

ROOF-HM

VERTIKALNO IZBACIVANJE DIMA CENTRIFUGALNI KROVNI VENTILATOR PREMA STANDARDU EN 12101-3 SMOKE EXHAUST VERTICAL DISCHARGE CENTRIFUGAL ROOF FAN ACCORDING TO EN 12101-3

F400



APLIKACIJE

Linija krovni ventilatora sa vertikalnim ispuštanjem ROOF-HM namenjena je za postrojenja koja zahtevaju evakuaciju dima od požara, u okruženjima kao što su: industrije, podzemne garaže, tržni centri, bolnice, škole, pozorišta, muzeji itd.

Ova serija je projektovana i proizvedena u skladu sa evropskom direktivom EN 12101-3, sertifikovanom od strane Autonomnog kvalifikovanog instituta za sertifikaciju.

Ventilatori ROOF-HM su pogodni za transport čistog vazduha i dima bez prašine do maksimalne temperature od 120°C u kontinuiranom radu, sa vrhunskim temperaturama na 180°C, a u slučaju požara na temperaturi od 400°C tokom 120 minuta (F400).

Za ugradnju van prostora za požar.

DOMET

Ova linija se sastoji od 12 modela sa 5 veličina sa prečnikom impelera od 630 do 1000 mm.

PREDNOSTI

Krovni ventilatori ove serije karakterišu veća efikasnost i bolje vazdušne performanse od ostalih koji su uobičajeno prisutni na tržištu.

Unazad zakrivljeno zavareno impeler i termoizolovani motor sa spoljnom ventilacijom omogućavaju realan rad u kontinuiranom poslu do 120°C sa vrhovima na 180°C.

Mogu postići veoma visoke performanse, do 55.000 m³/h i 2000 Pa.

KONSTRUKCIJA

- Spoljni transporter i noseća ploča sa ulaznim konusom od pocinkovanog čeličnog lima.
- Impeler sa unazad zakrivljenim lopaticama od čeličnog lima dizajniran da garantuje maksimalnu efikasnost i nizak nivo buke. Balansirano prema UNI EN-ISO 21940-11 stepen G 6.3.
- Direktno spojen motor, van protoka vazduha, hlađen spoljnim vazduhom.
- Asinhroni trofazni motor, zaštita IP 55, izolacija klase F pogodna za S1 upotrebu, tip montaže B5, u skladu sa IEC/EEC (UNEL MEC).
- Asinhroni trofazni motor, zaštita IP 55, izolacija klase F pogodna za S1 upotrebu, tip montaže B5, u skladu sa IEC/EEC (UNEL MEC).
- Spoljašnja priključna kutija za lako ožičenje.

TEHNIČKE SPECIFIKACIJE

- Transportovani vazduh: maks. 120°C u S1 servisu. F400 maks. 400°C u S2 servisu (požarna hitnost).
- Napon i frekvencija:
Trofazna verzija (T) 400V-50 Hz.

PRIBOR

- Ulazna gravitaciona zatvaračka (GS-HM).
- Fleksibilni spoj na ulazu (FC-DU-HT).
- Zaštitna rešetka na ulazu (FPG-DU).
- (Neophodno za upotrebu u otvorenom vazduhu).
- Prigušivač (SIL-HM).
- Bezbednosni prekidač (SW-HM-HT).

NA ZAHTEV

- Verzija sa motorom sa dvostrukim polaritetom.

APPLICATIONS

The vertical discharge roof fan line ROOF-HM are destined to the plants requiring the evacuation of fire smokes, in environments like: industries, underground car parks, shopping malls, hospitals, schools, theatres, museums, etc.

This series is designed and manufactured according to the European directive EN 12101-3 certified by an Autonomous Qualified Certification Institute.

ROOF-HM fans are suitable to convey clean air and not dusty smokes up to the maximum temperature of 120°C in continuous service, with peaks at 180°C, and in case of fire emergency at the temperature of 400°C for 120 minutes (F400).

For installation outside the fire compartment.

RANGE

This line consists of 12 models with 5 sizes with impeller diameter from 630 up to 1000 mm.

ADVANTAGES

The roof fans of this series are characterized by a higher efficiency and better aerodynamic performances than the others commonly present in the market. The backward curved welded impeller and the thermo-isolated motor with external ventilation allow the real operation in continuous service up to 120°C with peaks at 180°C. They can get very high performances, up to 55.000 mc/h and 2000 Pa.

CONSTRUCTION

- External conveyor and support plate with inlet cone galvanized in steel sheet.
- Backward curved blade impeller in steel sheet designed to guarantee the maximum efficiency and low noise level. Balanced according to UNI EN-ISO 21940-11 degree G 6.3.
- Directly coupled motor, outside the airflow, cooled by the external air.
- Asynchronous three-phase motor, protection IP 55, insulation class F suitable for S1 service, mounting type B5, according to IEC/EEC (UNEL MEC).
- Asynchronous three-phase motor, protection IP 55, insulation class F suitable for S1 service, mounting type B5, according to IEC/EEC (UNEL MEC).
- External terminal box for easy wiring.

TECHNICAL SPECIFICATIONS

- Conveyed air : max 120°C in S1 service. F400 max 400°C in S2 service (fire emergency).
- Voltage and frequency: Three-phase version (T) 400V-50 Hz.

ACCESSORIES

- Inlet gravity shutter (GS-HM).
- Inlet flexible joint (FC-DU-HT).
- Inlet protection grid (FPG-DU). (Necessary for use in free air).
- Silencer (SIL-HM).
- Safety switch (SW-HM-HT).

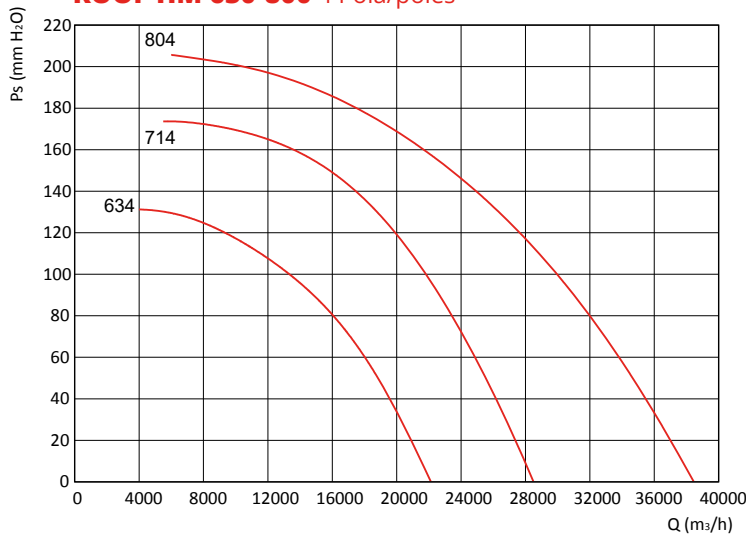
ON REQUEST

- Version with double polarity motor.

Performanse prikazane na dijagramima selekcije odnose se na vazduh na temperaturi od 15°C i nadmorskoj visini od 0 m, a dobijene su kod tipa instalacije „C“ bez rešetke ili dodatne opreme.

Performances shown in the selection diagrams refer to air at 15°C temperature and 0 m a.s.l. altitude, and they were obtained in installation type “C” with no grid or accessories.

ROOF-HM 630-800 4 Pola/poles

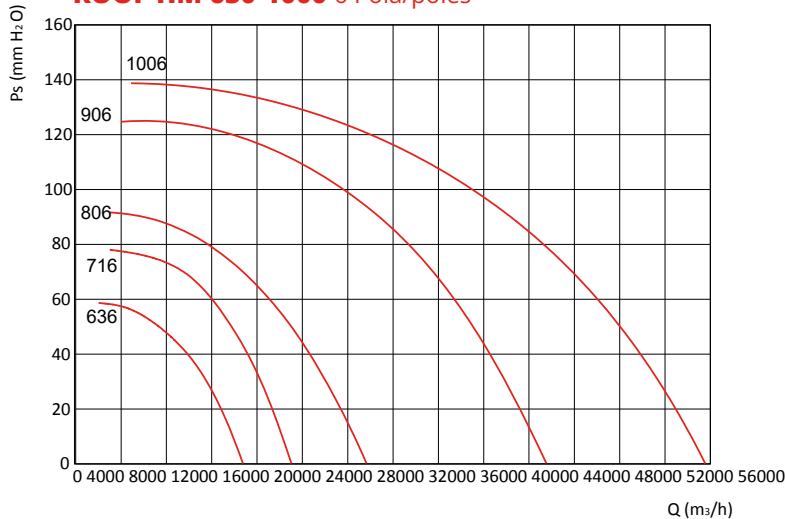


4 POLA / POLES (1500 RPM)

T: TROFAZNO / THREE-PHASE (3Ph-400V-50Hz)

Model	Model	brzina protoka Flow rate (m ³ /h)	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
634 T		22.000	5,5	11	132	78
714 T		28.300	9,2	18	132	82
804 T		38.300	15	28	160	84

ROOF-HM 630-1000 6 Pola/poles

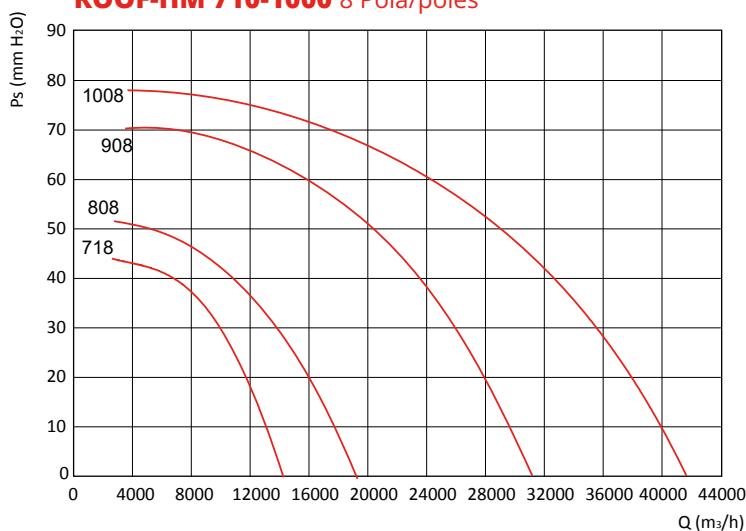


6 POLA / POLES (1000 RPM)

T: TROFAZNO / THREE-PHASE (3Ph-400V-50Hz)

Model	Model	brzina protoka Flow rate (m ³ /h)	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
636 T		14.600	2,2	5	112	69
716 T		18.800	3	7	132	73
806 T		25.500	5,5	12	132	75
906 T		41.500	11	22	160	80
1006 T		55.500	15	29,3	180	83

ROOF-HM 710-1000 8 Pola/poles



8 POLA / POLES (750 RPM)

T: TROFAZNO / THREE-PHASE (3Ph-400V-50Hz)

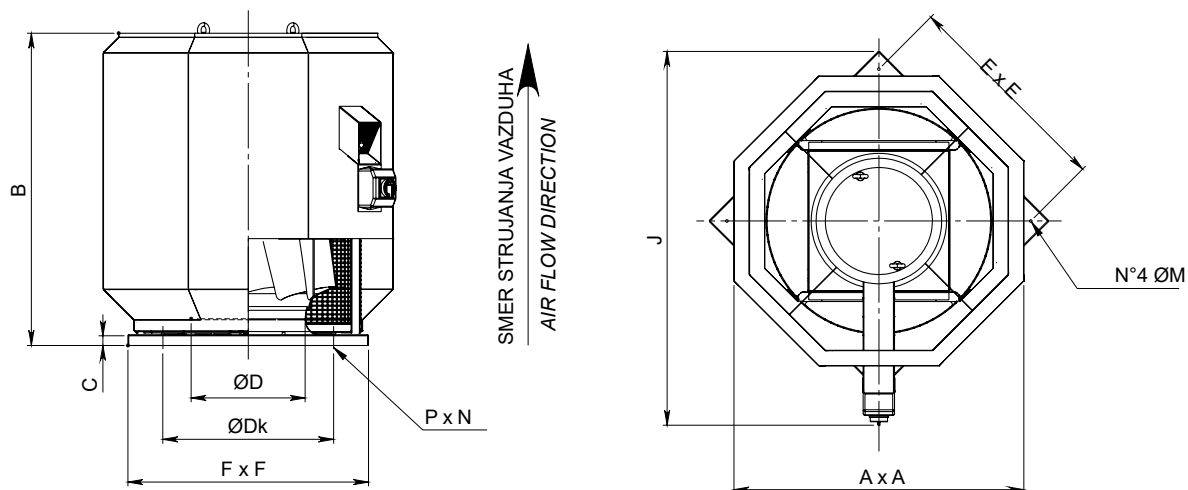
Model	Model	brzina protoka Flow rate (m ³ /h)	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
718 T		14.100	1,5	4	112	67
808 T		19.100	2,2	5,5	132	68
908 T		31.200	5,5	12,8	160	74
1008 T		41.700	7,5	16,4	160	77

PAŽNJA: nivo zvučnog pritiska se meri u slobodnom prostoru na 4 m od ventilatora, u bilo kom smeru, sa ulazom u kanal i slobodnim izlazom.

TOLERANCIJE: performanse i nivoi zvučne snage unutar tolerancija dozvoljenih standardom DIN 24166 za klasu 2.

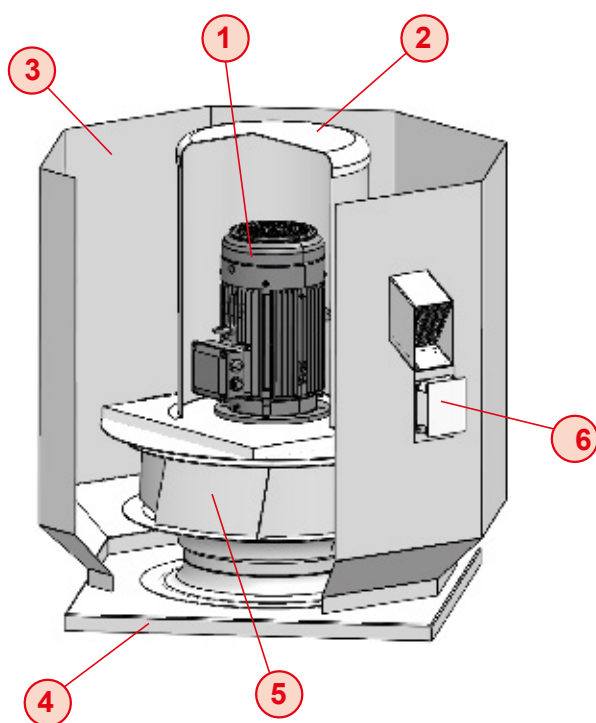
ATTENTION: sound pressure level is measured in free field at 4 m from the fan, in any direction, with ducted inlet and free outlet.

TOLERANCES: performances and sound power levels within the tolerances allowed by the DIN 24166 standard for Class 2.

ROOF-HM**DIMENZIJE - DIMENSIONS**

Model Model	A	B	C	ØD	ØDK	E	F	J	ØM	n° P	ØN	Kg
630	1130	1150	50	420	690	780	900	1500	12	6	M10	260
710	1230	1200	50	480	770	880	1000	1600	12	8	M10	340
800	1350	1500	50	530	860	1000	1120	1800	12	8	M10	480
900	1450	1600	80	600	970	1100	1250	1900	12	8	M10	450
1000	1600	1750	80	660	1070	1250	1330	2100	12	8	M10	620

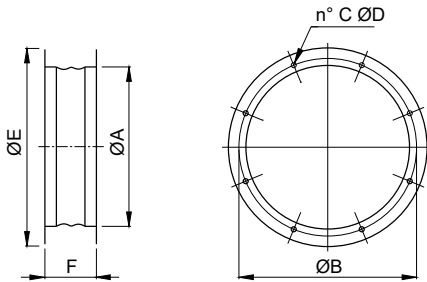
Dimenzionalne tolerancije u ± 5 mm - Dimensional tolerances ± 5 mm

ROOF-HM**REZERVNI DELOVI - SPARE PARTS**

- 1 Motor - Motor
- 2 Prekrivač - Cover
- 3 Kućište prstena - Ring casing
- 4 Baza - Base
- 5 Imper - Impeller
- 6 Spoljna priključna kutija - External terminal box

ROOF-HM**PRIBOR- ACCESSORIES****FC-DU-HT: FLEKSIBILNA VEZA**

Dizajnirano da spreči širenje vibracija duž kanala. Radna temperatura $-50^{\circ}\text{C} + 120^{\circ}\text{C}$.
(Testirano na $400^{\circ}\text{C}/2$ sata).
Komponente od čeličnog lima zaštićene od atmosferskih uticaja.

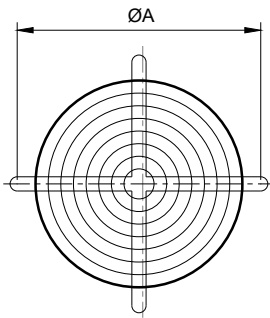
**FC-DU-HT: FLEX CONNECTION**

Designed to prevent the propagation of the vibrations along the duct.
Working temperature $-50^{\circ}\text{C} + 120^{\circ}\text{C}$.
(Tested $400^{\circ}\text{C}/2\text{h}$).
Components in steel sheet protected against the atmospheric agents.

Model Model	ØA	ØB	C	ØD	ØE	F	kg
FC-DU-HT 630	640	690	12	12	730	200	6,2
FC-DU-HT 710	710	770	16	12	810	200	7,2
FC-DU-HT 800	810	860	16	12	910	200	8,3
FC-DU-HT 900	910	970	16	16	1030	220	14
FC-DU-HT 1000	1010	1070	16	16	1130	220	15,4

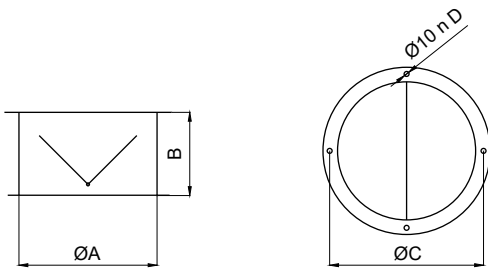
FPG-DU: ULAZNA REŠETKA

Zaštite ih od slučajnog kontakta sa rotirajućim delovima ventilatora.
Proizvedeno od čelične šipke u skladu sa standardima UNI EN ISO 12499, EUROVENT1/3 i zaštićeno od atmosferskih uticaja. (Neophodno za upotrebu na otvorenom vazduhu).

**FPG-DU: INLET GRID**

They preserve from the casual contact with the rotating parts of the fan.
Manufactured in steel rod according to UNI EN ISO 12499, EUROVENT1/3 standards and protected against the atmospheric agents. (Necessary for use in free air).

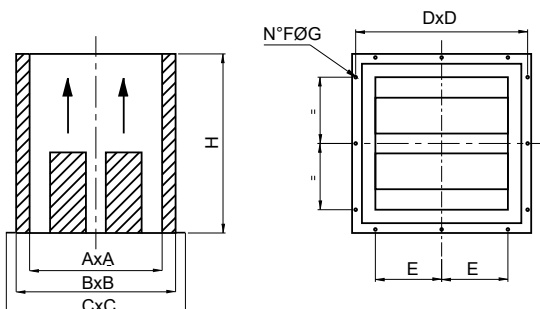
Model Model	ØA	kg
FPG-DU 630	690	1,8
FPG-DU 710	770	2,5
FPG-DU 800	860	3
FPG-DU 900	970	4
FPG-DU 1000	1070	5

GS-HM: ZATVARAČ**GS-HM: SHUTTER**

Model Model	ØA	B	ØC	n*D	kg
GS-HM 630	630	330	690	6	9
GS-HM 710	710	400	770	8	13
GS-HM 800	810	450	860	8	18
GS-HM 900	910	500	970	8	24
GS-HM 1000	1015	550	1070	8	32

SIL-HM: PRIGUŠIVAČ

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

**SIL-HM: SILENCER**

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

Model Model	A	B	C	D	E	n°F	ØG	H	kg
SIL-HM 630	740	890	1000	960	370	12	15	1000	90
SIL-HM 710	790	990	1130	1090	420	12	15	1200	160
SIL-HM 800	900	1100	1250	1200	275	20	15	1300	250
SIL-HM 900	1040	1240	1380	1320	300	20	20	1400	300
SIL-HM 1000	1120	1320	1530	1470	340	20	20	1500	330