SI-BACK B

CENTRIFUGALNI VENTILATOR SA UNAZAD ZAKRIVLJENIM LOPATICAMA, VISOK KAPACITET, NIZAK I SREDNJI PRITISAK

CENTRIFUGAL BACKWARD CURVED BLADE FAN HIGH CAPACITIES LOW AND MEDIUM PRESSURES

APLIKACIJE

SI-BACK B ventilatori su dizajnirani za instalacije koje zahtevaju srednje do velike protoke vazduha sa niskim do srednjim pritiscima, u industrijskim primenama montiranim na kanale za transport veoma prašnjavog vazduha. Na primer: piljevina, drvna sečka, granulirani materijali, isključujući vlaknaste materijale.

DOMET

Ova linija se sastoji od 16 veličina sa prečnikom impelera od 220 do 1250 mm.

PREDNOSTI

SI-BACK B liniju karakteriše izuzetna čvrstoća zahvaljujući krutoj konstrukciji od emajliranog lima i debljini materijala. Još jedna karakteristika je poseban samočisteći profil sečiva koji omogućava transport materijala i raznovrsnost modela i verzija.

KONSTRUKCIJA

- Spiralni deo od epoksidno obojenog emajliranog čeličnog lima. Pričvršćivanje prirubnica prema UNI EN ISO 1335/Tab.1.
- Visoko efikasno zavareno impeler sa unazad zakrivljenim lopaticama.
- Balansiranje prema UNI ISO 21940-11.
- Asinhroni trofazni ili jednofazni elektromotor, zaštita IP 55, klasa izolacije F, servis S1, tip montaže B3 ili B5, konstrukcija prema IEC/EEC (UNEL MEC) standardima.
- Raspored 4 ili 5 (impeler direktno povezan sa vratilom motora); izvedba 1, 9, 12 (kaišni pogon, sa impelerom povezanim sa motorom pomoću prenosnika).

TEHNIČKE SPECIFIKACIJE

SIBACK B standard

- Transportovani vazduh: veoma prašnjav, transportni materijali.
- Temperatura transportovanog vazduha: -20°C / +60°C.
- Napon:
  - Trofazna verzija (T) 400V – 50Hz.
  - Jednofazna verzija (M) 230V – 50Hz.

ARAŽMANI

- SI-BACK B raspored 4: impeler direktno spojen sa vratilom motora, motor postavljen na nosaču motora.
- SI-BACK B raspored 5: impeler direktno spojen sa vratilom motora, motor prirubljen na spirali ventilatora.
- SI-BACK B raspored 1: verzija sa golim vratilom, osnovni raspored za kaišnu spojnicu (bez ikakvih komponenti spojnice).
- SI-BACK B raspored 9: verzija sa kaišnom spojnicom, sa motorom postavljenim sa strane nosača (uključujući komplet kaišnog pogona i motor).
- SI-BACK B raspored 12: verzija sa kaišnom spojnicom, sa motorom i ventilatorom postavljenim na zajedničkoj podlozi (uključujući komplet kaišnog pogona i motor).

APPLICATIONS

SI-BACK B fans are designed for installations requiring medium-large air deliveries with low-medium pressures, in industrial duct mounted applications for conveyance of very dusty air. For instance: sawdust, woodchips, granulated materials, excluding fibrous materials.

RANGE

This line consists of 16 sizes with impeller diameter from 220 up to 1250 mm.

ADVANTAGES

SI-BACK B line is characterized by the extreme sturdiness due to the rigid construction in enamelled sheet metal and the thickness of the materials. Another feature is the special selfcleaning profile of the blade that allows the conveyance of material and the variety of models and versions.

CONSTRUCTION

- *Volute in epoxy painted enamelled steel sheet. Fixing flanges according to UNI EN ISO 1335/Tab.1.*
- *High efficiency backward curved blade welded impeller.*
- *Balancing according to UNI ISO 21940-11.*
- *Asynchronous three or single phase, electric motor, protection IP 55, insulation class F, service S1, mounting type B3 or B5, construction according to IEC/EEC (UNEL MEC) standards.*
- *Arrangement 4 or 5 (impeller directly coupled to motor shaft); execution 1, 9, 12 (belt driven, with impeller coupled to the motor by mean of transmission).*

TECHNICAL SPECIFICATIONS

SI-BACK B standard

- *Conveyed air: very dusty, conveyance materials.*
- *Temperature of conveyed air: -20°C / +60°C.*
- *Voltage: three phase version (T) 400V*
  – 50Hz. single phase version (M) 230V
  – 50Hz.

ARRANGEMENTS

- *SI-BACK B arrangement 4: impeller directly coupled to motor shaft, motor placed on the motor support.*
- *SI-BACK B arrangement 5: impeller directly coupled to motor shaft, motor flanged on the fan volute.*
- *SI-BACK B arrangement 1: bare shaft version, basic arrangement for belt coupling (without any coupling component).*
- *SI-BACK B arrangement 9: belt coupling version, with motor placed on the side of the support (including belt drive kit and motor).*
- *SI-BACK B arrangement 12: belt coupling version, with motor and fan placed on a common basement (including belt drive kit and motor).*

PRIBOR

– Zaštitna rešetka na ulazu (IPG-SBB). (Neophodna za upotrebu u slobodnom vazduhu).
– Zaštitna rešetka na izlazu (OPG-SBB). (Neophodna za upotrebu u slobodnom vazduhu).
– Fleksibilni spoj na ulazu (IFC-SBB).
– Fleksibilni spoj na izlazu (OFC-SBB).
– Kontraprirubnica na ulazu (ICF-SBB).
– Kontraprirubnica na izlazu (OCF-SBB).
– Vrata za inspekciju. (ID-SBB)
– AV nosači (AM).
– Otvor za odvod kondenzacije (CD),

NA ZAHTEV

– Verzije otporne na eksploziju (SI-BACK B Atex).
– Verzije od nerđajućeg čelika.
– Verzije za visoke temperature (150°C za direktno spajanje i 300°C za verzije sa kaišnim spajanjem).

ACCESSORIES

– *Inlet protection grid (IPG-SBB). (Necessary for use in free air).*
– *Outlet protection grid (OPG-SBB). (Necessary for use in free air).*
– *Inlet flexible joint (IFC-SBB).*
– *Outlet flexible joint (OFC-SBB).*
– *Inlet counter flange (ICF-SBB).*
– *Outlet counter flange (OCF-SBB).*
– *Inspection door. (ID-SBB)*
– *AV mounts (AM).*
– *Condensation drain hole (CD),*

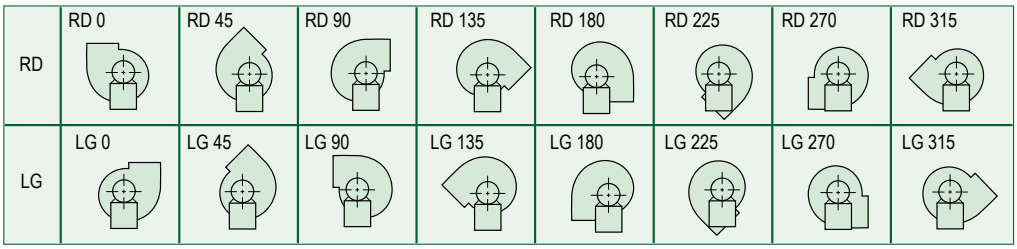
ON REQUEST

– *Explosion proof versions (SI-BACK B Atex).*
– *Stainless steel versions.*
– *High temperature versions (150°C for direct coupling and 300°C for belt coupling versions).*

SI-BACK B

Uglovi ispuštanja 180°- 225°: zahtevajte posebnu konstrukciju - Discharge angles 180°- 225°: request special contruction

UGLOVI ISPUŠTANJA - DISCHARGE ANGLES



SI-BACK B

PERFORMANSE - PERFORMANCES

1 Mm H_2O= 9,8 Pa

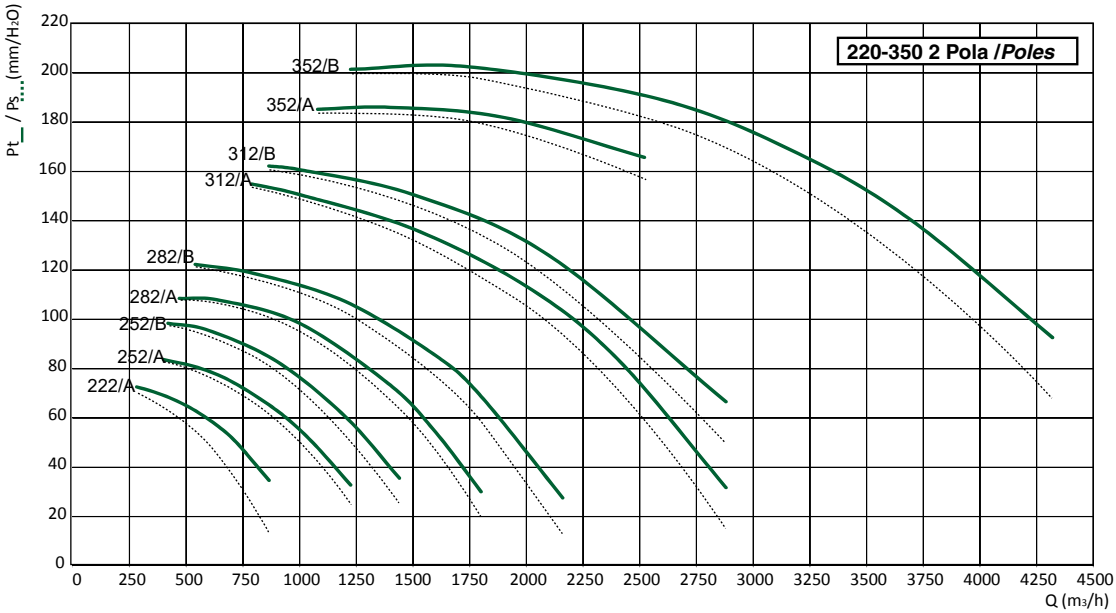
Performanse prikazane na dijagramima selekcije odnose se na vazduh na temperaturi od 15°C i nadmorskoj visini od 0 m, a dobijene su kod tipa instalacije „D“ bez rešetke i dodatne opreme.

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 "D" with no grid nor accessories.

2 POLA / *POLES* **(3000 RPM)** **T:** TROFAZNO / *THREE-PHASE* **(3Ph-400V-50Hz)**

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
222/A T*	0,18	0,55	63	54
252/A T*	0,25	0,65	63	57
252/B T*	0,37	1	71	59
282/A T*	0,55	1,35	71	61
282/B T*	0,75	1,9	80	61

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
312/A T	1,1	2,5	80	65
312/B T	1,5	3,2	90	65
352/A T	1,5	3,2	90	63
352/B T	2,2	4,7	90	68



* Samo za tržište van Evrope.
* Kao transportni ventilatori koji se koriste za transport negasovitih supstanci u industrijskim procesima.

** Only for non-Europeans market. * As conveying fans used for the transport of non-gaseous substances in industrial process applications.*

PERFORMANSE - PERFORMANCES

1 Mm H_2O= 9,8 Pa

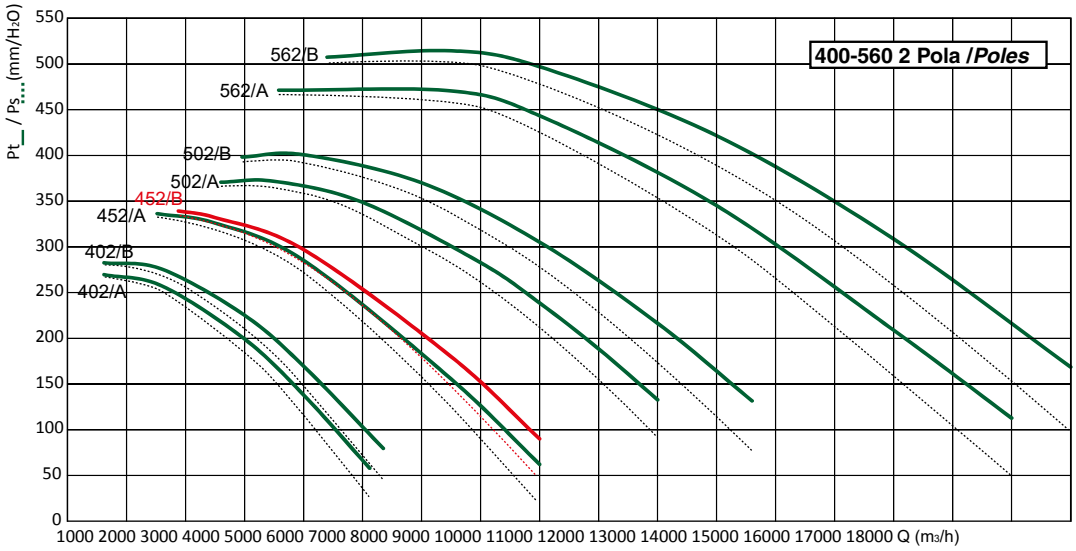
Performanse prikazane na dijagramima selekcije odnose se na vazduh na temperaturi od 15°C i nadmorskoj visini od 0 m, a dobijene su kod tipa instalacije „D“ bez rešetke i dodatne opreme.

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 "D" with no grid nor accessories.

2 POLA / *POLES* **(3000 RPM)** **T:** TROFAZNO / *THREE-PHASE* **(3Ph-400V-50Hz)**

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
402/A T	3	6,1	100	70
402/B T	4	7,5	112	71
452/A T	5,5	10,4	132	74
452/B T	7,5	13,9	132	73

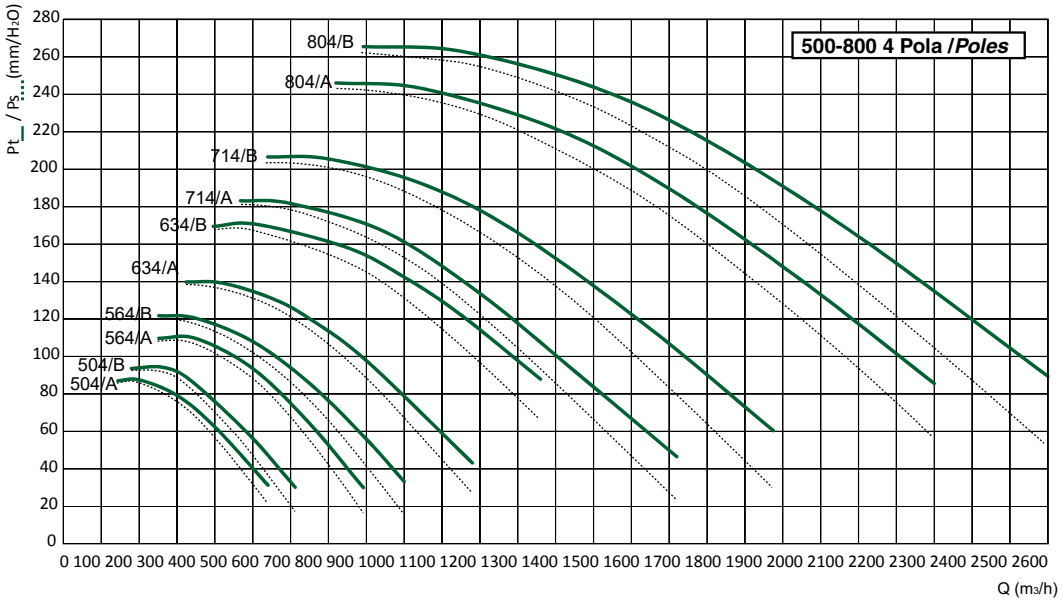
Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
502/A T	11	19,39	160	77
502/B T	15	26,2	160	77
562/A T	18,5	32,1	160	81
562/B T	22	40,4	180	81



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

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
504/A T	1,1	2,6	90	62
504/B T	1,5	3,5	90	64
564/A T	2,2	4,8	100	66
564/B T	3	6,6	100	67
634/A T	4	8,3	112	69

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
634/B T	5,5	11	132	70
714/A T	7,5	14,6	132	72
714/B T	11	20,9	160	74
804/A T	15	27,7	160	75
804/B T	18,5	32,8	180	76



LpA [dB(A)]: Merenje nivoa zvučne snage je sprovedeno u skladu sa UNI EN ISO 3746:1997. Zvučni pritisak je meren na površini paralelopipeda koji obuhvata mašinu na udaljenosti od 2 metra od njene površine.
TOLERANCIJE: performanse i nivoi zvučne snage u okviru tolerancija dozvoljenih standardom DIN 24166 za klasu 2.

LpA [dB(A)]: Measurement of the sound power level was carried out in compliance with UNI EN ISO 3746:1997. The sound pressure was measured on the surface of a parallelepiped that encloses the machine at a distance of 2 meters from its surface". TOLERANCES: performances and sound power levels within the tolerances allowed by the DIN 24166 standard for Class 2.

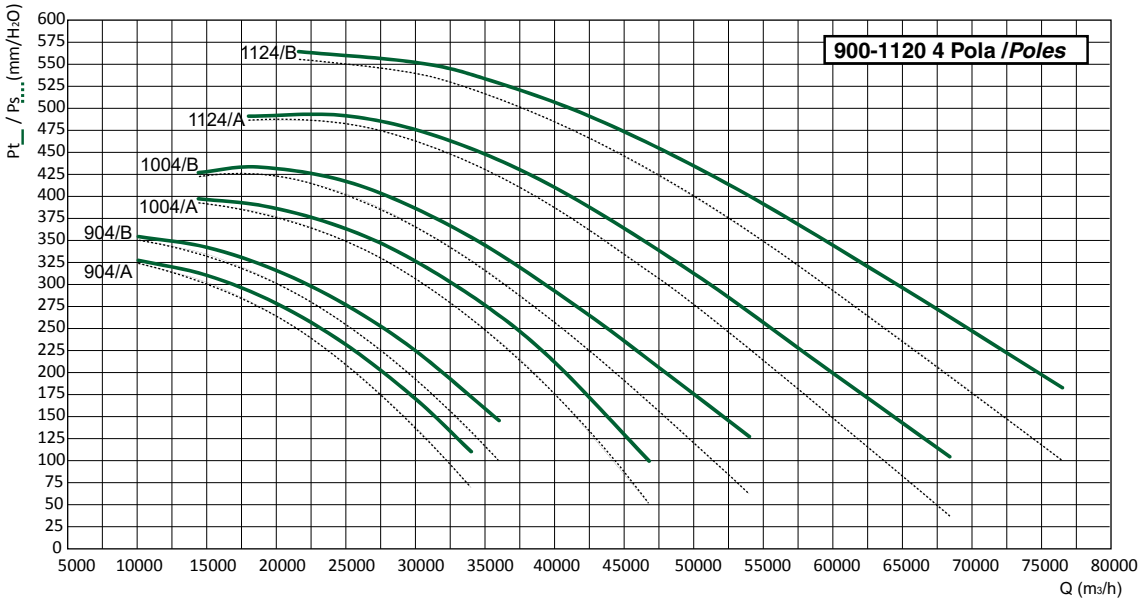
Performanse prikazane na dijagramima selekcije odnose se na vazduh na temperaturi od 15°C i nadmorskoj visini od 0 m, a dobijene su kod tipa instalacije „D“ bez rešetke i dodatne opreme.

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 “D” with no grid nor accessories.

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

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
904/A	30	53	200	78
904/B	37	65,5	225	78
1004/A	45	79	225	**80**

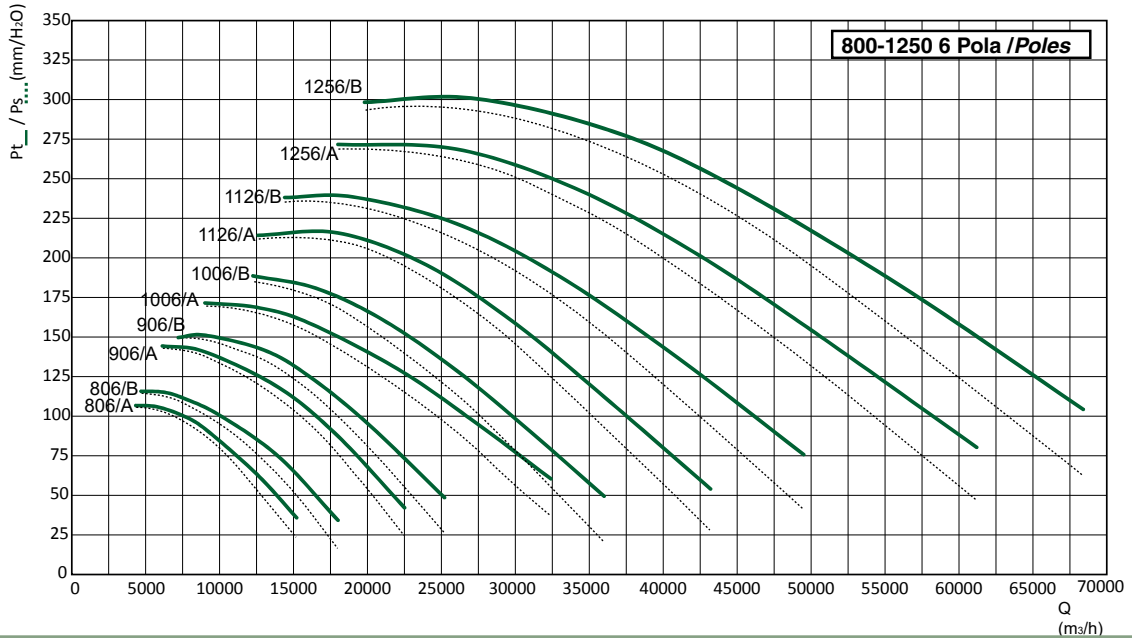
Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
1004/B	55	93	250	**82**
1124/A	75	127	280	**83**
1124/B	90	149	280	**84**



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

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
806/A T	4	8,6	132	66
806/B T	5,5	11,8	132	68
906/A T	7,5	15,2	160	70
906/B T	11	21,9	160	71
1006/A T	15	29	180	73

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
1006/B T	18,5	34	200	73
1126/A T	22	50	200	74
1126/B T	30	53	225	76
1256/A T	37	65	250	**78**
1256/B T	45	81	280	**78**



LpA [dB(A)]: Merenje nivoa zvučne snage je sprovedeno u skladu sa UNI EN ISO 3746:1997. Zvučni pritisak je meren na površini paralelopipeda koji obuhvata mašinu na udaljenosti od 2 metra od njene površine.
TOLERANCIJE: performanse i nivoi zvučne snage u okviru tolerancija dozvoljenih standardom DIN 24166 za klasu 2.

LpA [dB(A)]: Measurement of the sound power level was carried out in compliance with UNI EN ISO 3746:1997. The sound pressure was measured on the surface of a parallelepiped that encloses the machine at a distance of 2 meters from its surface”. TOLERANCES: performances and sound power levels within the tolerances allowed by the DIN 24166 standard for Class 2.

SI-BACK B

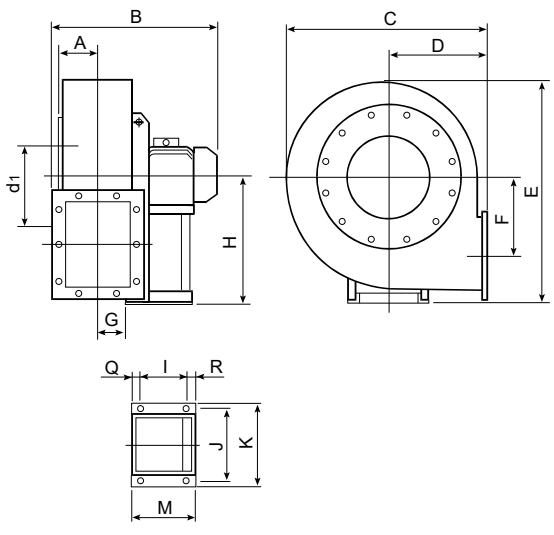
DIMENZIJE - DIMENSIONS

Aranžman 4- Arrangement 4

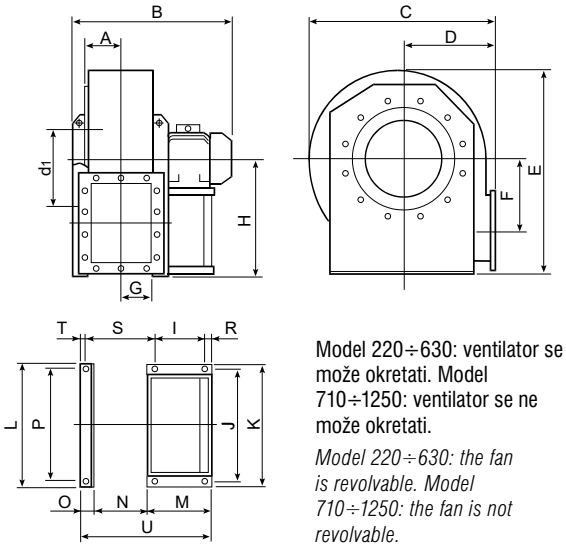
Model *Model*	Mot. (H)	Pm (kW)	Kg	Ventilator - *Fan*										Baza - *Base*												
				A	B	C	D	E	F	G	H 0° 135°	H 180° 225°	H 270° 315°	I	J	K	L	M	N	O	P	Q	R	S	T	U	Ø
222/A T	63	0,18	18	62	307	361	165	430	150	55	255	165	255	86	184	206		150				48	16				10
252/A T	63	0,25	24	86	366	441	195	527	175	76	315	195	315	86	184	206		150				48	16				10
252/B T	71	0,37	26		396									121	203	225		195				48	26				10
282/A T	71	0,55	30	95	414	475	200	606	202	86	375	200	375	121	203	225		196				49	26				10
282/B T	80	0,75	35		438									121	203	225		217				48	48				10
312/A T	80	1,1	42	105	458	527	225	658	229	96	400	225	400	121	203	225		211				45	45				10
312/B T	90	1,5	45		505									133	234	260		246				55	58				10
352/A T	90	1,5	66	115	530	600	255	738	253	106	450	255	450	133	234	260		246				55	58				10
352/B T	90	2,2	69		530									133	234	260		246				55	58				10
402/A T	100	3	85	127	585	655	285	811	286	118	500	285	500	197	289	324		276				30	49				12
402/B T	112	4	93		606									197	289	324		276				30	49				12
452/A T	132	5,5	115	141	673	735	320	914	321	132	560	320	560	237	337	372		336				40	59				12
452/B T	132	7,5	118		673									237	337	372		336				40	59				12
502/A T	160	11	175	157	810	832	360	1000	355	148	600	360	600	337	395	440		436				50	49				14
502/B T	160	15	180		810									357	395	440		436				50	49				14
504/A T	90	1,1	100		6136									133	234	260		246				55	58				10
504/B T	90	1,5	106		13									133	234	260		246				55	58				10
562/A T	160	18,5	270	177	857	940	400	1155	390	165	670	400	670	337	395	440	692	436	326	53	632	49	410	23	815	14
562/B T	180	22	276		938									357	434	488		460				33	430		839	17
564/A T	100	2,2	128		691									197	289	324		276				49	390		655	12
564/B T	100	3	136		691									197	289	324		276				49	390		655	12
634/A T	112	4	190	195	752	1050	450	1300	439	185	750	450	750	197	289	324	762	276	366	53	702	49	430	23	694	12
634/B T	132	5,5	205		792									237	337	372		336				59	440		754	
714/A T	132	7,5	287	216	837	1190	500	1415	500	202	670	500	850	201	772	826	915	336	404	60	772	75	497	27	800	20
714/B T	160	11	338		942									316				436				66			900	
804/A T	160	15	504	241	1011	1342	560	1591	560	226	755	560	950	315	862	926	1045	436	453	80	862	60	546	47	968	20
804/B T	180	18,5	512		1092									361				460				39			993	
806/A T	132	4	391		906									201				336				75			869	
806/B T	132	5,5	395		906									201				336				75			869	
904/A T	200	30	6847	275	1254	1500	630	1781	630	253	850	630	1060	401	962	1026	1145	500	507	80	962	39	600	47	1087	20
904/B T	225	37	67		1236									441				540				39			1127	
906/A T	160	7,5	511		1065									316				436				60			1023	
906/B T	160	11	531		1065									316				436				60			1023	
1004/A T	225	45	963	308	1378	1686	710	1994	710	284	950	710	1180	440	1056	1128	1255	540	569	100	1056	45	657	67	1209	20
1004/B T	250	55	1081		1486									500				600							1269	
1006/A T	180	15	743		1279									360				460							1129	
1006/B T	200	18,5	850		1336									400				500							1169	
1124/A T	280	75	1445	350	1558	1884	800	2252	800	319	1060	800	1320	565	1178	1268	1400	690	638	100	1178	45	763	55	1428	24
1124/B T	280	90	1486		1558									565				690							1428	
1126/A T	200	22	955		1405									375				500							1238	
1126/B T	225	30	1156		1447									415				540							1278	
1256/A T	250	37	1430	388	1632	2114	900	2548	900	358	1190	900	1500	475	1310	1400	1530	600	716	100	1310	45	840	55	1415	24
1256/B T	280	45	1915		1632									565				690							1505	

* Težina ventilatora u kg (kompletno sa motorom).* *Weight of fan in kg (complete with motor).*
Dimenzionalne tolerancije ± 5 mm - *Dimensional tolerances ± 5 mm*

MODEL/ *MODEL* 250-500



MODEL/ *MODEL* 560-1250



Model 220÷630: ventilator se može okretati. Model 710÷1250: ventilator se ne može okretati.

Model 220÷630: the fan is revolvable. Model 710÷1250: the fan is not revolvable.

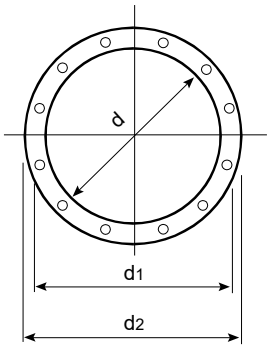
SI-BACK B

DIMENZIJE - DIMENSIONS

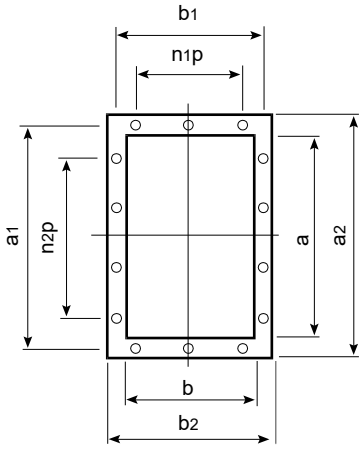
Model *Model*	Ulazna prirubnica - *Inlet flange* (fig. 1)					Izlazna prirubnica- *Outlet flange* (fig. 2)									
	d	d_1	d_2	n°	ø	a	b	a_1	b_1	a_2	b_2	$n_1$xp	$n_2$xp	n°	ø
220	130	155	185	8	8	124	103	145	125	164	143			4	8
250	185	219	255	8	8	207	148	241	182	277	218	1x112	1x112	8	12
280	205	241	275	8	8	231	166	265	200	301	236	1x112	1x112	8	12
310	228	265	298	8	8	258	185	292	219	328	255	1x112	2x112	10	12
350	255	292	325	8	12	288	205	332	249	368	285	1x125	2x125	10	12
400	285	332	365	8	12	322	229	366	273	402	309	1x125	2x125	10	12
450	320	366	400	8	12	361	256	405	300	441	336	1x125	2x125	10	12
500	360	405	440	8	12	404	288	448	332	484	368	2x125	3x125	14	12
560	405	448	485	12	12	453	322	497	366	533	402	2x125	3x125	14	12
630	455	497	535	12	12	507	361	551	405	587	441	2x125	3x125	14	12
710	505	551	585	12	14	569	404	629	464	669	504	2x160	3x160	14	14
800	565	629	665	12	14	638	453	698	513	738	553	2x160	3x160	14	14
900	635	698	735	12	14	715	507	775	567	815	607	2x160	4x160	16	14
1000	715	775	815	16	14	801	569	871	639	921	689	2x200	3x200	14	14
1120	805	861	905	16	14	898	638	968	708	1018	758	3x200	4x200	18	14
1250	905	958	1005	16	14	1007	715	1077	785	1127	835	3x200	4x200	18	14

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

(fig. 1)



(fig. 2)



SI-BACK B

ARAŽMAN NA ZAHTEV - ARRANGEMENT ON REQUEST

ARAŽMAN *ARRANGEMENT* **5**

ARAŽMAN *ARRANGEMENT* **9**

ARAŽMAN 12 *ARRANGEMENT*