

SQ 2V-HT

Centrifugalni ventilatori otporni na visoke temperature
(za odstranjivanje dima) sa unazad zakrivljenim lopaticama
Backward curved blade centrifugal fans

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 četvorougona konstrukcija koja omogućuje upotrebu u 4 orijentacije (0°-90°-180°-270°) sa istim ventilatorom.

Dimenzije su ograničene zahvaljujući eliminaciji oslonca motora.

Serijski 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 1000°C, prouzrokujući sagorevanje bilo kog materijala samo radi zračenja vreline, stanje koje će učiniti beskorisnim bilo koju eksternu uništavajuću operaciju. Održavati temperaturu relativno niskom (300°C-400°C), izbacivanjem vrelotoplog 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 vakuum, tako sprečavajući širenje dima u druge prostorije. Bolji uslovi vida omogućuju lakše spasavanje/bekstvo lica koja su ostala u zgradi, 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 tihi 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 400°C na 2 sata, sertifikovane od strane kvalifikovanih autonomnih vlasti.

KONSTRUKCIJA :

- Četvorougona 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 UNI9219-DIN31001 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

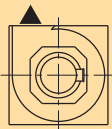
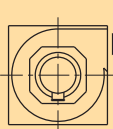
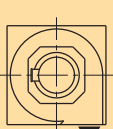
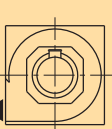
- Inlet protection guard according to UNI9219-DIN31001 norm and protected against the atmospheric agents.
- Outlet protection guard according to UNI9219-DIN31001 norm and protected against the atmospheric agents.



400°C/2h



SEK. 11

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

PERFORMANSE / PERFORMANCE

SQ - HT

Frekvencija 50 Hz - Temperatura vazduha 15°C – Barometarski pritisak 760 mm Hg – Specifična težina vazduha 1,22 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

$$Pd = 0,06218 \times (Q/209)^2 = \text{mm H}_2\text{O}$$

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

$$Pd = 0,06218 \times (Q/279,2)^2 = \text{mm H}_2\text{O}$$

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

$$Pd = 0,06218 \times (Q/343,4)^2 = \text{mm H}_2\text{O}$$

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

$$Pd = 0,06218 \times (Q/400)^2 = \text{mm H}_2\text{O}$$

SQ - HT 56

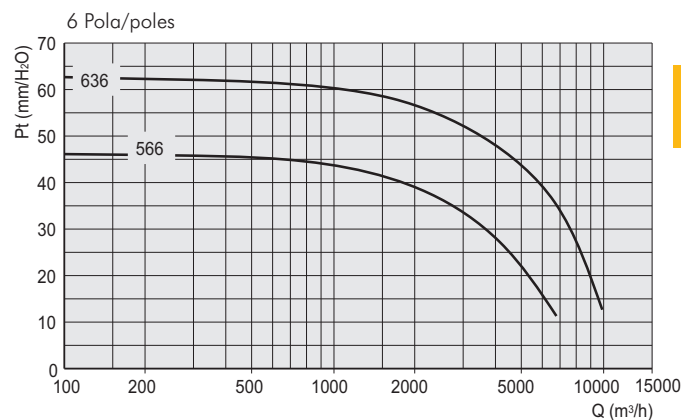
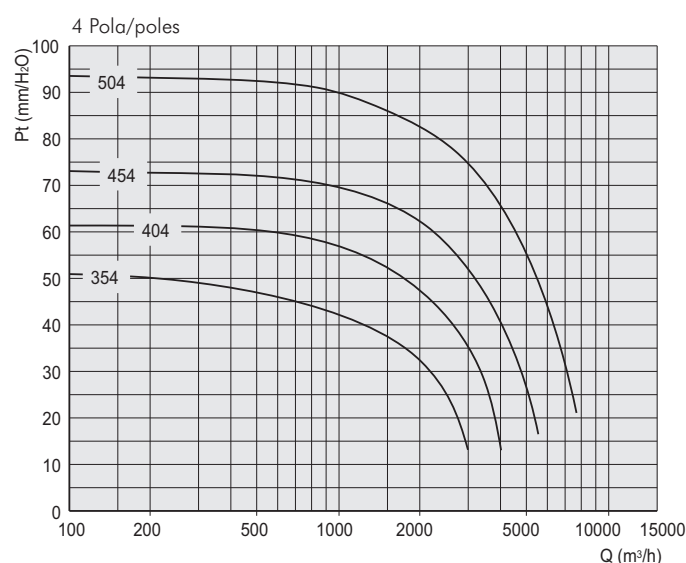
Tip Type	Model Model	U	P	Pm (kW)	In max (A)	IP/CL	Mot. (Gr)	Lp dB(A)
SQ	566	T	6	0,55	1,8	55/F	80	60

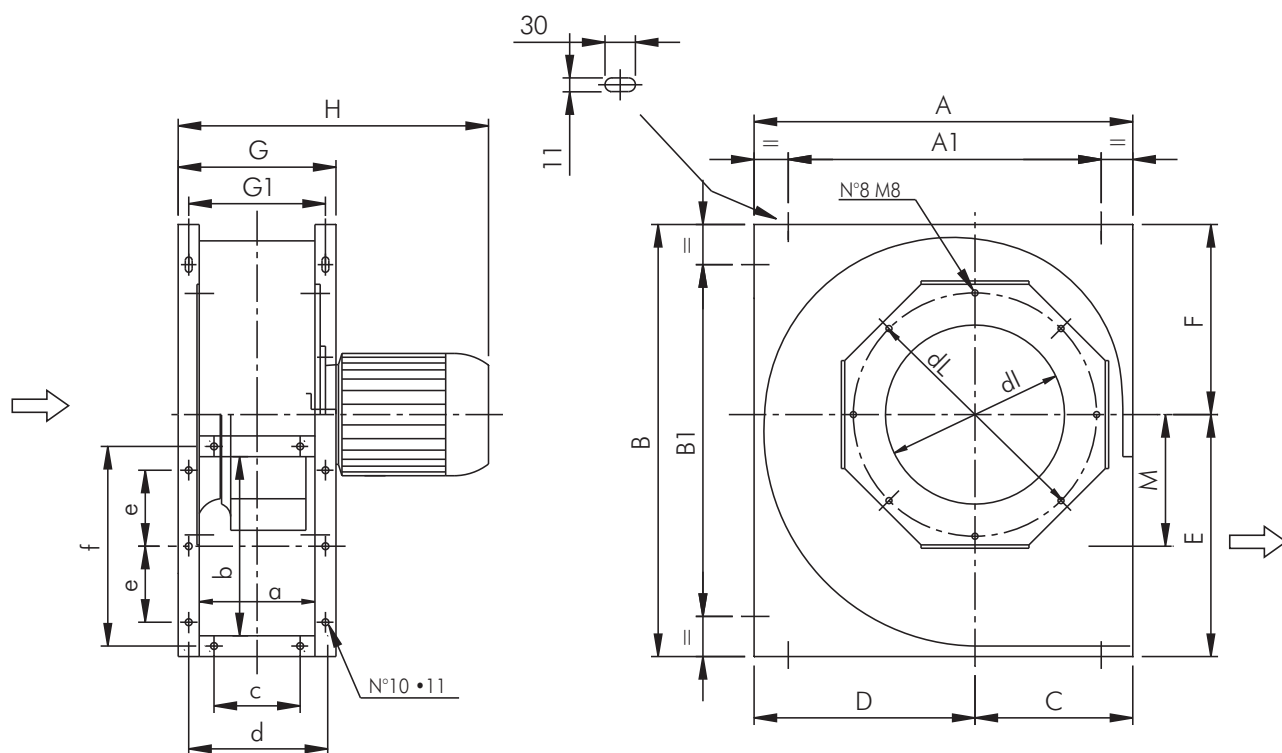
$$Pd = 0,06218 \times (Q/518,4)^2 = \text{mm H}_2\text{O}$$

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

$$Pd = 0,06218 \times (Q/679,3)^2 = \text{mm H}_2\text{O}$$





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