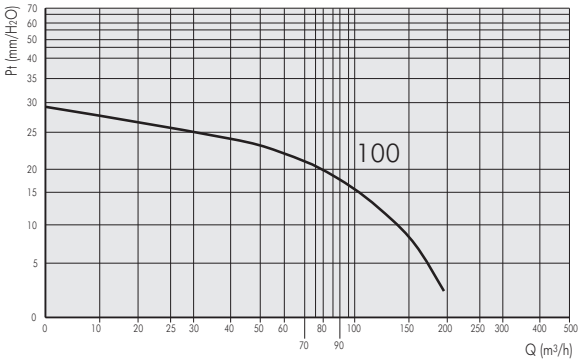


Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

MINI-BOX 100

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
MINI-BOX	100	M	1990	0,06	0,26	44/B	RVN o RVS

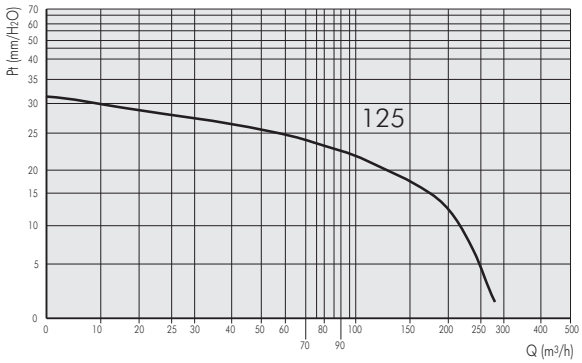
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
MINI-BOX	100	34	37	5	16	25	32	22	18	9	6



MINI-BOX 125

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
MINI-BOX	125	M	1700	0,07	0,29	44/B	RVN o RVS

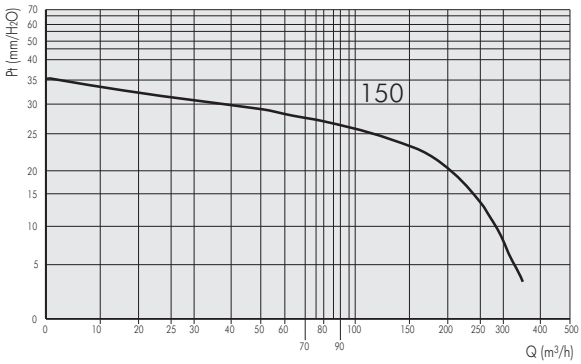
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
MINI-BOX	125	40	43	9	17	27	39	31	23	15	5



MINI-BOX 150

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
MINI-BOX	150	M	2530	0,08	0,38	44/B	RVN o RVS

Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
MINI-BOX	150	45	48	16	25	33	41	36	28	20	10



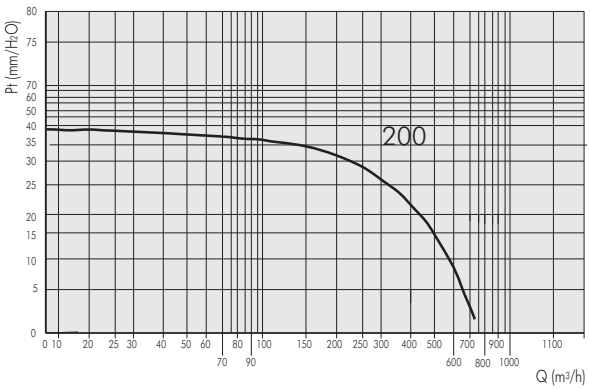
Pažnja: Nivo pritiska zvuka je meren u slobodnom prostoru sa 3m razdaljine od centra ventilatora.
Attention: *the sound pressure level is measured in free field at 3m distance from the fan centre.*

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

MINI-BOX 200

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
MINI-BOX	200	M	2550	0,12	0,54	44/B	RVN

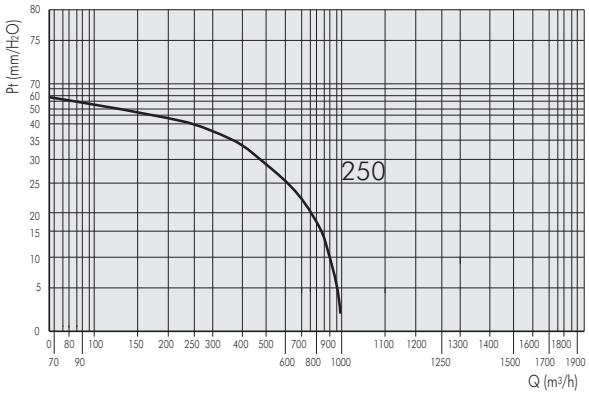
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
MINI-BOX	200	46	49	15	26	36	37	41	30	23	10



MINI-BOX 250

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
MINI-BOX	250	M	2550	0,19	0,83	44/B	RVNoRVM

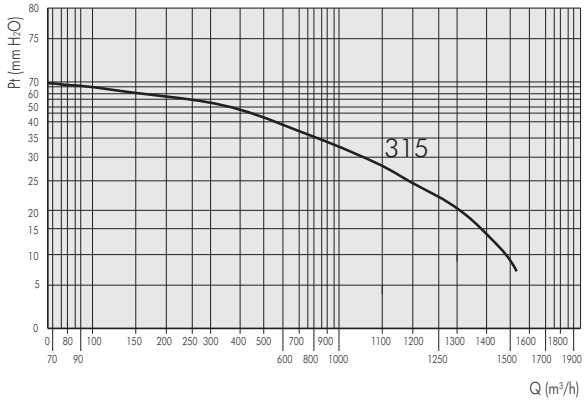
Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
MINI-BOX	250	48	51	18	30	42	41	39	32	31	16



MINI-BOX 315

Tip Type	Model Model	U	r.p.m.	Pm (kW)	In max (A)	IP/CL	Reg.
MINI-BOX	315	M	2630	0,31	1,35	44/B	RVM

Tip Type	Mod.	Lp dB(A)	Lw dB (A) u oktavi spektruma Hz) " in octave spectrum (Hz)								
			Tot.	63	125	250	500	1k	2k	4k	8k
MINI-BOX	315	49	52	20	30	38	40	38	35	32	19

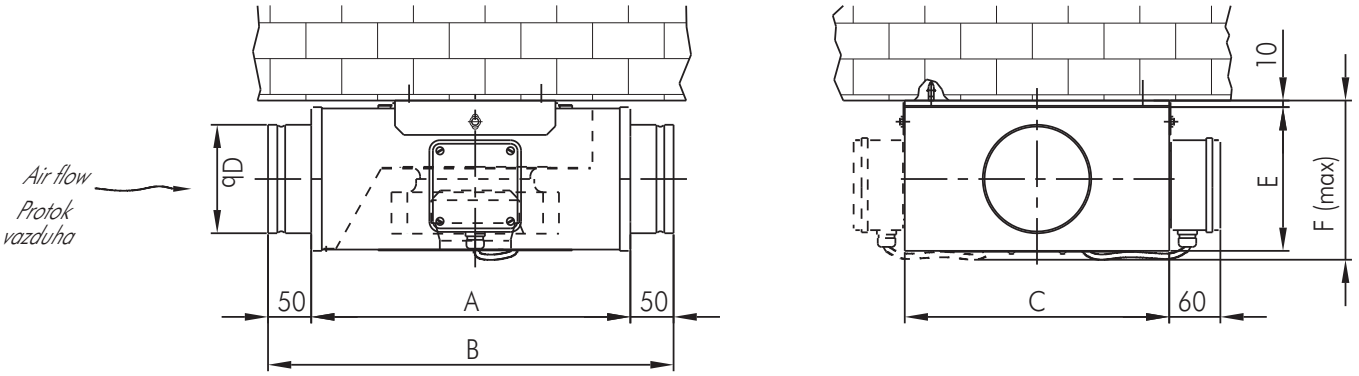


Pažnja: Nivo pritiska zvuka je meren u slobodnom prostoru sa 3m razdaljine od centra ventilatora.
Attention: *the sound pressure level is measured in free field at 3m distance from the fan centre.*

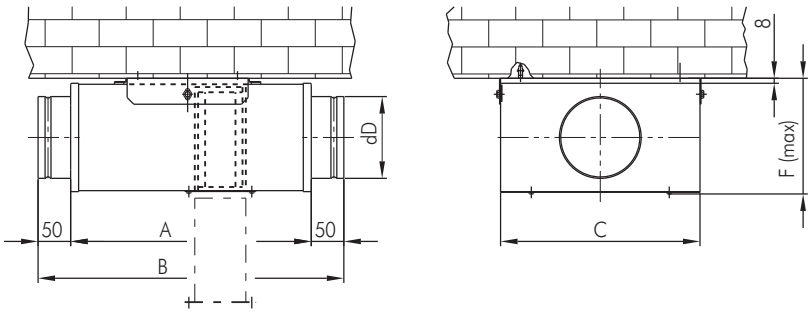
DIMENZIJE / DIMENSIONS

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

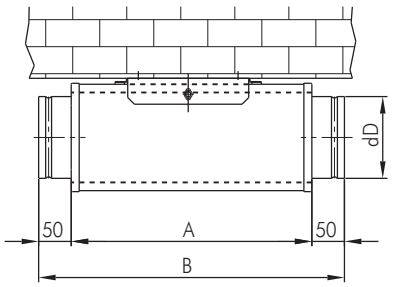
Mini-Box/*Mini-Box*



Filter/*Filter* (FMB)



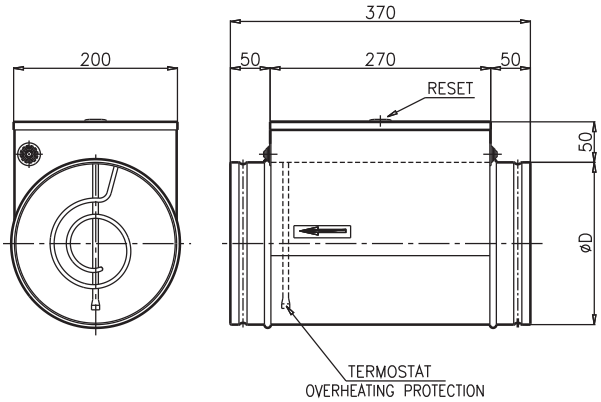
Prigušivač / *Silencer* (SMB)



Veličina/Size	A	B	C	•D	E	F (max)
100	363	463	303	98	163	190
125	363	463	303	123	163	190
150	363	463	303	148	183	210
200	503	603	373	198	233	260
250	503	603	373	248	283	310
315	503	603	423	312	343	370

Dimenzije u mm/ *Dimensions in mm*

ELEKTRIČNI GREJAČI / ELECTRIC HEATERS



TIP / TYPE	dD [mm]	Q min [m³/h]	U	P [kW]	I nom [A]
BE 100–0,6–1F	100	40	1~230V–50Hz	0,6	2,8
BE 125–0,6–1F	125	70	1~230V–50Hz	0,6	2,8
BE 125–1,2–1F	125	70	1~230V–50Hz	1,2	5,5
BE 160–1,2–1F	160	110	1~230V–50Hz	1,2	5,5
BE 160–2,0–1F	160	110	1~230V–50Hz	2,0	9,1
BE 200–2,0–1F	200	170	1~230V–50Hz	2,0	9,1
BE 200–6,0–3F	200	170	3~400V–50Hz	6,0	8,7
BE 250–2,4–1F	250	270	1~230V–50Hz	2,4	10,9
BE 250–6,0–3F	250	270	3~400V–50Hz	6,0	8,7
BE 315–6,0–3F	315	415	3~400V–50Hz	6,0	8,7

Dimenzije u mm/ *Dimensions in mm*

Porast temperature / *Temperature increase*

$$\Delta T\ [^{\circ}C] \simeq \frac{P\ [kW]}{Q\ [m^3/s] \cdot \delta\ [kg/m^3]}$$

REC

Rekuperator toplote
Heat recuperator

OSNOVNI PODACI :

Jedinice za obnavljanje toplote iz serije REC (u 8 veličina za normalni protok vazduha od 50 do 4500 m^3/h) su planirane da rešavaju problem visoke potrošnje energije, koje su tipične za industrijske pogone, korišćenjem spoljašnjeg vazduha.
Zahvaljujući postojanju razmenjivača toplote, moguće je povratiti 50% energije koja bi inače bila izgubljena isterivanjem iskorišćenog vazduha.
REC uređaji integrisani u dodatni sistem ventilacije i održavanja,mogu raditi zajedno u letnjoj i zimskoj sezoni.Naročito su pogodni za plafonsku ugradnju i povezivanje na kanalne sisteme,omogućuju direktno izvlačenje i uvlačenje vazduha u prostoriju-okolinu.

KONSTRUKCIJA :

-NOSEĆA KONSTRUKCIJA: je napravljena od tzv. ALUZINK panela sa jednim ili dvostrukim oklopom sa termalnom i akustičnom izolacijom od polyethylen- a i polyester- a debljine 10mm (Mod. 300-1200) i debljine 20mm (Mod.1600-4500).
Na ulaznom otvoru je panel sa filterom koji se lako može postaviti u slučaju zamene. Sve komponente su ispitane i lako se uklanjaju sa osnove.

- VENTILATORSKI SEKTOR: Ovaj sektor se sastoji od ventilatora sa dvostrukim otvorom i unapred zakrivljenim lopaticama montirani na antivibracione držače.
Monofazni (220 V/50Hz), trobrzinski motor je direktno povezan na ventilator, (1200-1600-2000-2600-3500), dvobrzinski(300-600) , Trofazni dvobrzinski(4500)priključen je na upravljački panel mašine.

- NADOKNADA TOPLOTE: Statični tip obnavljača toplote sa poprečnim protokom, visoke je efikasnosti. Ploče od aluminijuma sa protocima - odvojeni odgovarajućim zaptivačima. Ispod obnavljačke jedinice je montirano kućište za skupljanje kondenzata ,odvodne cevi su od NERĐAJUĆEG čelika.

-FILTER VAZDUHA: Filter je tipa rešetki sa valovitiim pregradama i mogućnošću zamene od osnove, sa filterom u sredini od sintetičkog vlakna klase G3
(Procenjena efikasnost 85%-EU3).

DODATNI DELOVI :

-Grejač vode (bez REC 300 i 600)
- Električni grejač
- Menjač brzine (CV3)
-Jedinica kontrolne table (PC3)
- Pomoćna jedinica hlađenja
- Cirkularni adapter
- Regulaciona žaluzina

NA ZAHTEV :

- Verzija sa duplim panelom (REC/D)
- Vertikalna verzija (REC/V)

GENERAL DESCRIPTION

The heat recovery units of the REC series (8 sizes with range of nominal air flow from 50 to 4500 m3/h) were planned and realized to solve the problem of the high consumption of energy, typical of all the plants which use outside air. Thanks to the presence of a heat exchanger, it is possible to recover the 50% of the energy which would otherwise go lost with the expulsion of the spoiled air.
The REC units integrate to the additional systems of ventilation and conditioning and they can work both in the summer and winter seasons. They are particulary suitable for ceiling installations and ducting, allowing the withdrawal and the introduction of the air directly in the environment.

CONSTRUCTION

CARRING STRUCTURE: the carring structure is realized with panels in ALUZINK simple or double shell with thermal and acoustic insulation in polyethylene and polyester with a thickness of 10 mm (Mod.300-1200) and 20 mm (Mod. 1600-4500).
The inlet side filter housing panel can be easily replaced for installation exigences. All the components are examinable and can be easily removed from the bottom.

FAN SECTOR: the fan section is complete of double inlet forward bladed centrifugal fan mounted on antivibration supports. The electric motor is directly coupled to the fan and it is mono phase type 230V/50Hz 3 speed (1200-1600-2000-2600-3500) 2 speed (300-600) and three phase type 2 speed (4500) connected to the power module on the machine board.

HEAT RECOVERY: the heat recovery of the static type with crossed flow high efficiency. The plates are in aluminium with the flows kept separated by suitable sealing. Under the recovery unit is installed a condensate collection housing in STAINLESS steel with draining pipe.

AIR FILTER: the filters are of the cell type with wavy septum removable from the bottom and reusable, with filtering media in synthetic fibre class G3 (Pondered efficiency 85%-EU3).

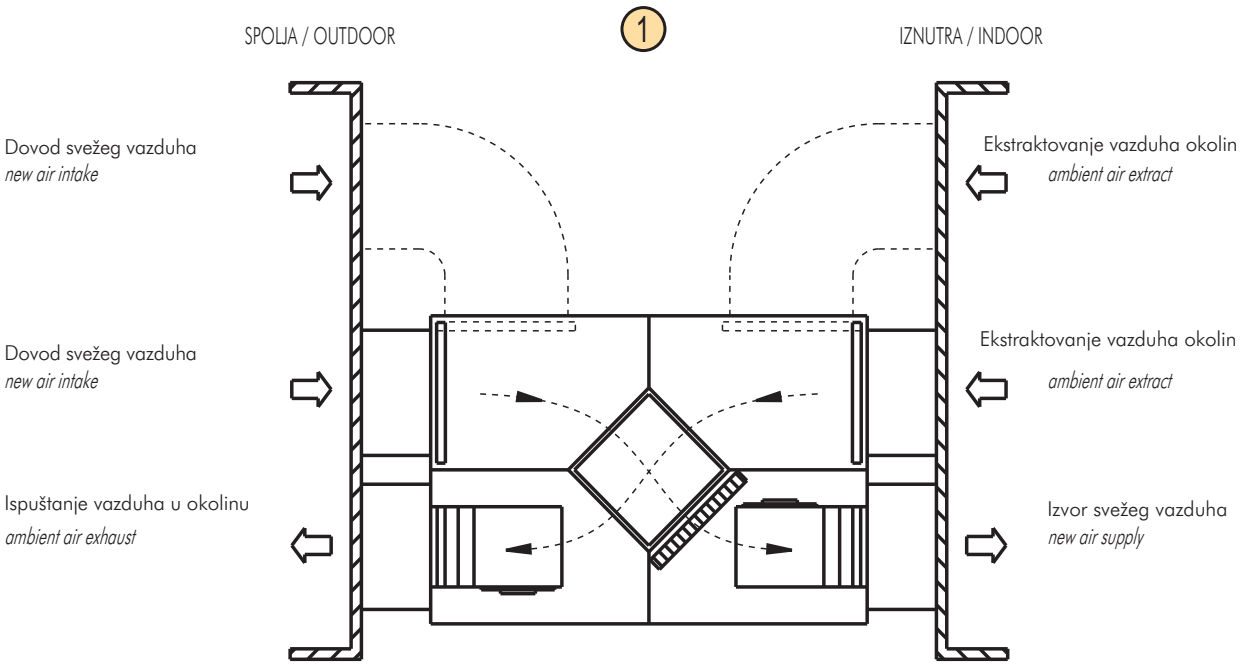
ACCESSORIES

- *Battery of hot water (without REC 300 e 600).*
- *Electric battery.*
- *Speed changeover (CV3).*
- *Unit control panel (PC3).*
- *Auxiliary cooling battery.*
- *Circular spigot adaptor.*
- *Regulation damper.*

UPON REQUEST

- *Double pannelling version (REC/D).*
- *Vertical version (REC/V).*

Standardna orijentacija sa i bez baterije / Standard orientation with and without battery

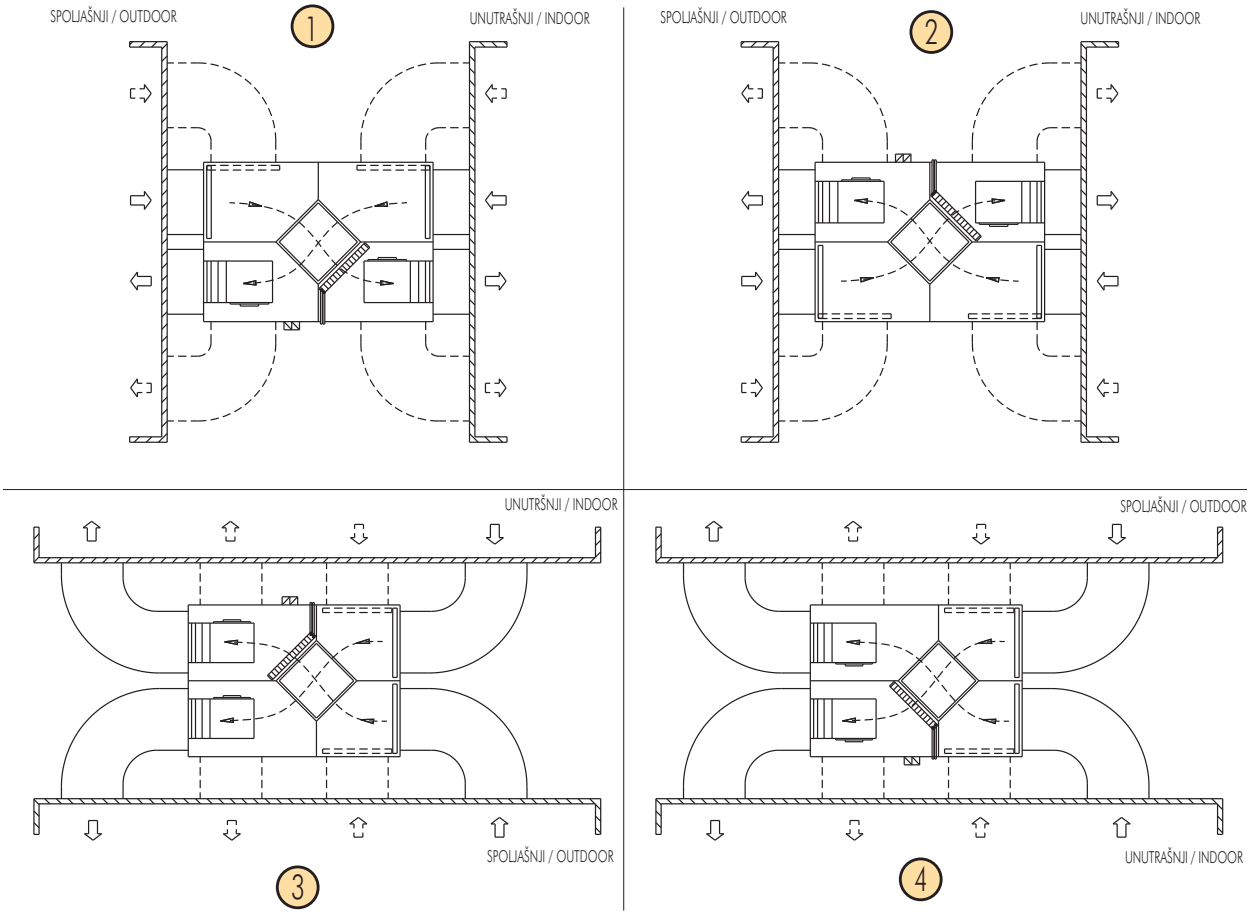


Upozorenje:
Na unutrašnjem otvoru panela opremljenim sa filterom sa može otkloniti i zameniti kao što je prikazano na slici (unutrašnja isprekidana linija).
Note: The inlet side panels equipped with filter housing can be removed and reinstalled as showed in the diagram (dot line indoor)

Orijentacija na zahtev sa isprekidanom linijom / dot line orientations upon request

Orijentacija sa baterijama /orientations with battery: 1 2 3 4

Orijentacija bez baterija / orientations without battery: 1 3



Model Model	Pm (kW)	Pol Poles	In Max (A)	IP	CL	U (V)	Lp dB(A)*
REC 300	0,045X2	4	1,08	44	B	230/1	53
REC 600	0,065X2	2	1,6	44	F	230/1	54
REC 1200	0,147X2	4	3	44	F	230/1	53
REC 1600	0,350X2	4	5,8	55	F	230/1	60
REC 2000	0,350X2	4	6,2	44	F	230/1	59
REC 2600	0,350X2	4	6	55	F	230/1	56
REC 3500	0,550X2	4	11,4	20	F	230/1	59
REC 4500	0,750X2	4	6,2	55	F	400/3	62

PAŽNJA: Nivo vazdušnog pritiska je meren na otvorenom prostoru sa razdaljinom od 1,5m od središta ventilatora u svakom pravcu, sa priključkom kanala na unutrašnji i spoljašnji otvor.

* ATTENTION: the sound pressure level is measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Grejač vode H2O 70°C/60°C T = 8°C / *Hot water battery 70°/60°C T=8°C*

Model/*Model* REC	300	600	1200	1600	2000	2600	3500	4500
Protok vazduha /*Air flow*	-	-	1000	1400	1900	2500	3200	3900
Redovi grejača	-	-	3	3	3	3	3	3
Toplotna moć /*Thermal yeald* (kW)	-	-	11,	16,3	20,4	29,7	35,1	44,3
Temp. toplog vazduha /*Exhaust temperature* (°C)	-	-	40,5	41,5	39	42,2	39,6	39,9
Pad pritiska sa vodene strane /*Charge loss water sid*	-	-	13	31	18	20	27	49

Grejač vode H2O 70°C/60°C T = 8°C / *Hot water battery 70°/60°C T=8°C*

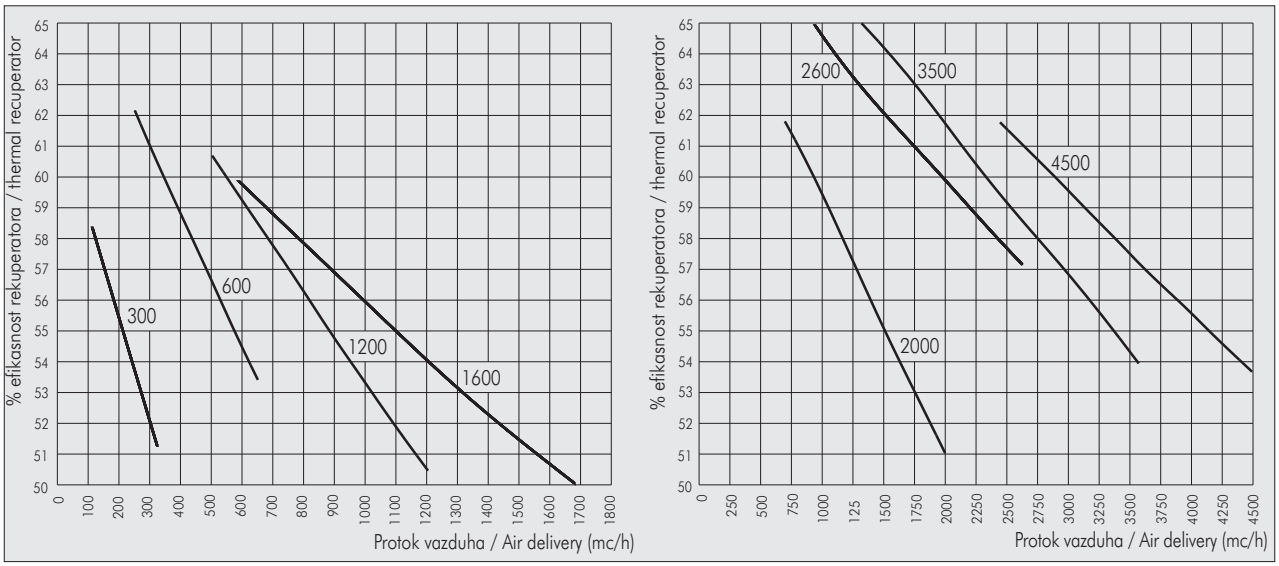
Model /*Model* REC	300	600	1200	1600	2000	2600	3500	4500
Protok vazduha /*Air flow*	-	-	1000	1400	1900	2100	3200	3900
Redovi grejača	-	-	3	3	3	3	3	3
Toplotna moć /*Thermal yeald* (kW)	-	-	13,6	19,4	24,6	35,4	42	52,
Temp. toplog vazduha /*Exhaust temperature* (°C)	-	-	47,1	48	45,3	48,9	45,8	46,
Pad pritiska sa vodene strane /*Charge loss water side* (kPa)	-	-	19	42	25	27	37	67

Električni grejač vode / *Electrical heater battery*

Model/*Model* REC	300	600	1200	1600	2000	2600	3500	4500
Električni otpornik 1. stepena / *Electrical resistor 1 stage* (kW)	2	4	4,5	6	9	12	12	12
Naponski izvor / *Power supply* (V)	230/	230/	400/	400/	400/	400/	400/	400/

EFEKTIVNOSTI / EFFICIENCIES

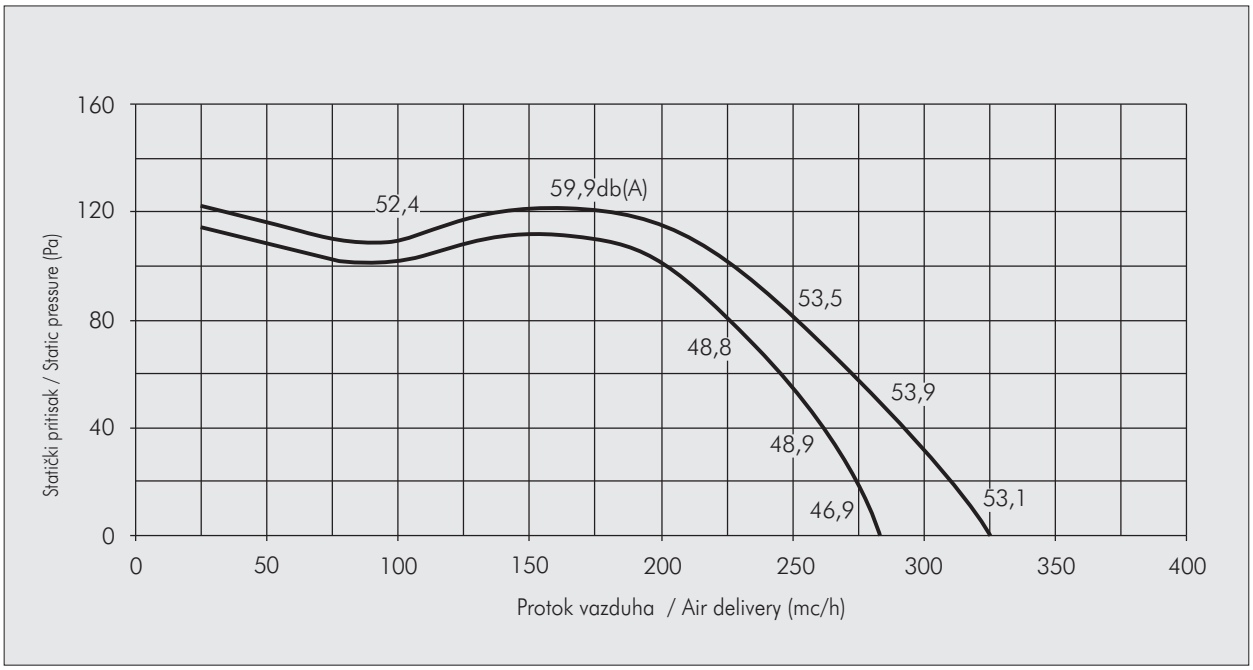
Napomena: ispušten vazduh je 20°C, dovođen obnovljen vazduh -5°C. / Reference: exhaust air 20°C, air intake renewall -5°C



Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3

Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

REC 300

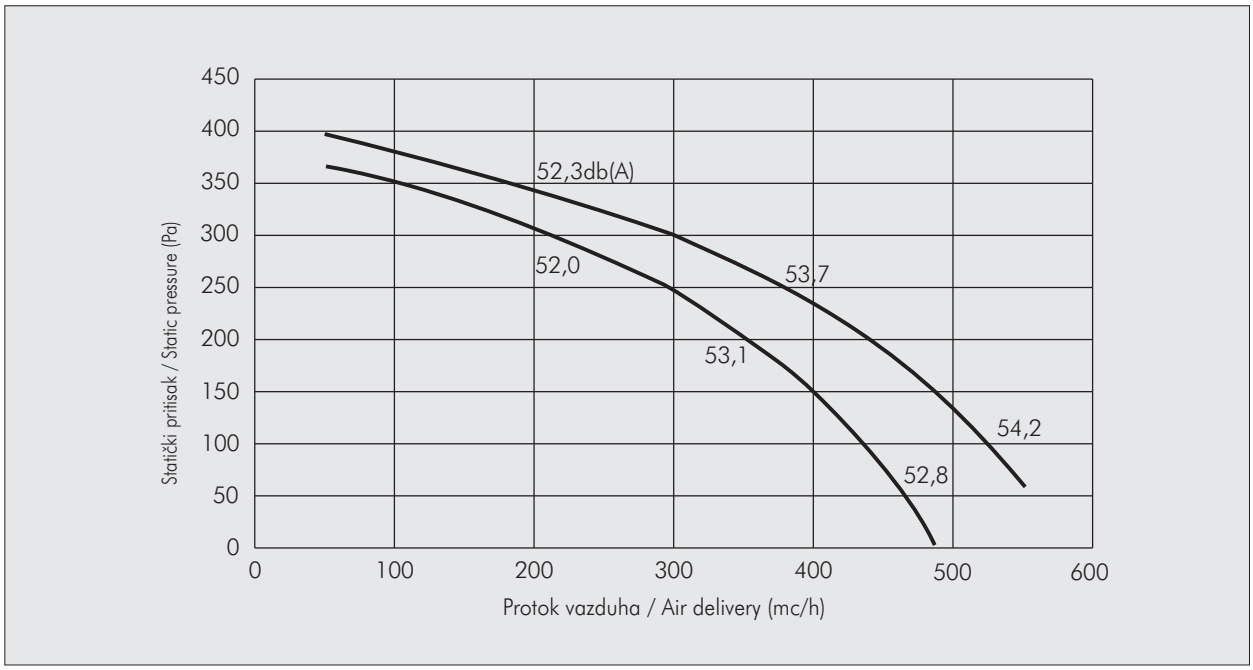


Pažnja: Nivo pritiska zvuka je meren u slobodnom prostoru sa 1.5m razdaljine od centra ventilatora, u bilo kom pravcu, sa izlaznom i ulaznom stranom povezanom na cevni sistem.

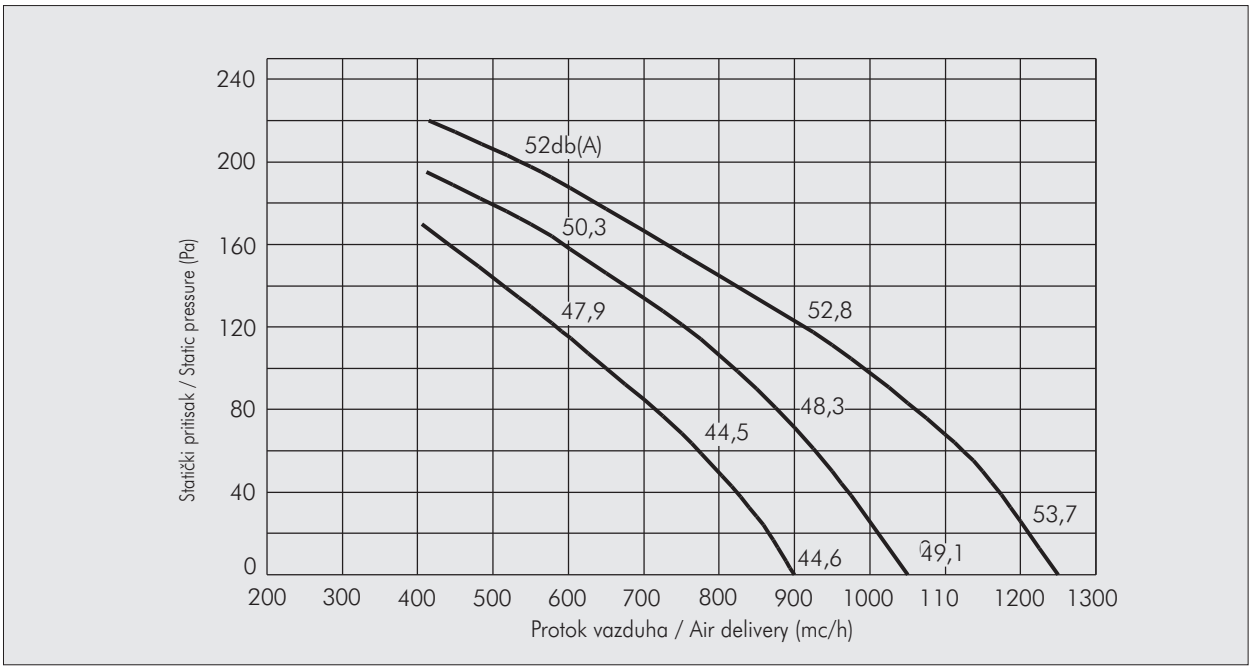
The sound pressure levels are measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

REC 600



REC 1200

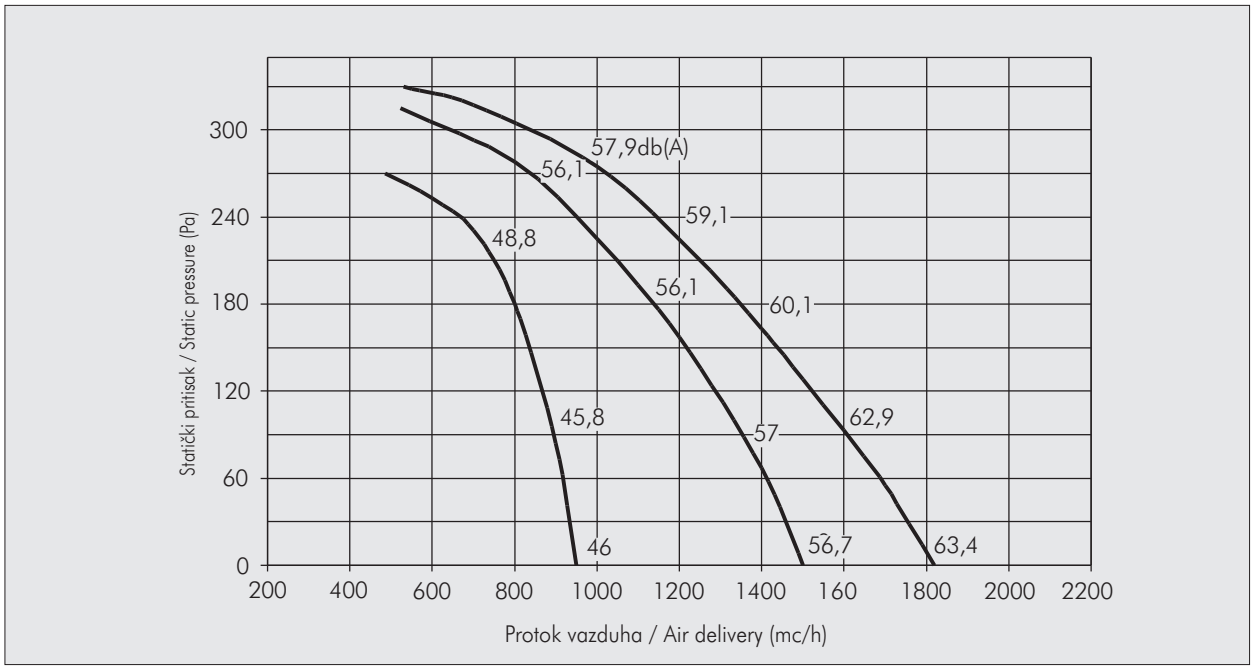


Pažnja: Nivo pritiska zvuka je meren u slobodnom prostoru sa 1.5m razdaljine od centra ventilatora, u bilo kom pravcu, sa izlaznom i ulaznom stranom povezanom na cevni sistem.

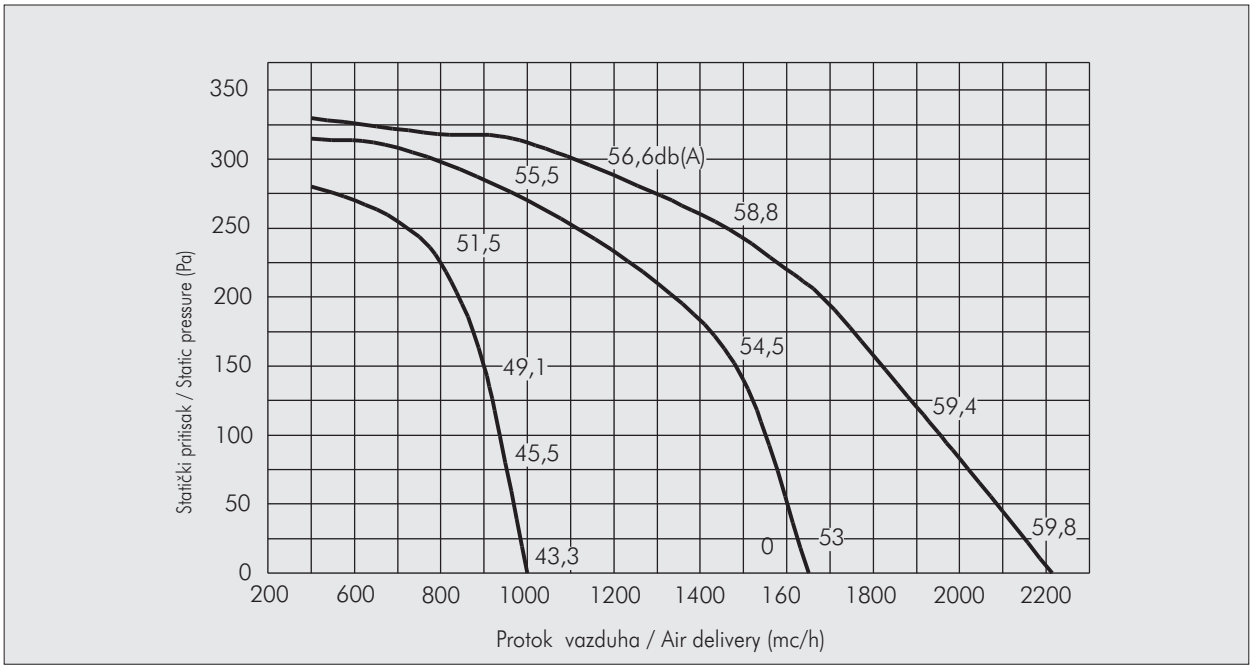
The sound pressure levels are measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

REC 1600



REC 2000

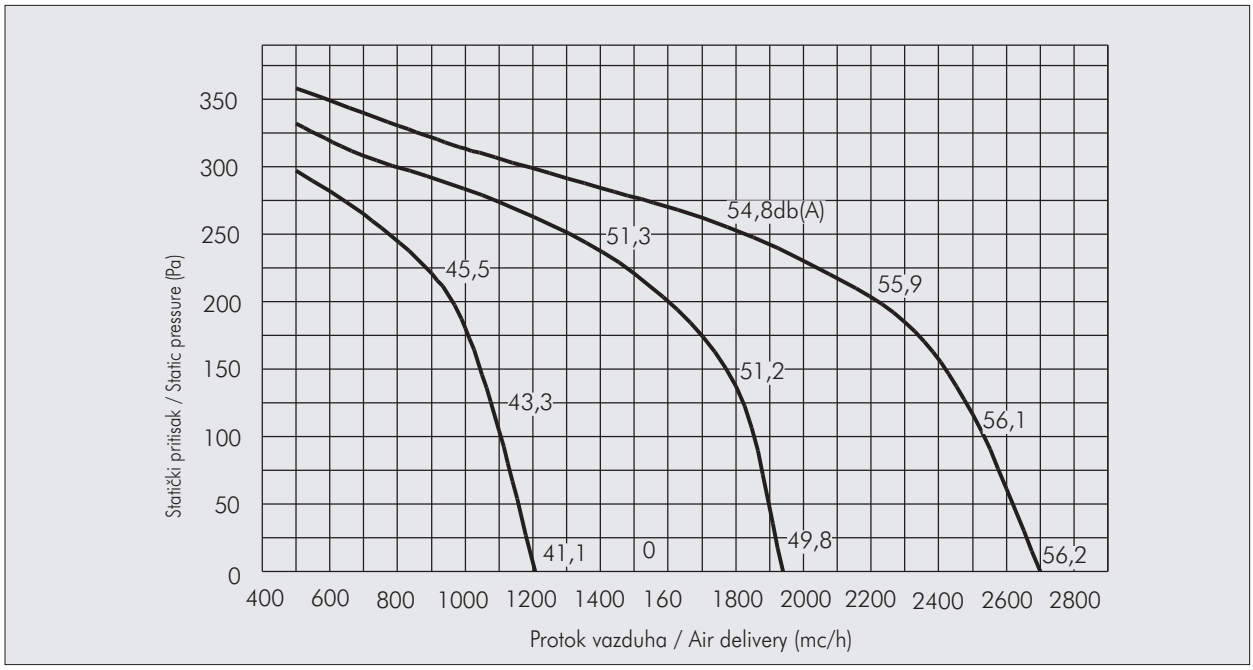


Pažnja: Nivo pritiska zvuka je meren u slobodnom prostoru sa 1.5m razdaljine od centra ventilatora, u bilo kom pravcu, sa izlaznom i ulaznom stranom povezanom na cevni sistem.

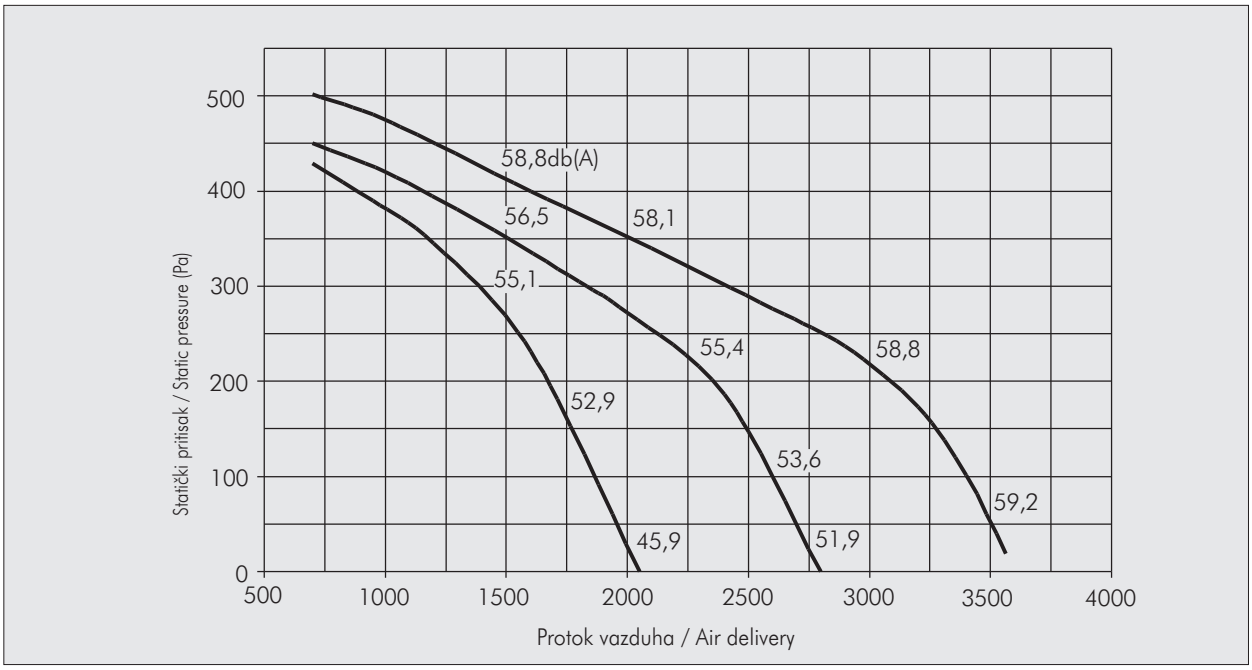
The sound pressure levels are measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

REC 2600



REC 3500



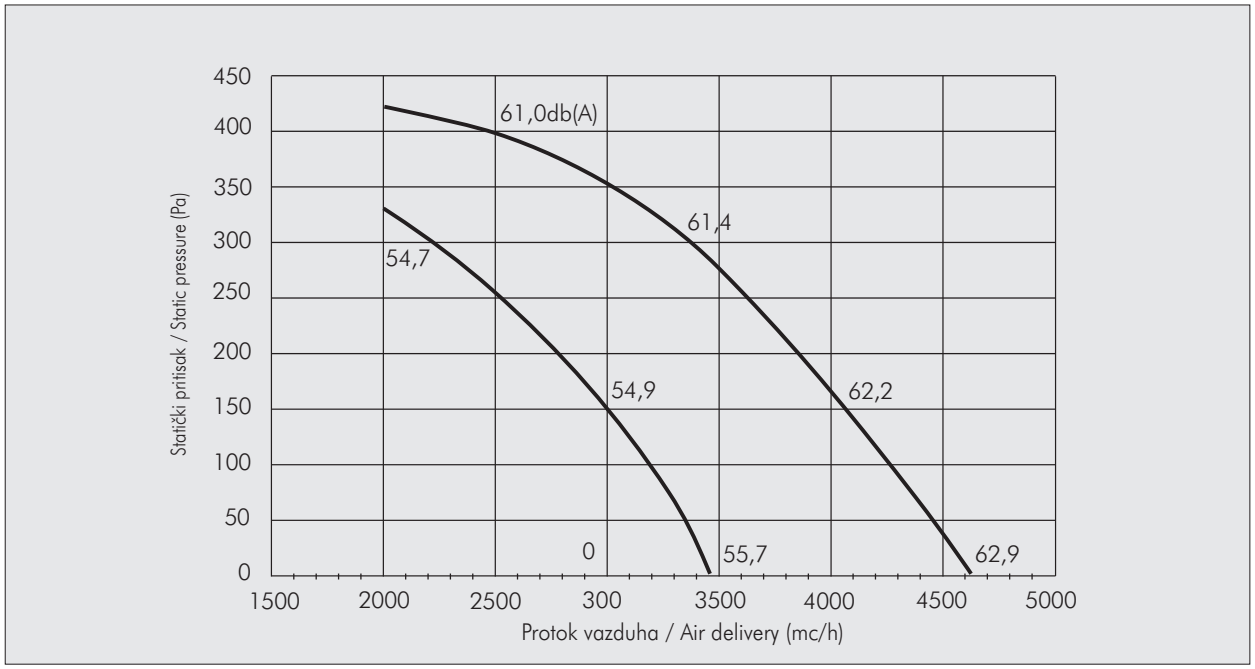
SEK. **13**

Pažnja: Nivo pritiska zvuka je meren u slobodnom prostoru sa 1.5m razdaljine od centra ventilatora, u bilo kom pravcu, sa izlaznom i ulaznom stranom povezanom na cevni sistem.

The sound pressure levels are measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.

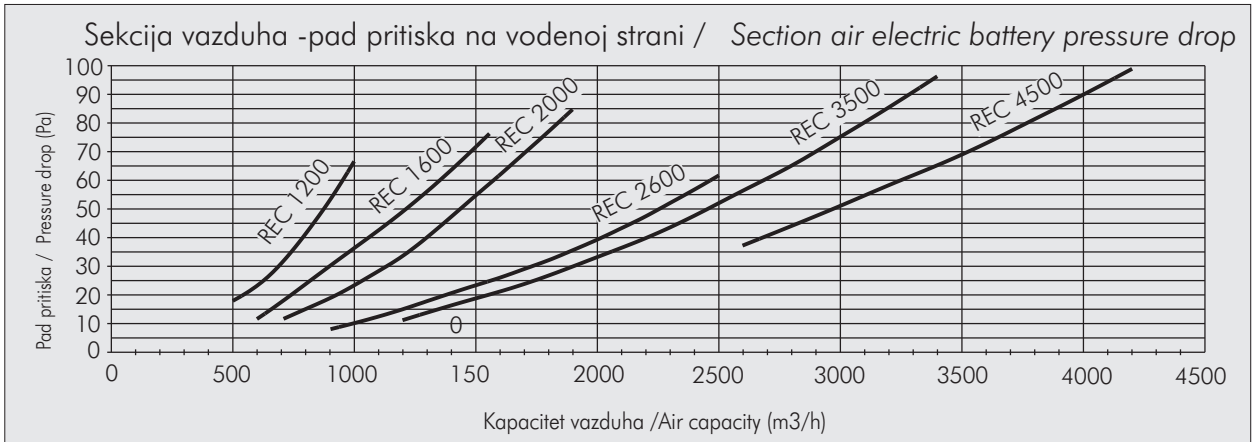
Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak760 mm Hg – Specifična težina vazduha1,22 Kg/m3
Frequency 50Hz – Air temperature 15°C – Barometric pressure 760 mm Hg – Air specific weight 1,22 Kg/m3

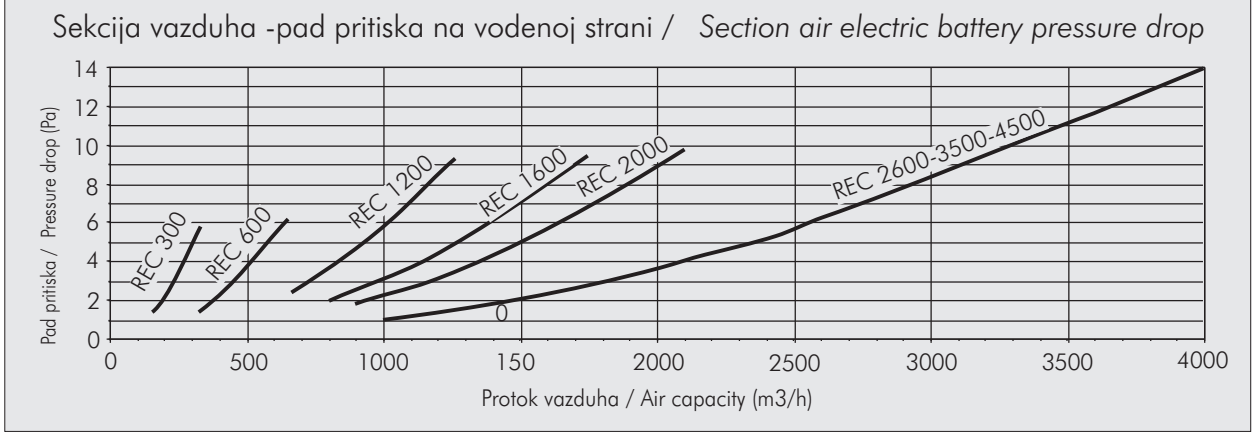
REC 4500

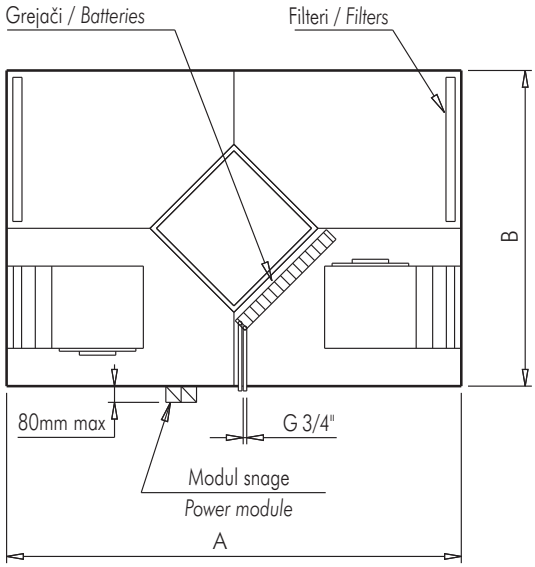


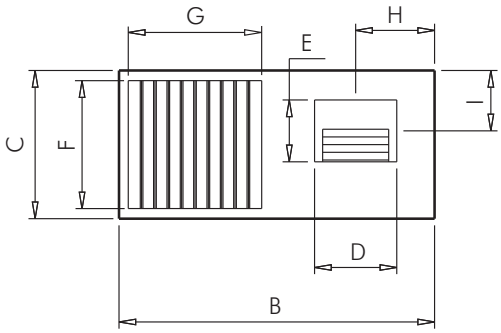
Pažnja: Nivo pritiska zvuka je meren u slobodnom prostoru sa 1.5m razdaljine od centra ventilatora, u bilo kom pravcu, sa izlaznom i ulaznom stranom povezanom na cevni sistem.

The sound pressure levels are measured in free field at 1,5 m distance from the fan centre, in any direction, with inlet and outlet sides connected to duct.





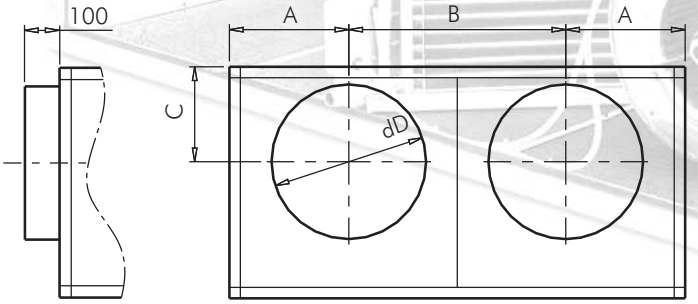




Tip/Type	A	B	C	D	E	F	G	H	I	kg.
REC 300	990	750	270	127	108	153	275	120	93	39
REC 600	990	750	270	164	100	153	275	197	99	41
REC 1200	1150	860	385	240	218	267	330	225	147	68
REC 1600	1350	900	410	240	270	267	337	241	186	91
REC 2000	1450	900	470	240	270	327	337	230	186	99
REC 2600	1700	1230	490	306	270	347	502	323	186	140
REC 3500	1700	1230	530	339	297	387	502	308	199	155
REC 4500	1700	1230	630	339	297	487	502	308	199	179

Dimenzije u mm/*Dimensions in mm*

KRUŽNI PRSTENASTI ADAPTER (NA ZAHTEV) / CIRCULAR SPIGOT ADAPTORS (UPON REQUEST)



Tip /Type	A	B	C	dD
REC 300	197	356	100	156
REC 600	197	356	118	196
REC 1200	224	411	179	312
REC 1600	241	418	193	312
REC 2000	230	440	192,5	312
REC 2600	323	583	213	351
REC 3500	307	616	235	396
REC 4500	307	616	260	396

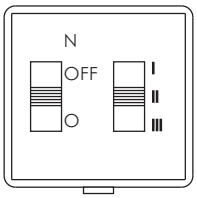
Dimenzije u mm/*Dimensions in mm*

KONTROLNE TABLE

Kontroler brzine CV3
Pogodan za instaliranje na zid, dozvoljava selekciju jedne od tri brzine ventilatora.(dve brzine za modele 300 i 600).
Na kontrolnoj tabli se nalaze:
Prekidač uključenja-isključenja
Tropozicioni prekidač brzine

SPEED CONTROL CV3

Suitable for wall installation, allows one of the three fan speeds to be selected. (two speeds for models 300 e 600).
On the control panel there are:
- on - off switch;
- three position speed switch.



Tehničke karakteristike / Technical characteristics

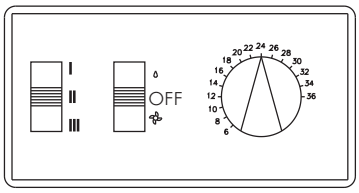
Izvor struje / *Power supply:*	230 +/- 10% Vac ; 50/60Hz
Regulatori / *Regulations:*	Prostorni temperaturni čvor / *Room temperature knob* Manuelni prekidač /Off/Estate/ *Manual switch Winter/Off/Summer* Trobrzinski prekidač : Min/Med/Max/ *Three speed switch: Min/Med/Max*
Interventni relei / *Intervention relays:*	6A sa otporom opterećenja / *5A with resistive load*
Temperaturni limit / *Temperature limits:*	0°C ; +50°C
Limit vlažnosti / *Humidity limits:*	10-90 U.R.% bez kondenzacije / *10-90U.R.% without condensation*
Stepen zaštite / *Protection grade:*	IP 20
Boja / *Colour:*	Ledeno bela / *Ice white*
Spremnik / *Container:*	ABS mm. 90 x 65 x 30

JEDINICA KONTROL TABLE PC3

Pogodna za montiranje na zid, zimi omogućuje aktivaciju električne -naknadne grejne jedinice u odnosu na sobnu temperaturu i omogućuje selekciju od tri brzine električnog ventilatora.
Na kontrolnoj tabli se nalaze:
Prekidač uključenja-isključenja (leto-zima)
Dugme za regulaciju temperature
Tropozicioni prekidač brzine.

UNIT CONTROL PANEL PC3

Suitable for wall installation, it allows, in winter, the activation of any electrical post-heating elements according to the room temperature and also allows the three speeds of the electrical fan to be selected.
On the control panel there are:
- on (summer -winter) - off switch;
- temperature regulation knob;
- three position speed switch.



Tehničke karakteristike / Technical characteristics

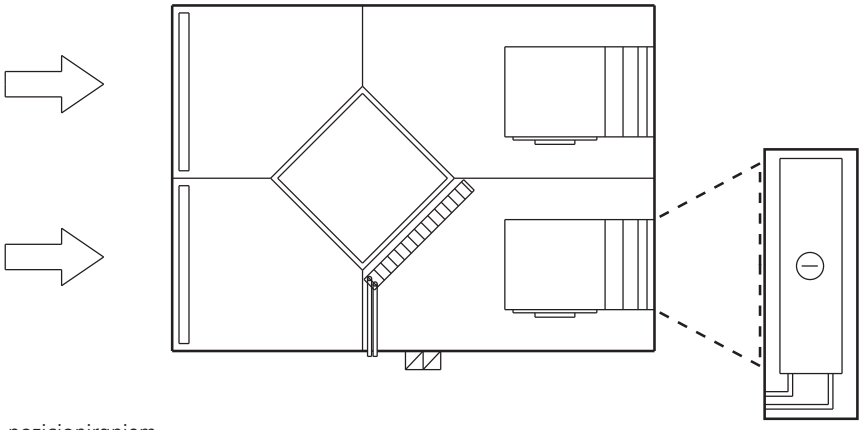
Izvor struje / *Power supply:*	230 +/- 10% Vac ; 50/60Hz
Regulatori / *Regulations:*	Prostorni temperaturni čvor / *Room temperature knob* Manuelni prekidač /Off/Estate/ *Manual switch Winter/Off/Summer* Trobrzinski prekidač : Min/Med/Max/ *Three speed switch: Min/Med/Max*
Interventni relei / *Intervention relays:*	5A sa otporom opterećenja / *5A with resistive load*
Polje regulacije / *Regulation field:*	6 - 30°C
Senzor temperature / *Temperature sensor:*	NTC 4K7
Interventni diferencijal / *Intervention diffrential:*	0,5°C ; 0,1°C
Temperaturni limit / *Temperature limits:*	0°C ; +50°C
Limit vlažnosti / *Humidity limits:*	20-90 U.R.% bez kondenzacije / *20-90U.R.% without condensation*
Stepen zaštite / *Protection grade:*	IP 40
Boja / *Colour:*	Ledeno bela / *Ice white*
Spremnik / *Container:*	ABS mm. 150 x 84 x 32

GREJAČ VODE

Omogućava tretman hlađenja sa odvlaživanjem vazduha koji napušta rekuperator. Ovaj deo sadrži bakarnu cev i jedinicu razmenjivanja od aluminijuma, kao i nerđajući čelični odvod.
Oblikovan okvir omogućuje lako montiranje ove jedinice na pravougaoni deo vazdušnog kanala.

COLD WATER UNIT

Allows the cooling treatment with de-humidification of the air leaving the recuperator unit.
The section includes the copper pipe and aluminium package exchange unit and the stainless steel drain tray.
The shaped rim ensures an easy fixing of the unit to a rectangular section air duct line.

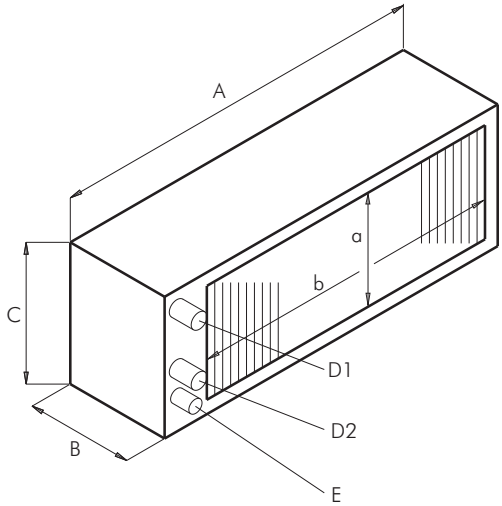


Skica sa linearnim pozicioniranjem.
Layout with linear positioning.

Model /*Model*	REC	300	600	1200	1600	2000	2600	3500	4500
Protok vazduha /*Air flow*		-	-	1000	1400	1900	2100	3200	4000
Snaga rashlađivanja / *Cooling power*	(kW)	-	-	7,2	9,1	11,	15,	18,5	26,9
Temp.toplog vazduha / *Exhaust temperature*	(°C)	-	-	15	16,2	16,8	16,9	17,3	16
Pad vazdušnog pritiska /*Air pressure drop*	(Pa)	-	-	20	32	38	42	49	98
Kapacitet vode /*Water capacity*	(m^3/h)	-	-	1,24	1,56	1,98	2,60	3,17	4,6

Referento stanje : unutrašnja temperatura vazduha 29 °C db 50% ili temperatura vode 7/12 °C

Reference conditions: Input air temperature 29 °C db 50% ur Water temperature 7/12 °C



Tip /Type	A	B	C	D1	D2	E	a	b
REC 300	-	-	-	-	-	-	-	-
REC 600	-	-	-	-	-	-	-	-
REC 1200	1000	200	295	3/4"	3/4"	22	21	860
REC 1600	1000	200	295	3/4"	3/4"	22	0	860
REC 2000	1100	200	322	3/4"	3/4"	22	21	860
REC 2600	1340	200	322	3/4"	3/4"	22	0	1200
REC 3500	1340	200	372	1"	1"	22	23	1200
REC 4500	1340	200	372	1"	1"	22	5	1200

Dimenzije u mm/*Dimensions in mm*

ZAOBILAZNI ODMRZIVAČ ILI SLOBODNO HLAĐENJE

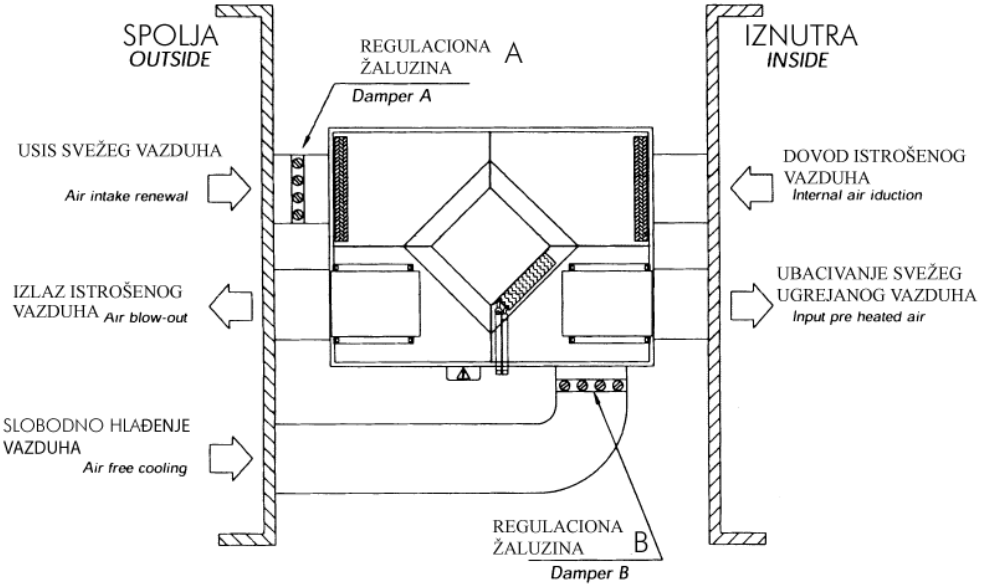
Modeli REC 600-1200-2000-4500 imaju razdvojenu strukturu omogućavajući sprovođenje zaobilaznog odmrzavanja ili slobodnog hlađenja.

SLOBODNO HLAĐENJE : Kada je spoljašnja temperatura blizu unutrašnje rekuperator može zaobići direktno insertovan obnovljeni vazduh u prostoriji.
Ovo je moguće uraditi sa otvaranjem žaluzine B i u ist o vreme sa zatvaranjem žaluzine A.

DEFROSTING BY-PASS OR FREE COOLING

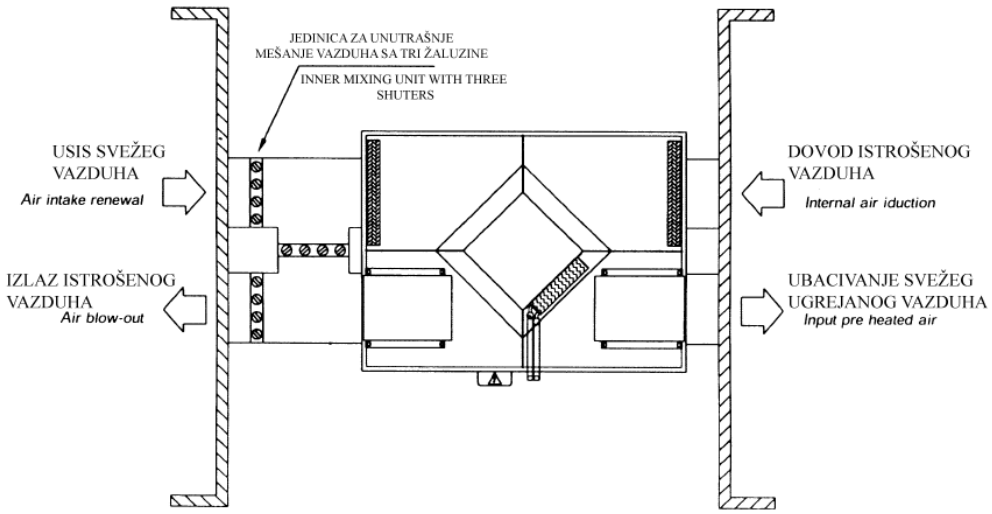
For REC 600-1200-2000-3500-4500 models the structure has a presplitting allowing defrosting by-pass or free cooling to be carried out.

FREE COOLING: *When the external temperature is close to the internal temperature the recuperator may be bypassed inserting renewal air directly in the room. It is possible to do this by opening damper B and at the same time closing damper A.*



ODMRZAVANJE I RECIRKULACIJA
U periodima jake hladnoće često je potrebno sistemu omogućiti odmrzavanje omota rekuperatora ili ubrzati recirkulaciju unutrašnjeg vazduha.
Na drugoj šemi primera datog u prilogu ja naznačeno: Prikladno podešavanje kretanja povezanog žaluzinama C, D i E , moguće je prigušenje spoljašnjeg vazduha i mešanje sa vazduhom od recirkulacije.
U fazi odmrzavanja, pokretanjem jedinice povoljno je predvideti odloženo startovanje ventilatora i jako je bitna signalizacija u trenutku naredbe.

DEFROSTING AND RECIRCULATION: *In the very cold periods, it is often necessary to forsee a system that allows a possible defrosting of the package recuperator or the recirculation of the inside air to accelerate the putting into regime of the plant.*
In the scheme 2 an example of application is indicated : regulating opportunely the movement connected of the shutters C, D and E, it is possible to choke the external air and to mix it with that of the recirculation. In phase of defrosting, at the start of the unit, it is opportune to forsee the delayed start of the supply fan; it is very important that this is signalled at the moment of the order.

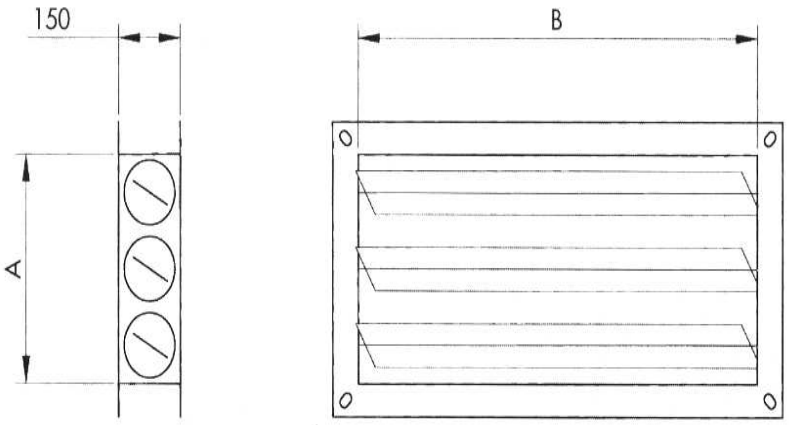


REGULACIONA ŽALUZINA

Izrada je od jednostavne grupe rebara, koji omogućuju zatvaranje protoka vazduha. Koriste se za realizaciju sprovođenja.

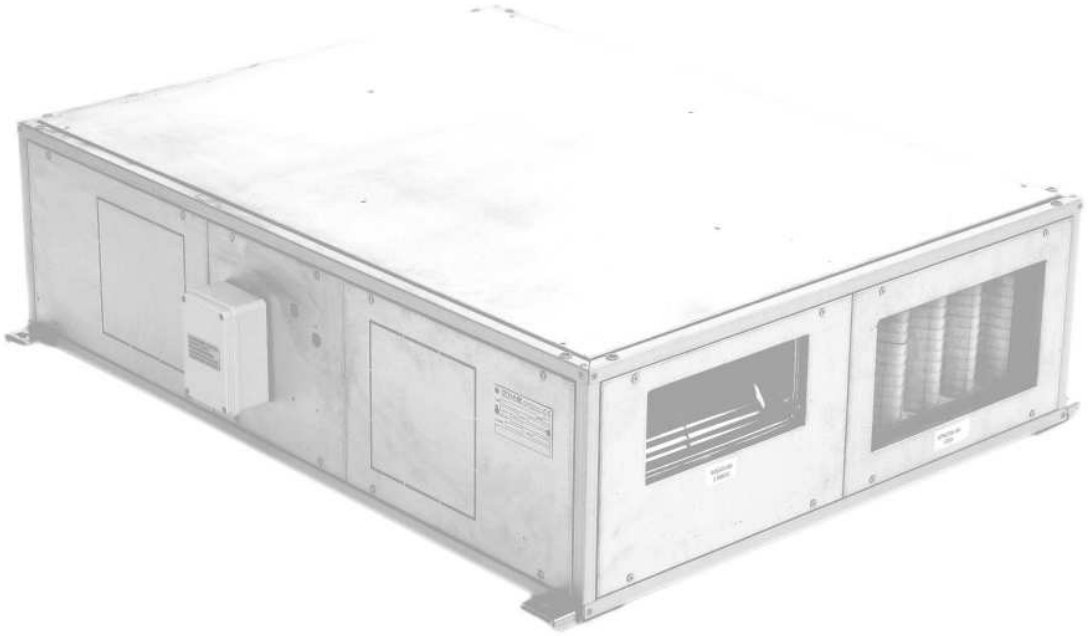
REGULATION DAMPER

Made from a single fin group, allows the air flow to be closed. They are used to carry out the bypass.



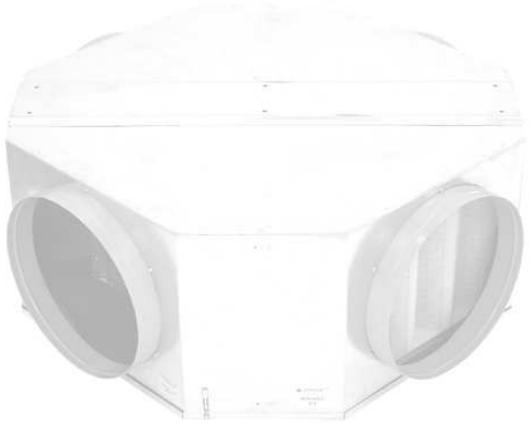
Tip/Type	A	B
REC 300	210	280
REC 600	210	280
REC 1200	310	330
REC 1600	310	330
REC 2000	410	330
REC 2600	410	500
REC 3500	410	500
REC 4500	410	600

Dimenzije u mm/*Dimensions in mm*



MINI-REC

Rekuperator toplote
Heat recuperator



OSNOVNI PODACI :

Jedinice za obnavljanje toplote iz serije MINI-REC su dizajnirane i proizvedene da rešavaju problem visoke potrošnje energije,koje su tipične za industrijske pogone koji koriste spoljašnji vazduh.Zahvaljujući postojanju razmenjivača toplote, moguće je povratiti 50%energije koja bi inače bila izgubljena isterivanjem iskorišćenog vazduha.MINI-REC uređaji se mogu integrisati u bilo koji sistem ventilacije i održavanja vazduha, a tako mogu raditi zajedno u letnjoj i zimskoj sezoni.Pogodni su za ugradnju u plafon i priključivanje na kanalne-cevne sisteme.Omogućuju izvlačenje i uvlačenje vazduha direktno u prostoriju-okolinu.

KONSTRUKCIJA :

NOSEĆA KONSTRUKCIJA: je napravljena od panela galvanizovane čelične ploče sa akustičnom izolacijom debljine (10mm). Na ulaznom otvoru je panel sa filterom koji se lako može postaviti u slučaju zamene.
Sve komponente su ispitivane i lako se uklanjaju sa osnove.

NADOKNADA TOPLOTE
Statični tip obnavljača toplote sa poprečnim protokom, visoke je efikasnosti. Ploče od aluminijuma sa protocima koji su odvojeni odgovarajućim zaptivačima. Ispod obnavljačke jedinice je montirano kućište za sakupljanje kondenzata, odvodne cevi su od NERĐAJUĆEG čelika.

FILTER VAZDUHA
Filter se sastoji od valovitih pregrada sa mogućnošću zamene sa osnove, sa filterom u sredini od sintetičkog vlakna klase G3 (Procenjena efikasnost 85%-EU3).

GENERAL DESCRIPTION

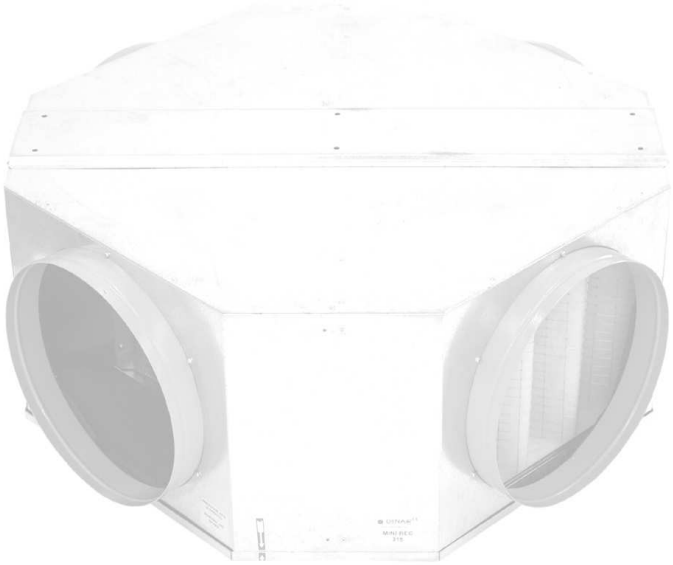
The heat recovery units of the MINI-REC series are designed and realized to solve the problem of the high consumption of energy, typical of all the plants supplying outside air. Thanks to the presence of a heat exchanger, it is possible to recover more than the 50% of the energy which would otherwise be lost with the expulsion of the spoiled air. The MINI-REC units can be fitted in addition to every systems of ventilation and conditioning and they can work both in the summer and winter seasons.
They are particulary suitable for ceiling installations and ducting, allowing the exhaust and the introduction of supply air directly in the environment.

CONSTRUCTION

MAIN STRUCTURE: the main structure is realized with panels in galvanized steel sheet with acoustic insulation (thickness of 10 mm).
The inlet side filter housing panel can be easily replaced for installation needs. All the components are examinable and can be easily removed from the bottom.

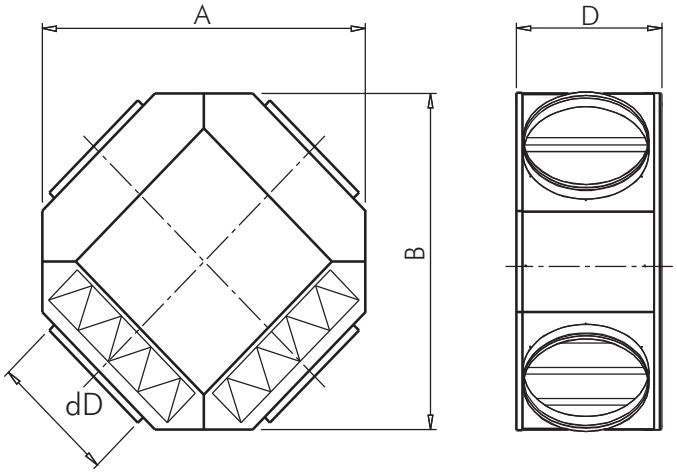
HEAT RECOVERY: the heat recovery of the static type with crossed flow high efficiency. The plates are in aluminium with the flows kept separated by suitable sealing. Under the recovery unit is installed a condensate collection plate in STAINLESS steel with draining pipe connection.

AIR FILTER: the filters are of the cell type with wavy septum removable from the bottom and reusable, with filtering media in synthetic fibre class G3 (Pondered efficiency 85%-EU3).



DIMENZIJE / DIMENSIONS

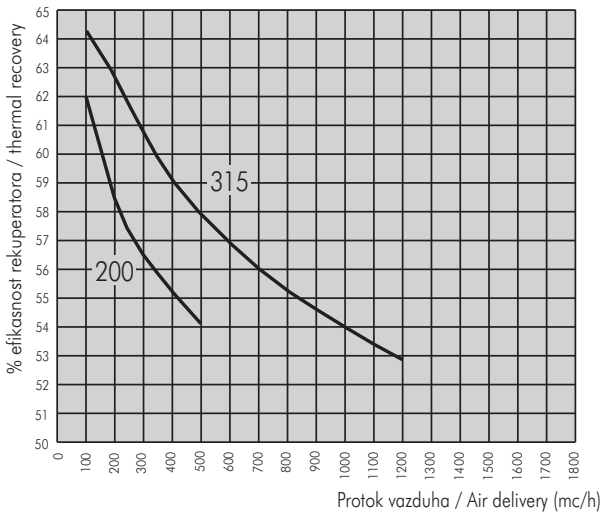
MINI-REC

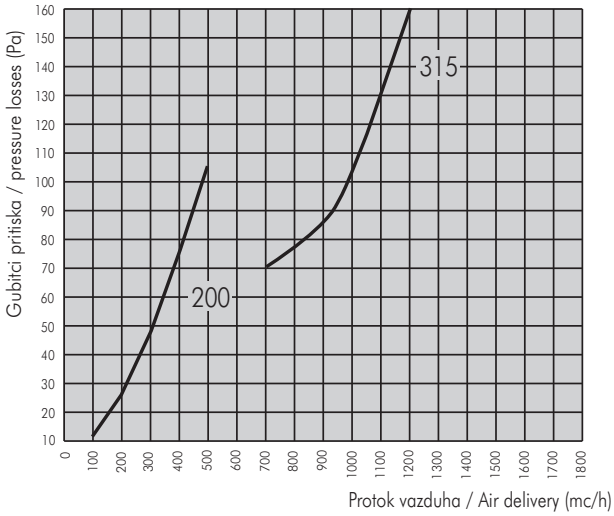


Tip /Type	A	B	C	dD	kg
200	720	720	20	230	24
315	800	800	315	360	30

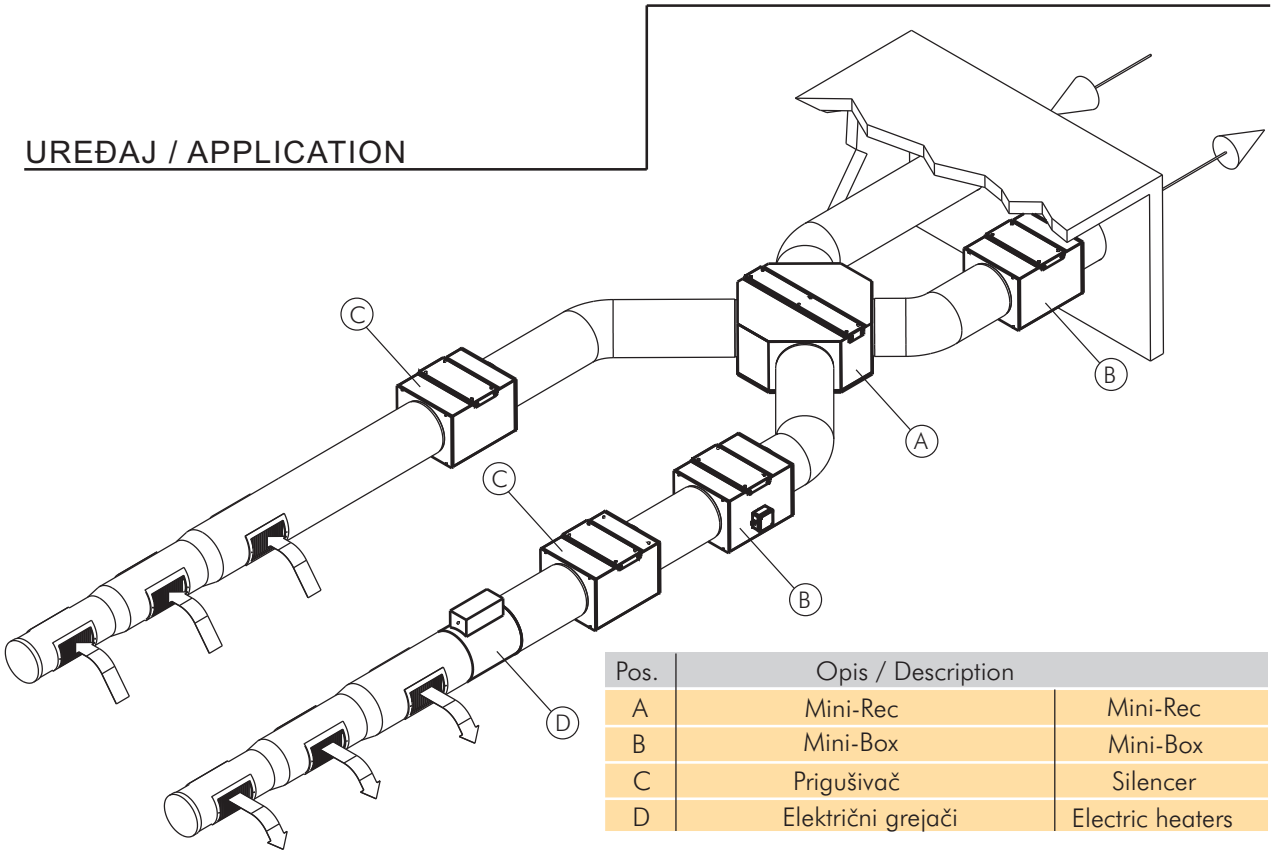
PERFORMANSE / PERFORMANCE

MINI-REC

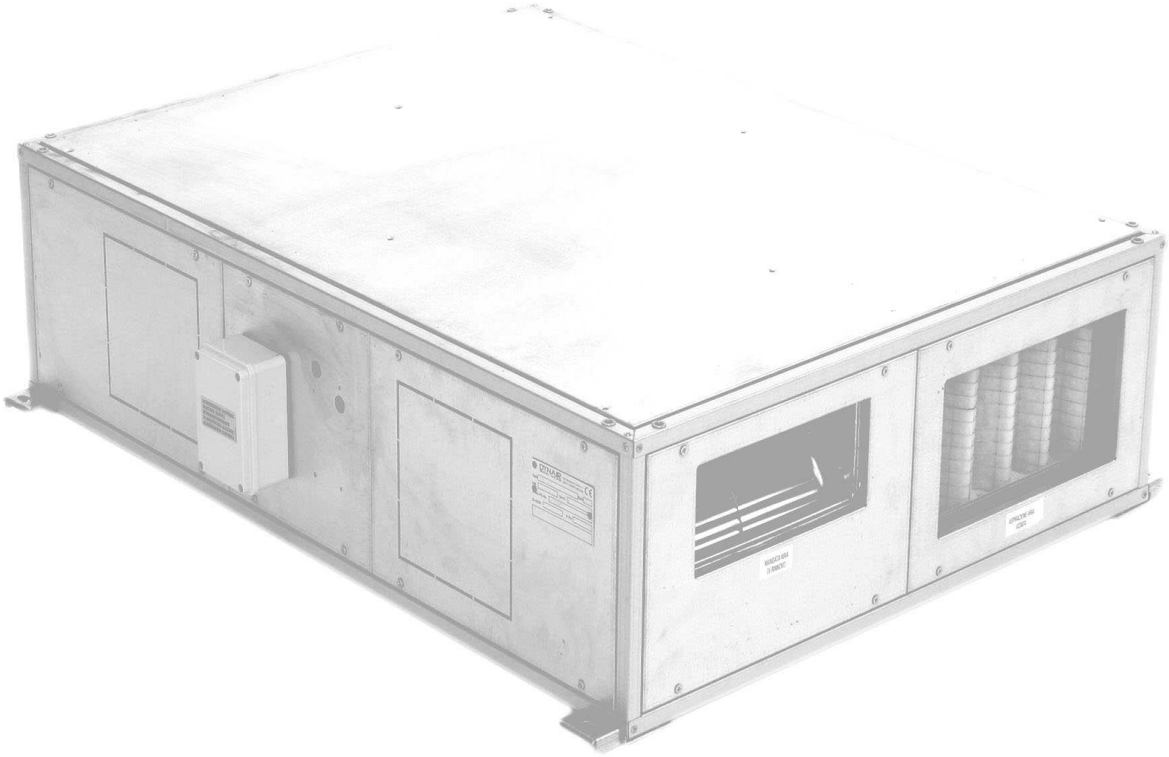


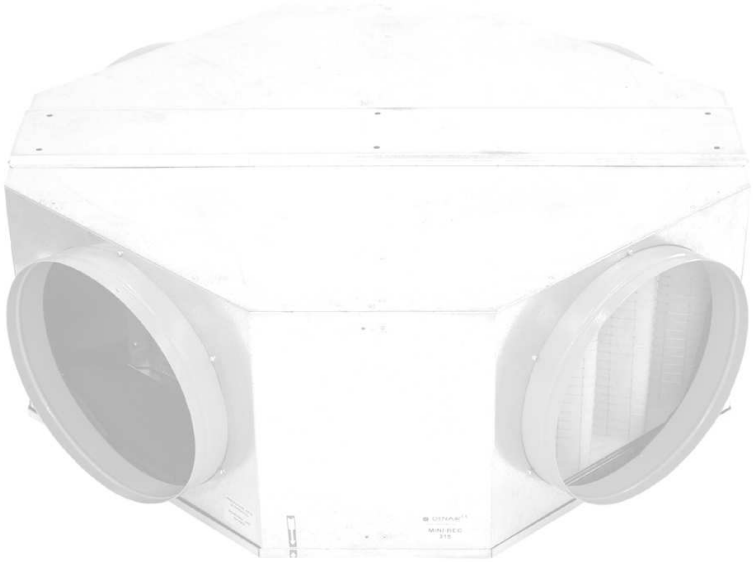


UREĐAJ / APPLICATION



Pos.	Opis / Description	
A	Mini-Rec	Mini-Rec
B	Mini-Box	Mini-Box
C	Prigušivač	Silencer
D	Električni grejači	Electric heaters





DYNAIR

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