

ECi-BOX

VENTILATOR SA UNAZADNIM ZAKRIVLJENIM LOPATICAMA, ELEKTRONSKIM MOTOROM I INTEGRISANIM INVERTOROM

CABINET BACKWARD CURVED BLADE FAN WITH EC
MOTOR AND INTEGRATED INVERTER



APLIKACIJE

ECi-BOX linija se sastoji od centrifugalnih ventilatora sa unazad zakrivljenim krilima, direktno spojenih sa elektronski komutiranim motorom sa permanentnim magnetima (EC) smeštenim u plenumu (BOX), obloženom zvučnoizolacionim materijalom. Ovi ventilatori su posebno pogodni za usisavanje ili ubacivanje vazduha u stambene, poslovne i industrijske zgrade (kancelarije, teretane, prodavnice, restorane, mašinske prostorije, prostorije sa električnim razvodnim tablama itd.) koje zahtevaju tihi rad, savršenu regulaciju brzine i izuzetno visoku efikasnost, u skladu sa zakonskom ErP regulativom.

DOMET

7 modela sa impelerima od 350 do 630 mm i protokom vazduha preko 16.000 m³/h. Maksimalni dozvoljeni pritisci do 1100 Pa.

KARAKTERISTIKE

ECi-BOX ventilatori karakterišu se veoma niskom potrošnjom energije zahvaljujući upotrebi EC motora sa permanentnim magnetima sa stepenom efikasnosti IE5, izuzetno jednostavnim povezivanjem i pokretanjem zahvaljujući inverteru integrisanom u motor i pažljivo dizajniranim centrifugalnim impelerima sa unazad zakrivljenim krilama. Izlazni protok vazduha može biti usmeren u liniji sa usisnom stranom ili okrenut za 90°.

KONSTRUKCIJA

- Orman ventilatori za izbacivanje vazduha sa samonosećim okvirom od aluminijuma sa unutrašnjom zvučno izolacionom oblogom klase 1.
- Kružni ulazni deo.
- Centrifugalne lopatice sa unazad zakrivljenim krilama.
- Sinhroni motor sa elektronski komutiranim permanentnim magnetima, stepene efikasnosti IE5, IP55 klase F, 100% podesiva brzina sa ugrađenim drajverom (inverter).
- Lako uklonjive ploče za inspekciju i održavanje i za smer izlaznog protoka.
- Raspored 5 (direktno povezivanje)

TEHNIČKE SPECIFIKACIJE

- Transportovani vazduh: čist, neabrazivan.
- Temperatura transportovanog vazduha: -20°C / +50°C.
- Napon i frekvencija:
 - Trofazna verzija (T) 400V-50Hz.
 - Monofazna verzija (M) 230V-50Hz.
- Zatvorena bočna ploča usisne strane.

PRIBOR

- Vodootporni poklopac (RC-CB).
- Nosači za fiksiranje (FB-CB).
- Kružna kontra-prirubnica (CF-DU).
- Fleksibilna veza (FC-DU).
- Regulator brzine 0-10V (SRC 10).
- Nožice (SF-CB)

APPLICATIONS

ECi-BOX line consists of backward curved centrifugal fans, directly coupled to an electronically commutated permanent magnets motor (EC) housed in a plenum (BOX), lined with soundproofing material. These fans are particularly suitable to extracting or introducing air in residential, commercial and industrial buildings (offices, gyms, shops, restaurants engine rooms, electric panel rooms etc.) requiring silent operation, perfect speed regulation and an extremely high efficiency, according to the ErP Regulation in law.

RANGE

7 models with impellers from 350 to 630mm and airflow over 16.000 m³/h. Maximum pressures allowed up to 1100 Pa.

ADVANTAGES

ECi-BOX fans are characterized by a very low power consumption thanks to the use of an EC motor with permanent magnets with an efficiency grade IE5, extremely easy connection and start-up thanks to the inverter integrated in the motor and of carefully designed backward curved centrifugal impellers. The outlet airflow can be directed inline with the inlet side or turned by 90°.

CONSTRUCTION

- Cabinet extract fans with self-carrying frame in aluminum with Internal sound proofing lining Cl.1.
- Circular inlet section.
- Centrifugal backward curved blade.
- Electronically commutated permanent magnets synchronous motor, with efficiency IE5, IP55 Cl.F, 100% speed adjustable with built-in driver (inverter).
- Easy removal panels to allow inspection and maintenance and for outlet flow direction.
- Arrangement 5 (direct coupling)

TECHNICAL SPECIFICATIONS

- Conveyed air: clean not abrasive.
- Temperature of conveyed air: -20°C / +50°C.
- Voltage and frequency: Three phase version (T) 400V-50Hz. Mono-phase version (M) 230V-50Hz.
- Inlet side panel closed.

ACCESSORIES

- Weatherproof cover (RC-CB).
- Fixing brackets (FB-CB).
- Circular counter-flange (CF-DU).
- Flexible connection (FC-DU).
- Speed regulator 0-10V (SRC 10).
- Support feet (SF-CB).

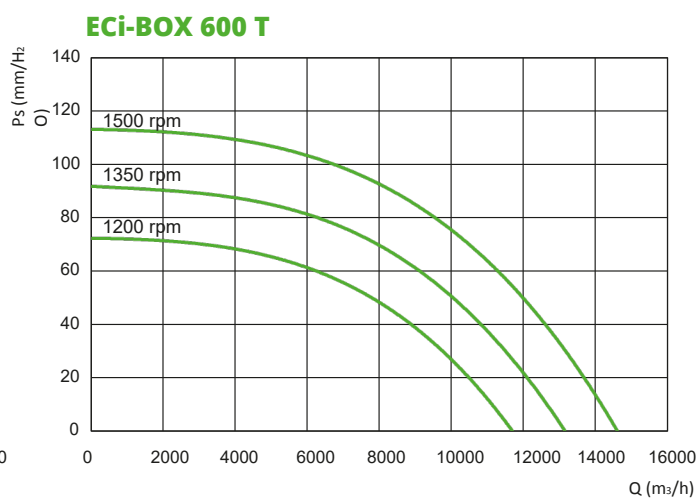
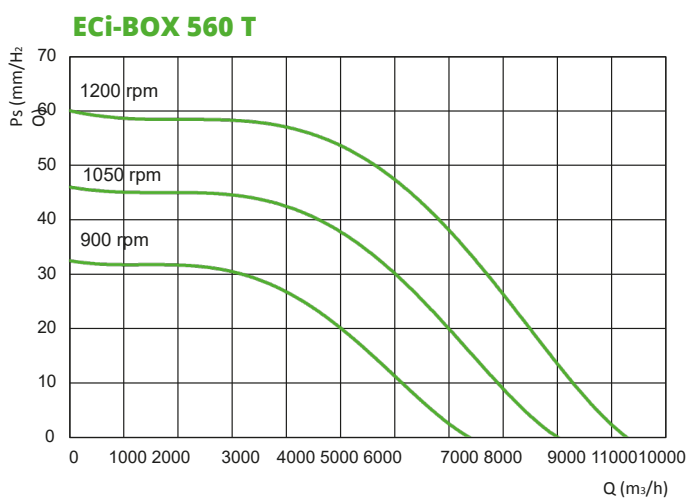
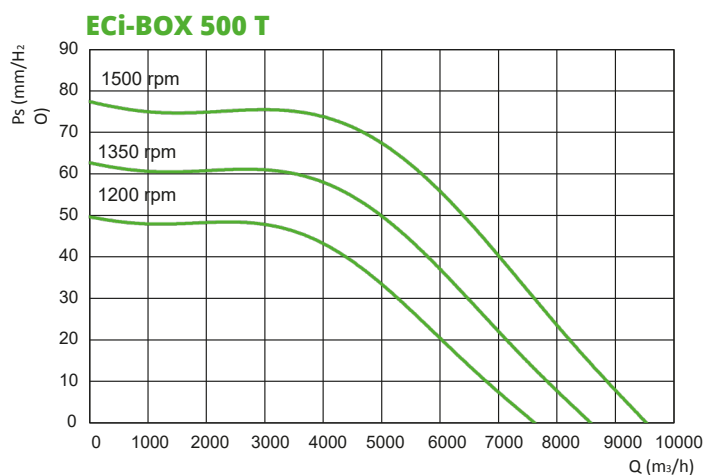
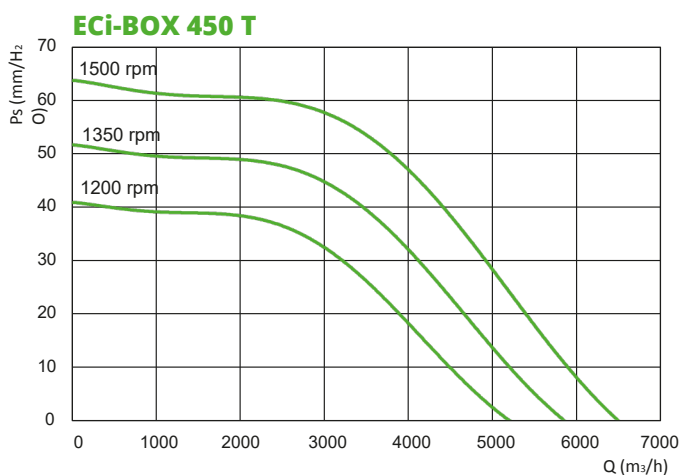
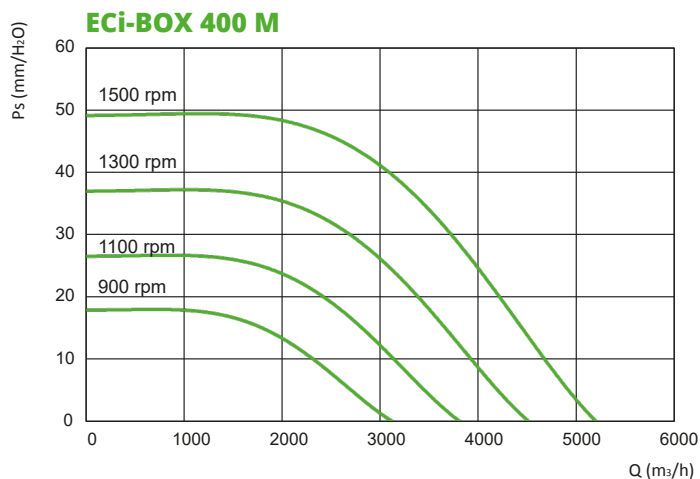
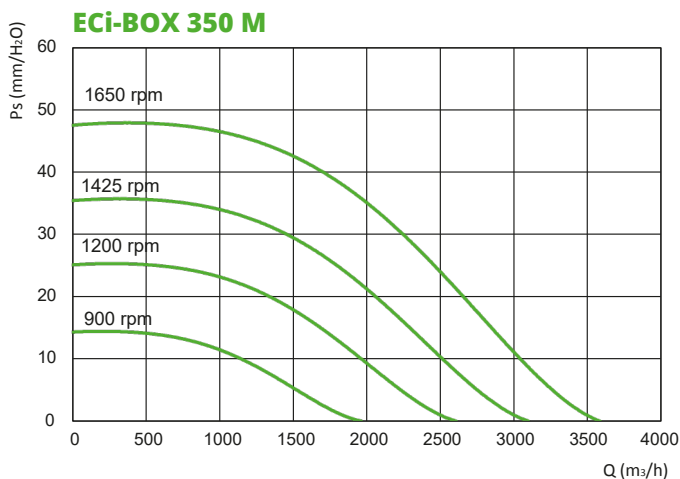
ECi-BOX

PERFORMANSE - PERFORMANCES

1 mm H₂O = 9,8 Pa

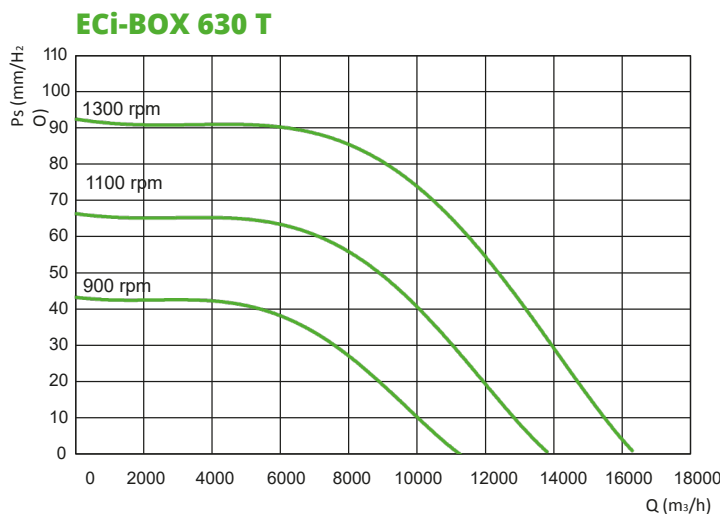
Performanse prikazane na dijagramima odnose se na vazduh na temperaturi od 15 ° C i nadmorskoj visini od 0 m. , a dobijeni su u instalacijama tipa "C" u nedostatku mreže i pribora.

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 instal-lation type "C" with no grid nor accessories.



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VAŽNO: tokom upotrebe proverite da li apsorbovana struja nikada ne prelazi vrednost nominalne struje motora.

VAŽNO: tokom upotrebe nikada ne prekoračujte maksimalni broj obrtaja naznačen u tabelama (*).

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

IMPORTANT: during use check that the current absorbed never exceeds the value of the rated current of the motor.

IMPORTANT: during use never exceed the maximum RPM indicated in tables (*).

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

Model Model	Snabdevanje Supply	RPM fan max (*)	Pr (kW)	Pm motor (kW/RPM)	In max (Ams)	Lp (dB(A))
350 M	230V/1ph	1650	0,3	0,75/3000	5,0	56
400 M	230V/1ph	1500	0,5	0,6/1800	4,3	58
450 T	400V/3ph	1500	0,8	1,7/1500	3,2	60
500 T	400V/3ph	1500	1,5	1,7/1500	3,2	62
560 T	400V/3ph	1200	1,4	1,7/1500	3,2	67
600 T	400V/3ph	1500	2,9	3,0/1500	5,9	74
630 T	400V/3ph	1300	2,9	3,0/1500	5,9	70

Pm = Snaga motora

Pr = Snaga osovine pri maksimalnim obrtajima ventilatora

RPM = Maksimalna brzina okretanja ventilatora (ne sme se prekoračiti)

In = Potrošnja struje

Lp = Nivo zvučnog pritiska u

slobodnom polju 3 m od ventilatora sa kanalnim ulazom i slobodnim izlazom

Pm = Power and speed motor

Pr = Shaft power at max fan RPM

RPM = Maximum turning speed of the fan (not to be exceeded)

In = Motor nameplate current

Lp = Sound pressure level in free field at 3 m distance from the fan, with ducted inlet and ducted outlet, outlet on the opposite side of the inlet.

SRC 10: REGULATOR REGULATOR

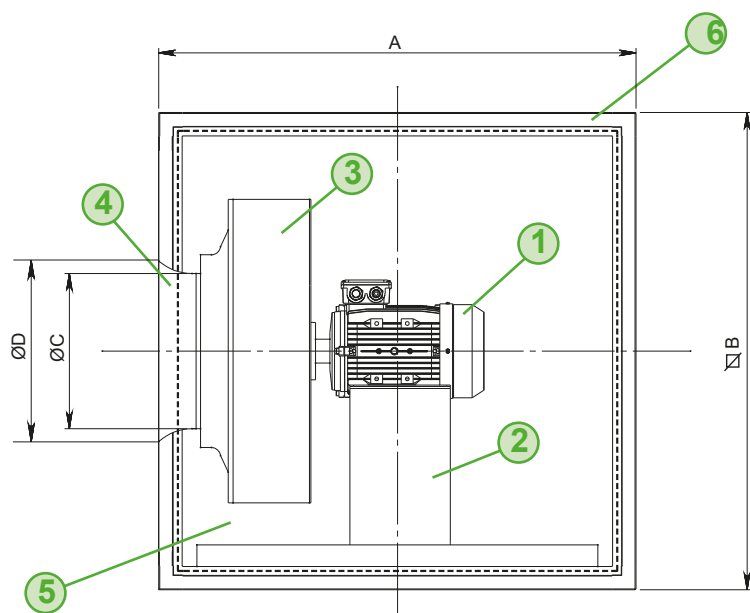
Kontrolni potencijometar (regulator brzine) sa izlazom 0-10V i integrisanim prekidačem za uključivanje/isključivanje (suvi kontakt).

Control potentiometer (speed regulator) with 0-10V output and integrated ON / OFF switch (dry contact).



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DIMENZIJE - DIMENSIONS



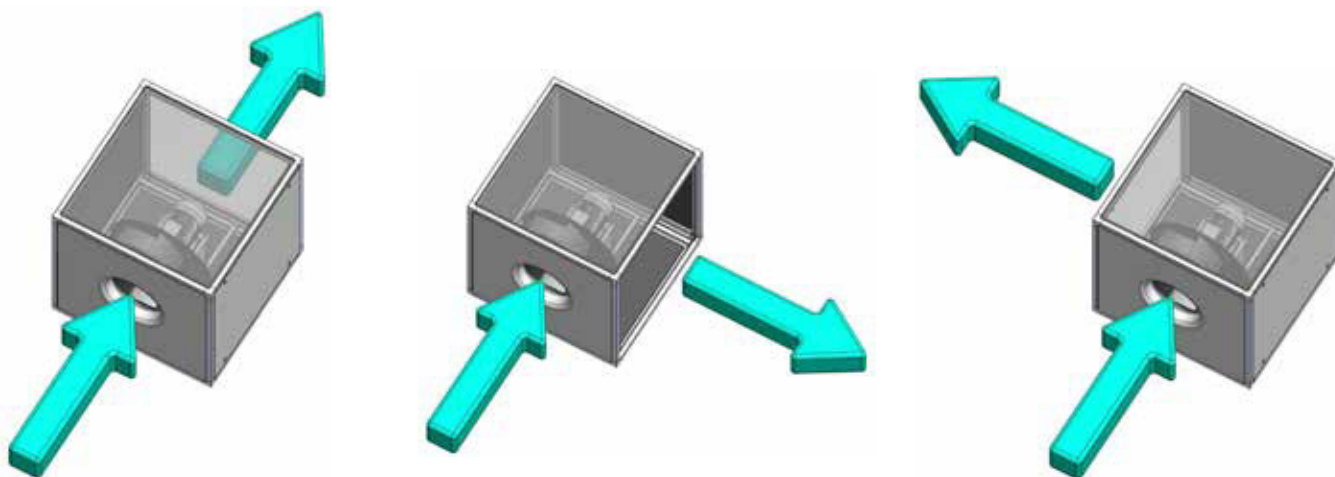
- 1 Motor - Motor
- 2 Držać motora - Motor support
- 3 Inper - Impeller
- 4 ulazni konus - Inlet cone
- 5 Panel za impelera - Inspection panel
- 6 Okvir - Frame

Model Model	A	∅B	∅C	∅D	kg
350	550	550	235	300	40
400	700	700	265	350	60
450	700	700	300	400	80
500	800	800	330	450	100
560	800	800	370	500	120
600	1000	1000	370	500	140
630	1000	1000	400	550	160

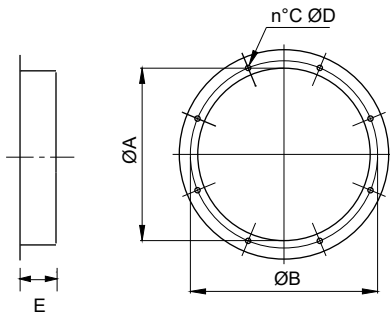
Dimenzionalne tolerancije u ± 5 mm - Dimensional tolerances ± 5 mm

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NAČIN INSTALACIJE - INSTALLATION METHOD

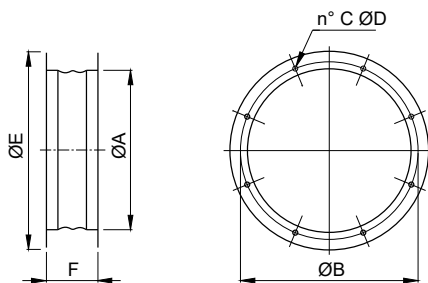


CF-DU: KONTRAPRIRUBNICA COUNTER FLANGE



Model Model	AC-BOX	ØA	ØB	C	ØD	E	kg
CF-DU 35	350	360	395	8	10	80	1,2
CF-DU 40	400	410	450	8	12	80	1,9
CF-DU 45	450	460	500	8	12	80	2,1
CF-DU 50	500/550	510	560	12	12	80	2,4
CF-DU 56	560/600	570	620	12	12	80	2,6
CF-DU 63	630	640	690	12	12	80	2,9

FC-DU: Fleksibilna veza FLEX CONNECTION



Dizajniran da spreči širenje vibracija duž kanala.

Designed to prevent the propagation of the vibrations along the duct.

Model Model	AC-BOX	A	B	C	D	E	F	kg
FC-DU 35	350	360	395	8	10	430	200	2,6
FC-DU 40	400	410	450	8	12	490	200	4
FC-DU 45	450	460	500	8	12	540	200	4,5
FC-DU 50	500/550	510	560	12	12	600	200	5,2
FC-DU 56	560/600	570	620	12	12	650	200	5,5
FC-DU 63	630	640	690	12	12	725	200	6,2

FB-CB:FIKSIRANJE ZASTAVA FIXING BRACKETES

Nožice omogućavaju fiksiranje ventilatora. Komplet se sastoji od 4 dela pocinkovanog čeličnog lima, koji se fiksiraju na samonoseći okvir BOX-a.

The feet allow the fixing of the fan. Kit composed by 4 pieces in galvanized steel sheet, to be fixed to the BOX self-carrying frame.

