

# ROOF-AM

## AKSIJALNI PRSTENASTI KROVNI VENTILATOR - "UNEL-MEC"

RING AXIAL ROOF FAN  
"IEC" MOTOR



### APLIKACIJE

Krovni ventilatori serije ROOF-AM su namenjeni za upotrebu tamo gde su potrebni veliki protok vazduha, u krovnim aplikacijama, bez dugih kanala. Na primer: ventilacija industrijskih zgrada (fabrika, skladišta), farmi, mašinske sale itd.

### DOMET

Serijski se sastoji od 8 veličina sa prečnikom radnog kola od 450 do 1000 mm.

### KARAKTERISTIKE

ROOF-AM seriju karakteriše prisustvo ulaza sa velikim radijusom zakrivljenosti, kako na ulazu tako i na izlazu vazduha, koji garantuju maksimalnu tišinu i visoku vazдушnu efikasnost, a takođe omogućavaju efikasno korišćenje ventilatora kao izvlači. kao pošiljalac. Motor je lako dostupan kako za prvi električni priključak tako i za potrebe održavanja. Motor je napravljen u skladu sa međunarodnim standardima, čime se obezbeđuje pouzdanost i dugoročni ekonomski oporavak ventilatora jednostavnim popravkom ili zamenom samog motora.

### KONSTRUKCIJA

- Prstenasti transporter sa dvostrukom ivicom sa velikim radijusom zakrivljenosti i bazom za sidrenje u čeličnom lima, zaštićen od atmosferskih uticaja.
- Kapa od tehnopolimera otporna na vremenske uslove.
- Mreža protiv ptica i spoljna zaštita od nezgoda, izrađena u skladu sa UNI EN ISO 12499 od čelične žice i zaštićena od atmosferskih uticaja.
- Radno kolo visokih performansi sa lopaticama od aeroprofila, sa promenljivim uglom nagiba od mirovanja u tehnopolimeru i glavčini u livenom aluminijumu. Balansiranje prema UNI ISO 21940-11 standardima.
- Asinhroni elektromotor naizmenične struje, IP55 zaštita, CI F izolacija, S1 servis, konstrukcija u skladu sa specifičnim IEC / EEC standardima (UNEL-MEC).
- Izvedba 5 ili 4 (direktna spojnica sa konzolnim radnim kolom).

### TEHNIČKE SPECIFIKACIJE

#### ROOFAM STANDARD

- Vazduh koji se prenosi: čist ili malo prašnjav, neabrazivan.
- Temperatura transportovanog vazduha:  $-20^{\circ}\text{C}$  /  $+50^{\circ}\text{C}$
- Napon napajanja: Trofazna verzija (T) 400V-3Ph  
Monofazna verzija (M) 230V-1Ph
- Frekvencija: 50Hz.
- Operacija u ekstrakciji.

### PRIBOR

- Gravitacioni zatvarač, samo izvlačenje (GS-RO).
- Eksterni terminalni blok (OTB).
- Podloge za nosače na valovitim krovovima (SB).
- Brojna baza (CB).
- Bočna mreža radnog kola (FPG) obavezna za upotrebu sa slobodnim izlazom.
- Servisni prekidač (SV).

### NA ZAHTEV

- Verzije bez mreže motora.
- Verzije za rad ubrzavanja.
- Verzije sa "efikasno" reverzibilnim protokom vazduha (ROOF-REV).
- Verzije sa elektromotorom dvostrukog polariteta.
- Verzije sa transporterom i postoljem od nerđajućeg čelika ili aluminijuma.
- ATEKS verzije (Roof-AM Atek).
- Verzije sa metalnim poklopcem
- Verzija bez šešira.

### APPLICATIONS

ROOF-AM line is designed to extract large volumes of air in roof installations, without long ducts. For instance: ventilation of industrial buildings (factories, warehouses etc.), stock farms and electrical equipments etc.

### RANGE

This line consists of 8 sizes with impeller from 450 up to 1000 mm.

### ADVANTAGES

This line is characterized by the wide round shaped nozzles in both inlet and outlet, warranty of reduced noise level and high efficiency. Besides these fans allow the effective operation either in exhaust or supply duty. Electric motor is easily accessible for wiring and maintenance operations, manufactured according to international standards assuring reliability and the long-term economic recovery of the unit simply repairing or replacing the motor itself.

### CONSTRUCTION

- Ring casing with double wide round shaped nozzle, and base resistant to the atmospheric agents.
- Upper cover in techno-polymer resistant to the atmospheric agents.
- Protection grid on outlet side in steel rod, manufactured according to UNI EN ISO 12499.
- Impeller with high efficiency airfoil blades in plastic material and hub in die cast aluminum alloy. Variable pitch angle in still position.
- Balancing according to UNI ISO 21940-11 Asynchronous electric motor, protection IP55, Class F insulated, service S1, construction according to IEC/EEC (UNEL-MEC) standard.
- Arrangement 5 or 4 (impeller directly coupled to motor shaft).

### TECHNICAL SPECIFICATIONS

#### ROOF-AM STANDARD

- Conveyed air: clean, not abrasive.
- Temperature of conveyed air:  $-20^{\circ}\text{C}$  /  $+50^{\circ}\text{C}$ .
- Voltage: three phase version (T) 400V-3Ph.  
Single phase version (M) 230V-1Ph.
- Frequency: 50Hz.
- Working as exhaust fan.

### ACCESSORIES

- Inlet gravity shutter, only for exhaust fans (GS-RO).
- Outer terminal box (OTB).
- Support base for corrugate roof covering (SB).
- Counter base (CB).
- Inlet grid (FPG) mandatory for use in free air.
- Service switch (SW).

### ON REQUEST

Versions without motor side grid.

- Intake versions.
- Versions with air flow 100% reversible (ROOF-REV).
- Versions with three phase double polarity electric motor.
- Versions with casing and base in stainless steel or aluminum.
- Explosion proof versions (Roof-AM Atek)
- Versions with metal sheet cover.
- Versions without cap.

# ROOF-AM

## PERFORMANSE- PERFORMANCES

1 mm H<sub>2</sub>O = 9,8 Pa

Performanse prikazane na dijagramima odnose se na vazduh na temperaturi od 15°C i na nadmorskoj visini od 0 metara, a dobijene su u instalacijama tipa "C" u odsustvu mreže i pribora.

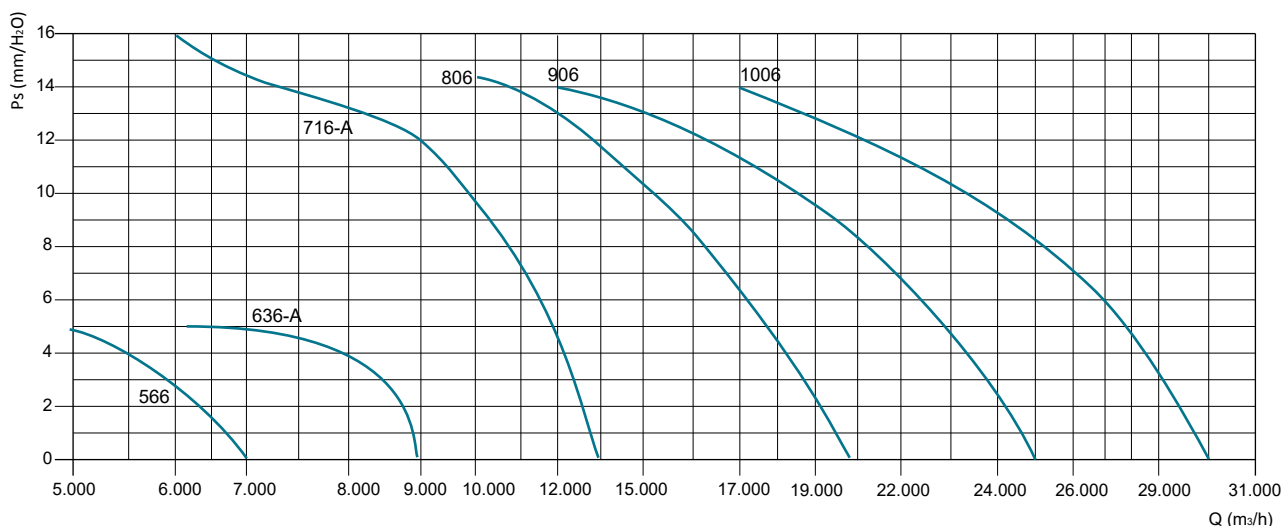
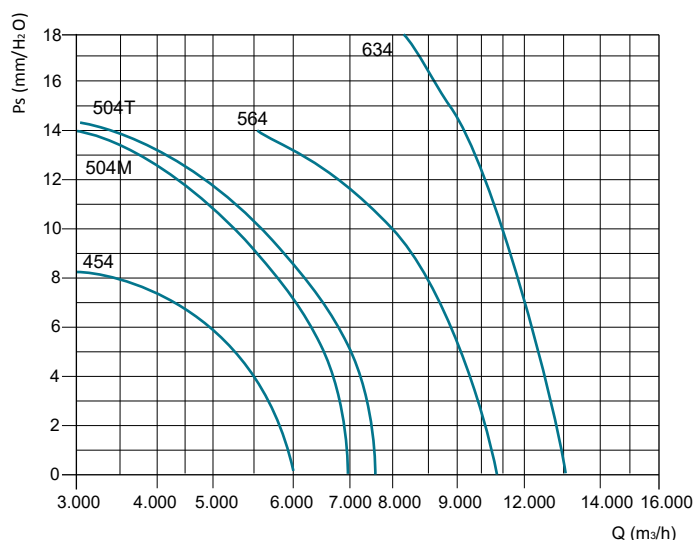
Performances shown in the selection diagrams refer to air at 15°C temperature and 0 mt a.s.l. altitude, and they were obtained in installation type "B" with no grid nor accessories.

### 4 POLA / POLES (1500 RPM) MONOFAZNO / SINGLE-PHASE (1Ph-230V 50Hz)

Model Model	Brzina protoka - Flow rate (m <sup>3</sup> /h)	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
454 M	6.000	0,25	1,8	71	59
504 M	7.000	0,37	3,3	71	63

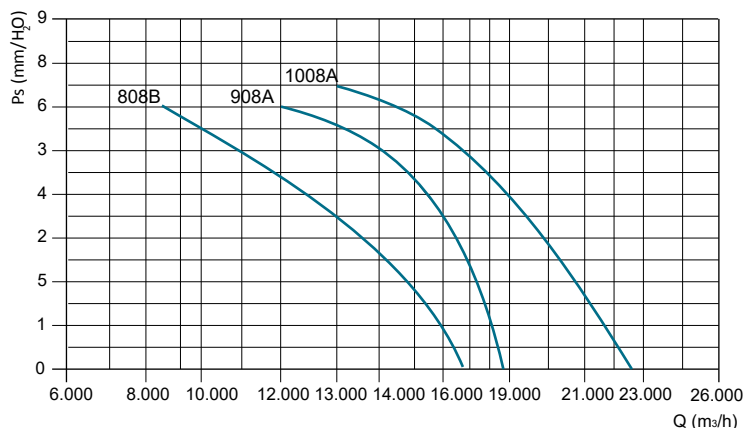
### 4 POLA / POLES (1500 RPM) TROFAZNO / THREE-PHASE (3Ph-400V 50Hz)

Model Model	Brzina protoka - Flow rate (m <sup>3</sup> /h)	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
454 T	6.000	0,25	0,8	71	59
504 T	7.500	0,55	1,6	80	63
564 T	10.500	0,75	2	80	66
634 T	13.000	1,1	2,8	90S	70



### 6 POLA / POLES (1000 RPM) TROFAZNO / THREE-PHASE (3Ph-400V 50Hz)

Model Model	Brzina protoka - Flow rate (m <sup>3</sup> /h)	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
566 T	6.900	0,25	1	71	56
636A T	9.000	0,37	1,3	80	60
716A T	13.500	0,75	2,2	90	61
806 T	20.000	1,5	4	100	62
906 T	25.000	1,5	4	100	69
1006 T	30.000	2,2	5	112	72



### 8 POLA / POLES (750 RPM) TROFAZNO / THREE-PHASE (3Ph-400V 50Hz)

Model Model	Brzina protoka - Flow rate (m <sup>3</sup> /h)	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A))
808B T *	16.500	0,75	2,3	100	57
908A T	18.800	0,75	2,3	100	63
1008A T	22.500	1,1	3,4	100	68

U slučaju ugradnje u EU, koristiti samo za ekstrakcije u okruženjima koja nisu zauzeta isključivo od strane ljudi (npr. profesionalne kuhinje, industrijske i poljoprivredne aplikacije, mašine, data centri, itd.)

**\* Samo za dodatnu instalaciju U.E**

In case of EU installation use only for air changes in environments NOT solely occupied by persons (for example: professional kitchens, industrial and agricultural applications, machinery ventilation, OEM, data centers,...). - \* ONLY FOR NON-EUROPEANS MARKET

**ROOF-AM****NIVO BUKE - NOISE LEVEL**

Model Model	63	125	250	500	1k	2k	4k	8k	Total
	Hz								
ROOF-AM 454	42	50	53	53	54	51	46	36	59
ROOF-AM 504	45	54	56	56	58	55	49	40	63
ROOF-AM 564	49	58	60	60	61	58	53	43	66
ROOF-AM 634	52	61	63	64	65	62	56	47	70
ROOF-AM 566	38	47	49	50	51	48	42	33	56
ROOF-AM 636 A	42	51	53	53	54	51	46	36	60
ROOF-AM 716 A	43	52	55	55	56	53	47	38	61
ROOF-AM 806	44	53	55	56	57	54	48	39	62
ROOF-AM 906	51	60	62	62	63	60	55	45	69
ROOF-AM 1006	55	63	66	66	67	64	59	49	72
ROOF-AM 808 B	39	47	50	50	51	48	43	33	57
ROOF-AM 908 A	45	54	56	56	57	54	49	39	63
ROOF-AM 1008 A	50	59	61	61	62	59	54	44	68

Ovim ventilacionim jedinicama, prema EU Regulativi 1253/2014, moraju upravljati preko invertera.

**Upozorenje:** nivo zvučnog pritiska se odnosi na omnidirekciono merenje u slobodnom polju na 6 m od ventilatora sa kanalnim usisom i besplatnom isporukom.

*All this ventilation units, according to EU Rule 1253/14, must be equipped with inverter.*

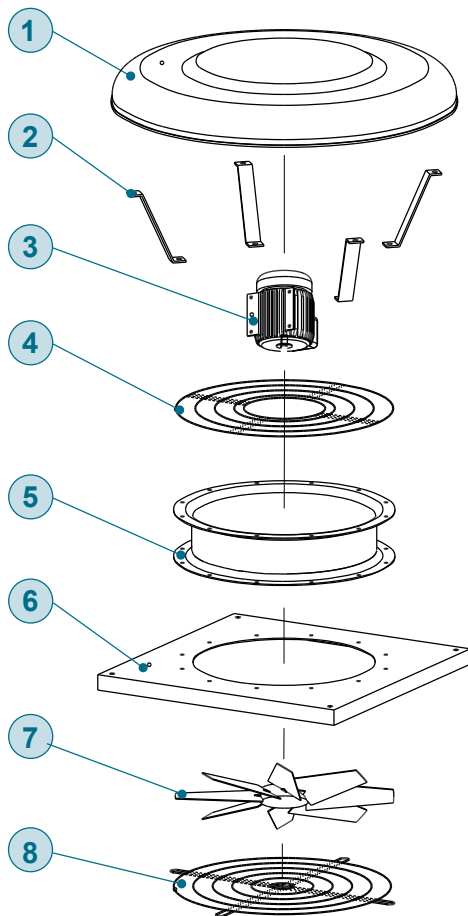
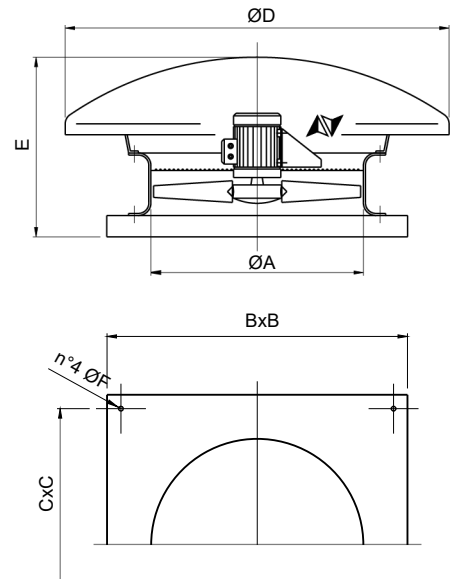
*ATTENTION: sound pressure level is measured in free field at 6 m from the fan, in any direction, with ducted inlet and free outlet.*



## DIMENZIJE - DIMENSIONS

Model Model	ØA	BxB	CxC	ØD	E	ØF	Kg
45	460	650	600	1000	450	10	30
50	510	760	710	1000	450	10	34
56	570	760	710	1000	450	10	38
63	640	930	870	1200	500	10	58
71	710	930	870	1200	500	10	63
80	815	1150	1050	1600	650	12	85
90	915	1300	1200	1600	650	12	120
100	1015	1300	1200	1600	700	12	130

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



- 1 Šešir - Cover
- 2 Zaštita - Brackets
- 3 Motor - Motor
- 4 Mreža - Grid
- 5 Transporter - Ring casing
- 6 Baza - Base frame
- 7 Impler - Impeller
- 8 Mreža (pribor) obavezna za slobodan vazduh - Grid (accessory) mandatory for free air

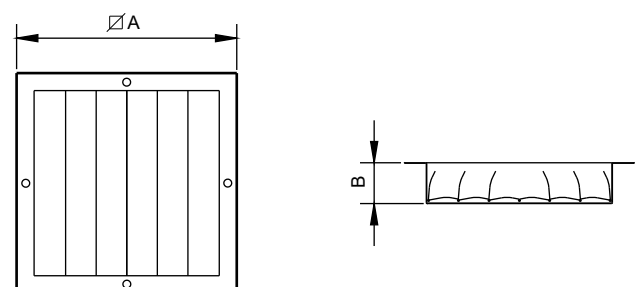
### GRAVITACIJSKI POKLOPCI: GS-RO

Poklopci gravitacionog zatvarača se otvaraju kretanjem vazduha sa uključenim ventilatorom i zatvaraju gravitacijom kada je isključen, izbegavajući gubitak toplote.

### GRAVITY SHUTTERS: GS-RO

Blades of the shutter are opened by the airflow when the fan is operating and they shut by gravity when the fan stops, thus avoiding heat waste.

Model Model	A	B	Kg
GS-RO 45	580	150	6
GS-RO 50-56	690	150	9
GS-RO 63-71	825	150	10
GS-RO 80	990	150	13
GS-RO 90-100	1160	150	15



# ROOF-AM

## PRIBOR - ACCESSORIES

### TALASASTE POTPORNE OSNOVE ZA KROVNE KULE

### SUPPORT BASES FOR ROOF FANS



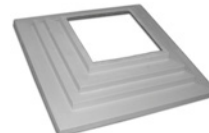
**SBIg/1 - SBI/1-2**



**SBc**



**SBIp**



**SBr**

### APLIKACIJE

SB (converse) rebraste potporne baze napravljene od čvrstog fibreglasa, pogodne su za ugradnju naših krovnih stubova na krovove od valovite ploče, izbjegavajući štetnu stagnaciju vode oko ventilatora i skupe zidarske ili stolarske radove.

### VERZIJE

**SBIg/1, SBI/1-2, SBI, SBc, SBIp:** za upotrebu sa krovnim ventilatorima sa bazom 930x930 mm (modeli 63 i 71).

**SBr:** redukcija koja se spaja sa **SBI, SBc, SBIp** bazama za 45, 50, 56 ventilatorskih jedinica.

Verzije SB su pogodne za spajanje sa valovitim pločama sa nagibom kosine:

- **SBIg/1:** trapezoidni talas H 28 (razmak 112 mm, razmak 28 mm)
- **SBI/1 10X146:** internacionalni (korak 146 mm visina 48 mm)
- **SBI/2 10X177:** "Euro" (korak 177 mm visina 51 mm mod.)
- **SBc:** „Euro" (korak 177 mm visina 51 mm i radijus savijanja lima jednak 3 metra)
- **SBIp:** karakteristike poput SBI, ali sa netalasastim preklapima (ivicama)

### INSTALACIJA

Preklapite prirubnicu na nizvodnu ploču i postavite je uzvodno. Preklapanje za najmanje jedan i četvrtinu talasa sa susjednim bočnim pločama (mod. SBI i SBc). Proverite da niste previše preopteretili razgovor.

### APPLICATIONS

The support bases SB (valleys), manufactured in sturdy glass-resin, are suitable for the installation of our roof fans on overlays built in corrugated slabs, avoiding detrimental stagnations of water nearby the fan and costly masonry or carpentry works.

### VERSIONS

**SBIg/1, SBI/1-2, SBI, SBc, SBIp:** to be used with roof fans having bases 930x930 mm (Models 63 and 71).

**SBr:** Adaptor to be coupled with soaker bases **SBI, SBc, SBIp** for installation of roof fans models 45-50-56.

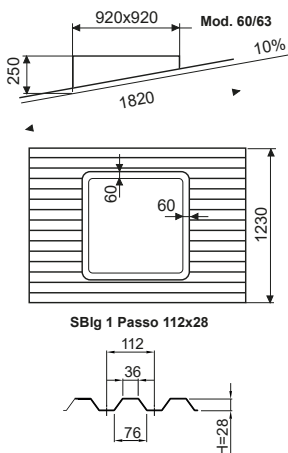
The versions SB are suitable to be coupled to corrugated slabs with pitch slope type:

- **SBIg/1:** trapezoidal wave H 28 (pitch 112 mm, pitch 28 mm)
- **SBI/1 10x146:** International type (pitch 146 mm pitch 48 mm)
- **SBI/2 10x177:** "Euro" type (pitch 177 mm height 51mm)
- **SBc:** "Euro" type (pitch 177 mm height 51 mm) and radius of curvature of the sheet of 3 meters.
- **SBIp:** similar features to SBI but with flat edges (not wavy)

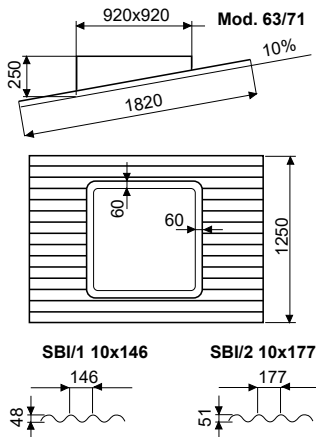
### INSTALLATION

Overlap the valley to the slab downstream and under-place it upstream. Overlap not less than one and fourth wave with the lateral adjacent slabs (mod. **SBIg/1, SBI/1-2, SBc**). Verify not to have excessively overloaded the valley.

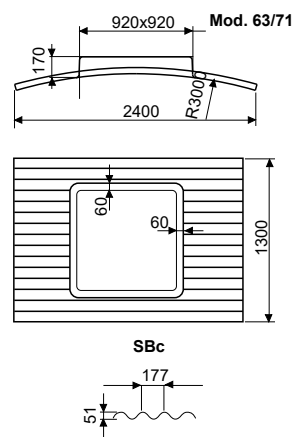
#### SBIg/1



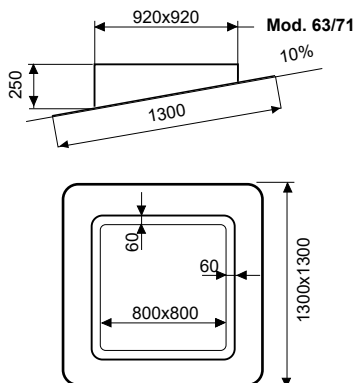
#### SBI/1 - SBI/2



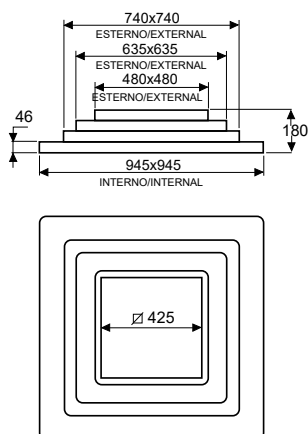
#### SBc



#### SBIp



#### SBr



#### SBIg/1 - SBI/1-2 - SBc - SBIp

