SI-BACK A

CENTRIFUGALNI VENTILATOR SA LOPATICAMA UNAZAD, VISOKIM PROTOKOM I NISKIM PRITISKOM

CENTRIFUGAL BACKWARD CURVED BLADE FAN HIGH CAPACITIES LOW PRESSURES

APLIKACIJE

Ventilatori serije SI-BACK A su namenjeni za instalacije koje zahtevaju visok protok vazduha sa relativno niskim pritiscima, u kanalnim instalacijama. Na primer: ventilacija i klimatizacija industrijskih i komercijalnih postrojenja, parkinga, pomorskih i rudarskih aplikacija itd.

DOMET

Asortiman se sastoji od 15 veličina sa prečnikom radnog kola od 250 do 1250 mm.

KARAKTERISTIKE

Asortiman SI-BACK A ventilatora odlikuje se ekstremnom robusnošću zbog konstrukcije od obojenog čelika i debljine korišćenih materijala. Još jedna karakteristika je raznolikost modela i verzija koje čine asortiman, koji vam omogućava da pronađete najprikladnije rešenje za bilo koji problem ventilacije. Radno kolo je dostupno u različitim klasamakonstrukcije (I-II-III) prema maksimalnoj brzini rotacije dozvoljenoj relativnim prečnikom.

KONSTRUKCIJA

- Vijak za obojeni čelični lim. Prirubnica prema UNI EN ISO 13351 /Tab.1 standardima.
- Visokoefikasni reverzno zavareni radni kolo sa zakrivljenim sečivom.
- Balansiranje prema UNI ISO 21940-11 standardima.
- Trofazni ili jednofazni asinhroni elektromotor, klasa IP 55 zaštita, klasa F izolacije, S1 servis, oblik B3 ili B5, konstrukcija prema IEC/EEC(UNEL-MEC) standardima.
- Izvedbe 4 i 5 (radno kolo direktno spojeno na osovinu motora); izvedbe1, 9, 12 (sa prenosom, sa radnim kolom spojenim sa motorom pomoću kaiša i remenica).

TEHNIČKE SPECIFIKACIJE

SI-BACK A standard:
Preneti vazduh: čist, malo prašnjav, neabrazivan.
- Temperatura transportovanog vazduha: -20 ° C / + 60 ° C.
- Napon:
  Trofazna (T) verzija 400V 50Hz.
  Monofazna verzija (M) 230V 50Hz.

ARANŽMANI

- SI-BACK Izvedba 4: radno kolo direktno spojeno na osovinu motora, motor postavljen na oslonac (stolicu).
- SI-BACK Izvedba 5: radno kolo direktno spojeno na osovinu motora, motor prirubnički pričvršćen na vijak ventilatora.
- SI-BACK Verzija 1: gola osovina, osnovna verzija za prenosne spojnice(bez prenosnog kompleta).
- SI-BACK Verzija 9: prenosna spojnica, sa motorom postavljenom zastavicom na strani nosača (uključuje komplet za prenos i motor).
- SI-BACK A verzija 12: prenosna spojnica, sa motorom i ventilatorima postavljenim na zajedničkoj osnovi (uključuje komplet za prenos i motor).

APPLICATIONS

SI-BACK A fans are designed for installations requiring large air deliveries with relatively low pressures, in duct mounted applications. For instance: ventilation and conditioning of industrial and commercial plants, car parks, marine and mining applications, etc.

RANGE

This line consists of 15 sizes with impeller diameter from 250 up to 1250 mm.

ADVANTAGES

SI-BACK A 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 variety of models and versions composing the series, consenting to find the suitable solution for many ventilation problems. Impeller is available in different classes (I-II-III) according to the maximum RPM admitted for the relevant diameter.

CONSTRUCTION

- *Volute in epoxy painted enamelled steel sheet. Fixing flanges according to UNI EN ISO 13351/Tab.1 standards.*
- *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).*
- *Arrangement 4 or 5 (impeller directly coupled to motor shaft); arrangement 1, 9, 12 (belt driven, with impeller coupled to the motor by mean of transmission).*

TECHNICAL SPECIFICATIONS

SI-BACK A standard
- *Conveyed air: clean, slightly dusty, not abrasive.*
- *Temperature of conveyed air: -20°C / +60°C.*
- *Voltage:*
  Three phase version (T) 400V – 50Hz.
  Single phase version (M) 230V – 50Hz.

ARRANGEMENTS

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

PRIBOR

– Zaštitna mreža za usisnu stranu (IPG-SBA) (Neophodna za upotrebu sa slobodnim ustima).
– Zaštitna mreža za dovod (OPG-SBA) (Neophodna za upotrebu sa slobodnim ustima).
– Antivibracioni usisni spoj (IFC-SBA)
– Antivibracioni spoj za pritiskanje (OFC-SBA)
– Usisna kontra prirubnica (ICF-SBA).
– Prirubnica za kontrapresovanje (OCF-SBA).
– Inspekcijski otvor. (ID-SBA)
– Antivibracioni nosači (AM).
– Otvor za odvod kondenzata (CD).

NA ZAHTEV

– Tek verzije (SI-BACK A Atek).
– Verzije od nerđajućeg čelika.
– Verzije sa toplim gasom (150°C za direktno spajanje i 300°C za verzije sa kaišnim spajanjem).

ACCESSORIES

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

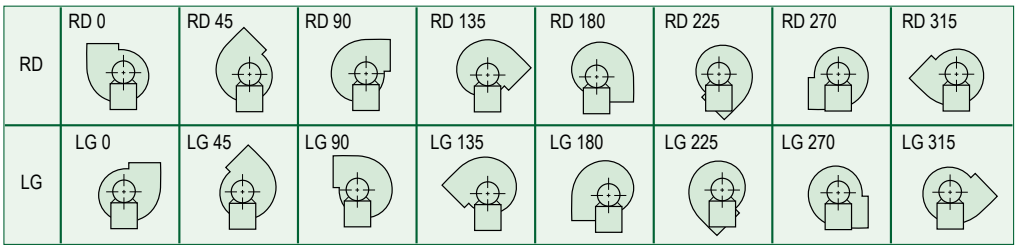
ON REQUEST

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

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

SI-BACK A

UGLOVI PRAŽNJENJA- DISCHARGE ANGLES



SI-BACK A

PERFORMANSE - PERFORMANCES

1 Mm H_2O= 9,8 Pa

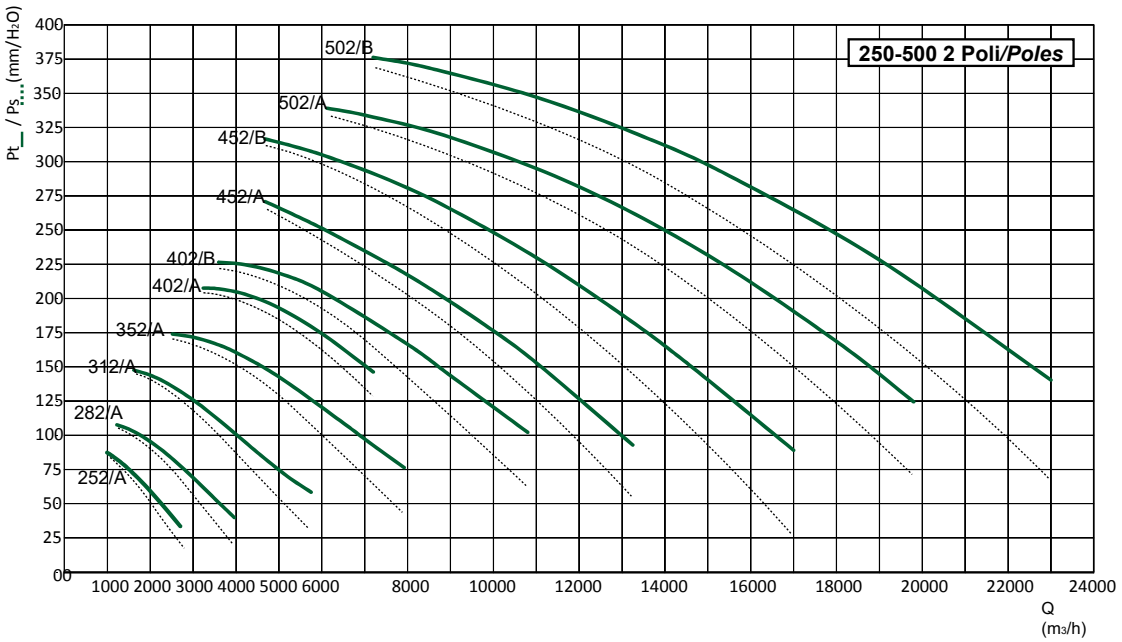
Performanse prikazane na dijagramima odnose se na vazduh na temperaturi od 15°C i nadmorskoj visini od 0 metara, a dobijene su u instalacijama tipa "D" u odsustvu mreže i pribora.

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 "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)
252/A T	0,55	1,35	71	63
282/A T	1,1	2,5	80	66
312/A T	2,2	4,7	90	67
352/A T	3	6,1	100	72
402/A T	4	7,5	112	70

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
402/B T	5,5	10,4	132	76
452/A T	7,5	13,9	132	79
452/B T	11	19,9	160	82
502/A T	15	26,2	160	**80**
502/B T	18,5	32,1	160	**82**



SI-BACK A

PERFORMANSE - PERFORMANCES

1 Mm H_2O= 9,8 Pa

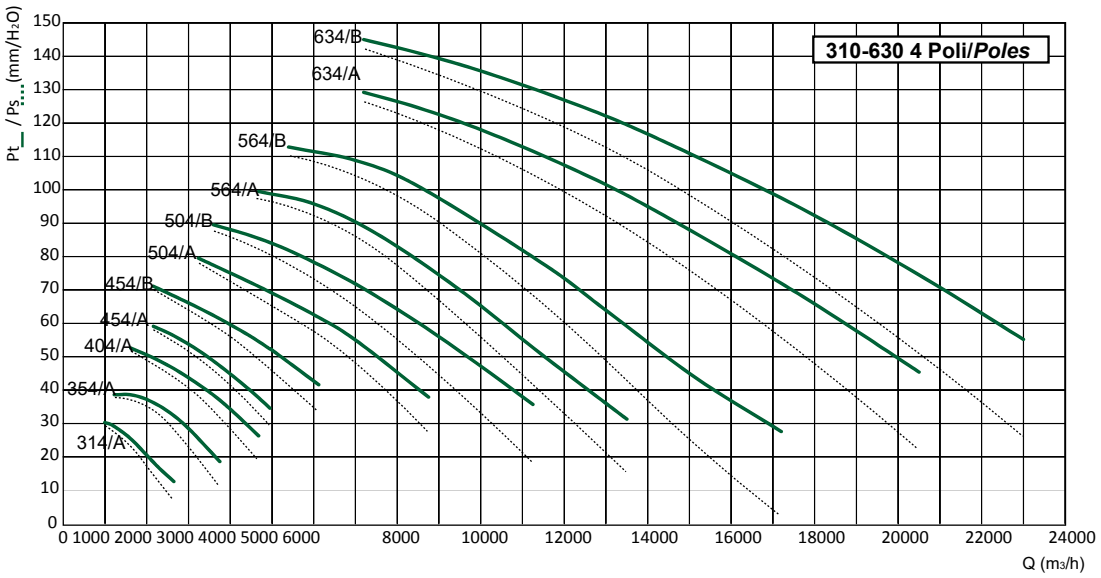
Le prestazioni indicate nei diagrammi si riferiscono ad aria alla temperatura di 15°C ed all'altitudine di O mt s.l.m. , e sono state ottenute in installazioni di tipo "D" in assenza di reti e accessori.

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)
314/A	0,18	0,6	63	52
354/A	0,37	1,1	71	57
404/A	0,75	1,5	80	60
454/A	0,75	1,9	80	59
454/B	1,1	2,6	90	60
504/A	1,5	3,5	90	67

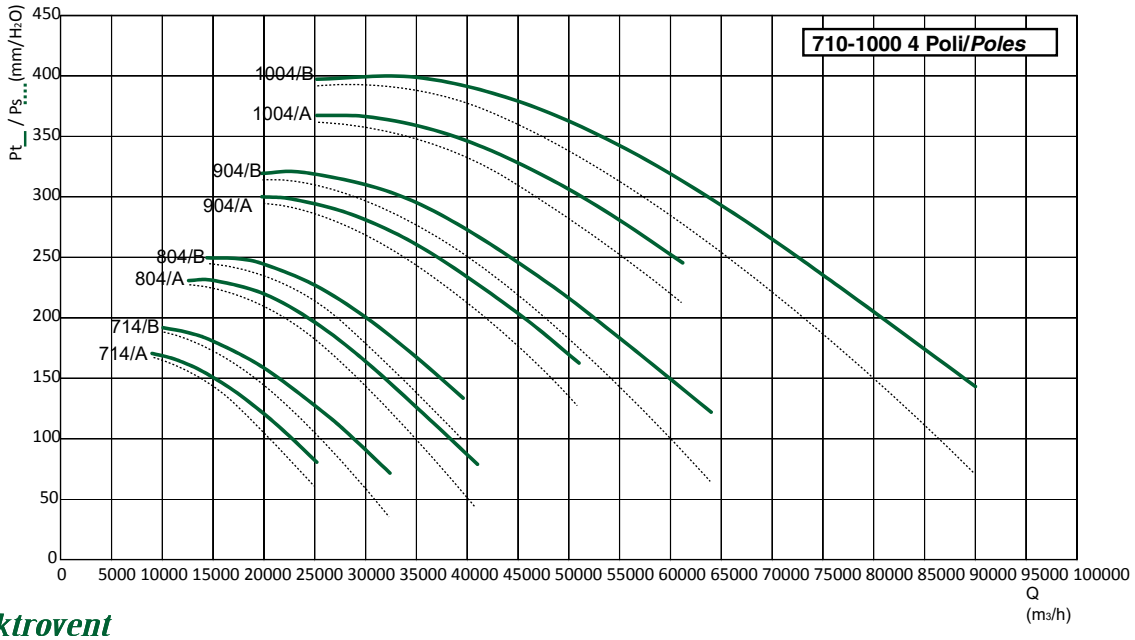
Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
504/B	2,2	4,8	100	69
564/A	3	6,6	100	70
564/B	4	8,3	112	72
634/A	5,5	11	132	73
634/B	7,5	14,6	132	73



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

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
714/A T	11	20,9	160	74
714/B T	15	27,7	160	78
804/A T	18,5	32,8	180	79
804/B T	22	38,8	180	75

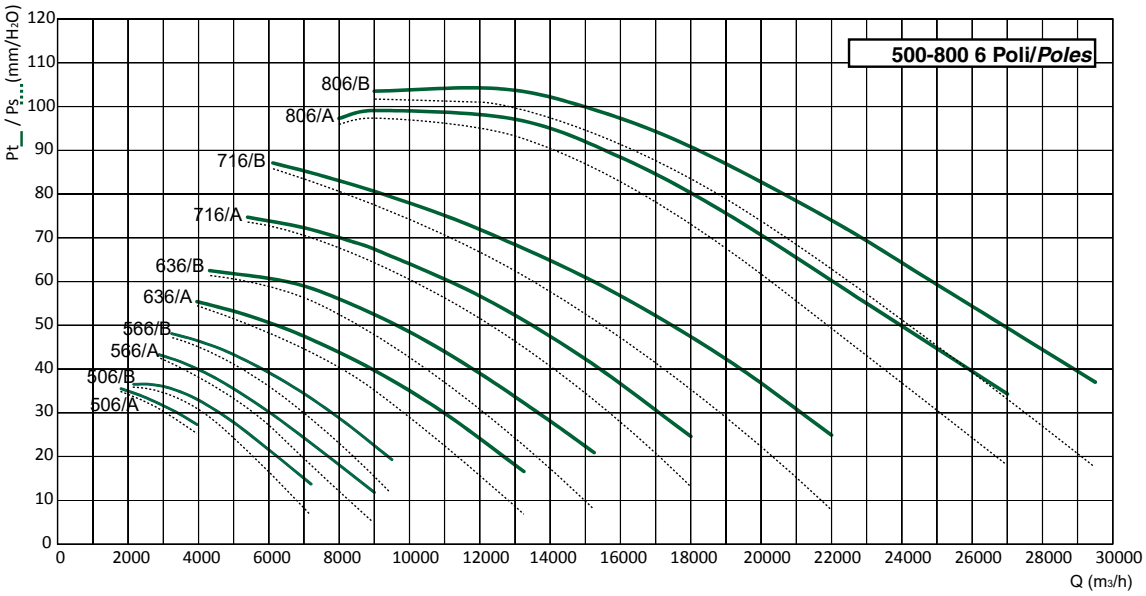
Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
904/A T	37	65,5	225	**81**
904/B T	45	78,8	225	**82**
1004/A T	55	93	250	77
1004/B T	75	127	280	**85**



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

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
506/A T	0,37	1,25	80	50
506/B T	0,55	1,75	80	56
566/A T	0,75	2,1	90	60
566/B T	1,1	2,9	90	61
636/A T	1,5	3,9	100	63

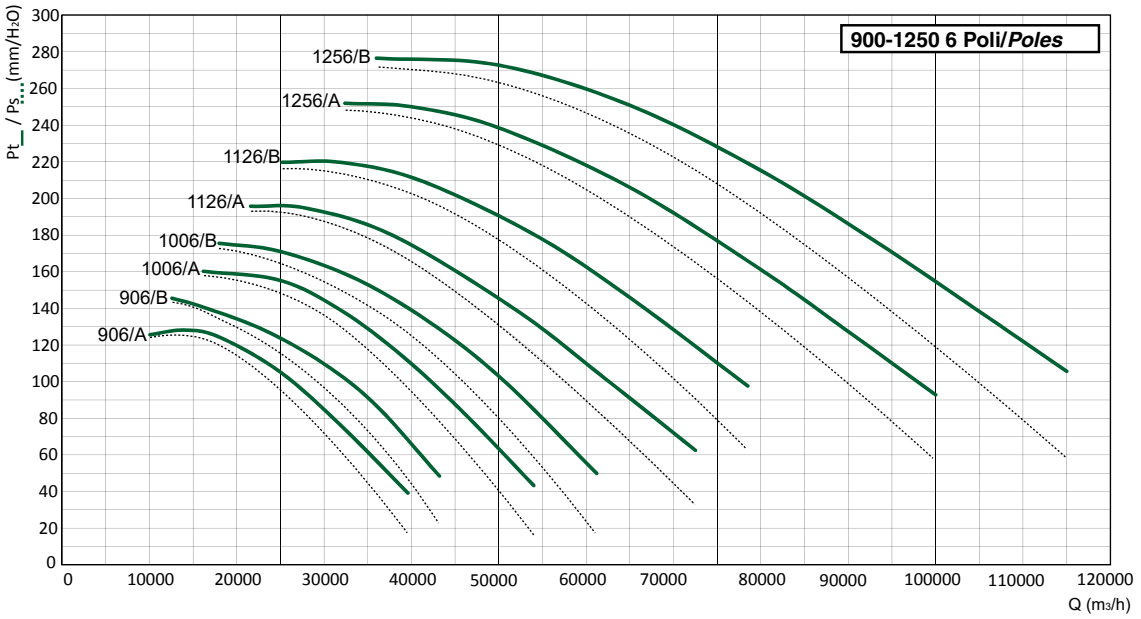
Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
636/B T	2,2	4,8	112	64
716/A T	3	6,8	132	64
716/B T	4	8,6	132	68
806/A T	5,5	11,8	132	**70**
806/B T	7,5	15,2	160	**71**



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

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
906/A	11	21,9	160	73
906/B	15	29	180	74
1006/A	18,5	33,7	200	75
1006/B	22	40	200	76

Model *Model*	Pm (kW)	In max (A)	Mot. (H)	Lp (dB(A)
1126/A	30	53	225	78
1126/B	37	64,5	250	78
1256/A	55	95	280	**81**
1256/B	75	131	315	**82**



LpA [dB(A)]: : Određivanje nivoa zvučne snage obavljeno je prema UNI EN ISO 3746: 1997 standardu. Merenja nivoa zvučnog pritiska vršena su na površini u obliku paralelepipeda koja zatvara mašinu, na udaljenosti od 2 m od površina same mašine“.

Tolerancije:aerodinamičke performanse i bukasu unutar tolerancija navedenih u DIN 24166, klasa 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 A

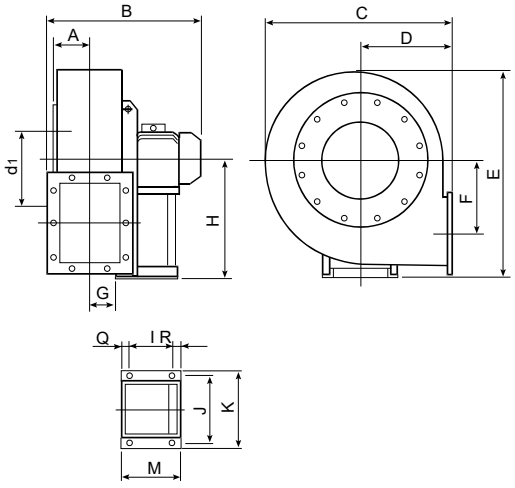
DIMENZIJE - DIMENSIONS

Aranžman 4 - Arrangement 4

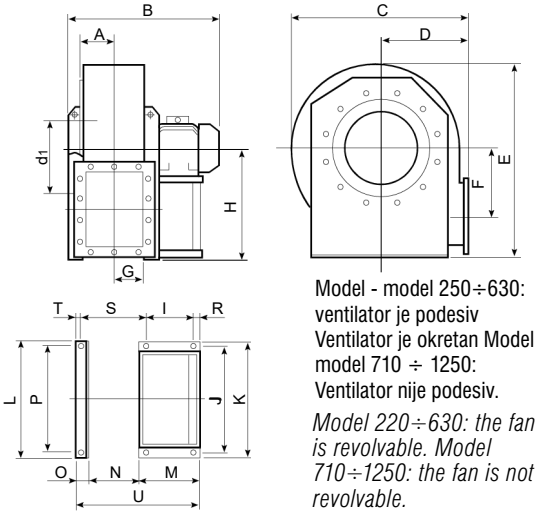
Model *Model*	Mot. (H)	Pm (kW)	Kg	Ventilator - *Fan*										Baza - *Base*												
				A	B	C	D	E	F	G	H 0° 135°	H 180° 225°	H 270° 315°	I	J	K	L	M	N	O	P	Q	R	S	T	U	Ø
252/A T	71	0,55	37	94	464	441	195	527	149	96	315	195	315	121	203	225		196				49	26				10
282/A T	81	1,1	45	105	482	477	200	605	172	105	375	200	375	121	203	225		217				48	48				10
312/A T	90	2,2	57	117	553	527	225	656	196	117	400	225	400	133	234	260		246				55	58				10
314/A T	63	0,18	43		452									86	184	206		145				45	14				10
352/A T	100	3	80	130	611	600	255	739	216	131	450	255	450	197	289	324		276				30	49				12
354/A T	71	0,37	65		509									121	203	225		189				45	23				10
402/A T	112	4	95	147	664	655	285	811	245	147	500	285	500	197	289	324		276				30	49				12
402/B T	132	5,5	116		710									237	337	372		336				40	59				12
404/A T	80	0,55	75		565									121	203	225		211				45	45				10
452/A T	132	7,5	124	163	751	735	320	914	275	165	560	320	560	237	337	372		336				40	59				12
452/B T	160	11	161		860									337	395	440		436				45	49				14
454/A T	80	0,75	89		600									121	203	225		211				50	45				10
454/B T	90	1,1	94		647									133	234	260		246				55	58				10
520/A T	160	15	187	183	913	832	360	1001	303	185	600	360	600	337	395	440		436				50	49				14
502/B T	160	18,5	196		913									337	395	440		436				50	49				14
504/A T	90	1,5	123		687									133	234	260		246				55	58				10
504/B T	100	2,2	130		718									197	289	324		276				30	49				12
506/A T	80	0,37	115		640									121	203	225		211				45	45				10
506/B T	80	0,55	117		640									121	203	225		211				45	45				10
564/A T	100	3	153	205	774	940	400	1155	332	207	670	400	670	197	289	324	692	275	409	53	632		49	468	23	737	12
564/B T	112	4	158		795									197	289	324		275					49	468		737	12
566/A T	90	0,75	141		743									133	234	260		245					58	493		707	10
566/B T	90	1,10	145		743									133	234	260		245					58	493		707	10
634/A T	132	5,5	202	230	885	1052	450	1290	373	232	750	450	750	237	337	372	762	335	459	53	702		59	527	23	846	12
634/B T	132	7,5	214		885									237	337	372		335					59	527		846	
636/A T	100	1,5	173		824									197	289	324		275					49	517		786	
636/B T	112	2,2	180		845									197	289	324		275					49	517		786	
714/A T	160	11	315	257	1045	1160	500	1418	427	254	850	500	850	316	772	826	832	439	508	60	772		60	606	27	1009	20
714/B T	160	15	326		1045									316				439					60			1009	
716/A T	132	3	276		940									201				336					75			909	
716/B T	132	4	286		940									201				336					75			909	
804/A T	180	18,5	465	287	1188	1312	560	1602	478	285	950	560	950	361	862	926	932	463	570	60	862		39	668	27	1095	20
804/B T	180	22	484		1239									361				463					39			1095	
806/A T	132	5,5	367		1002									201				336					75			971	
806/B T	160	7,5	397		1107									316				439					60			1071	
904/A T	225	37	840	322	1367	1500	630	1783	538	319	850	630	1060	441	962	1026	1145	540	638	80	962		39	731	47	1258	20
904/B T	225	45	847		1427									441				540					39			1258	
906/A T	160	11	556		1196									316				436					60			1154	
906/B T	180	15	658		1328									361				460					39			1178	
1004/A T	250	55	1105	360	1632	1686	710	1995	607	358	950	710	1180	500	1056	1128	1255	600	716	100	1056		45	803	67	1415	20
1004/B T	280	75	1278		1635									590				690								1505	
1006/A T	200	18,5	879		1482									400				500								1315	
1006/B T	200	22	885		1482									400				500								1315	
1126/A T	225	30	1153	404	1611	1884	800	2252	684	401	1060	800	1320	415	1178	1268	1400	540	802	100	1178		45	926	55	1441	24
1226/B T	250	37	1242		1719									475				600								1501	
1256/A T	280	55	1739	452	1818	2114	900	2548	770	449	1190	900	1500	565	1310	1400	1530	690	898	100	1310		45	1023	55	1688	24
1256/B T	315	75	1980		2030									675				800								1798	

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

MODEL / *MODEL* 250-500



MODEL / *MODEL* 560-1250



Model - model 250÷630: ventilator je podesiv
Ventilator je okretan Model - model 710 ÷ 1250: Ventilator nije podesiv.

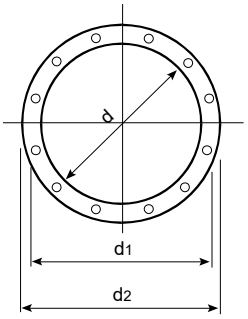
Model 220÷630: the fan is revolvable. Model 710÷1250: the fan is not revolvable.

SI-BACK A

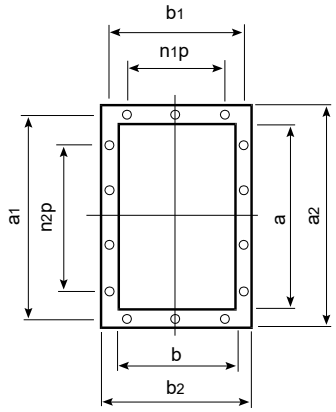
DIMENZIJE - DIMENSIONS

Model *Model*	Ulazna prirubnica - *Inlet flange* (fig. 1)					Izlazne prirubnice - *Outlet flange* (fig. 2)									
	d	d1	d2	n°	ø	a	b	a1	b1	a2	b2	n1xp	n2xp	n°	ø
250	255	292	325	8	10	258	185	292	219	328	255	1x112	2x112	10	12
280	285	332	365	8	12	288	205	332	249	368	285	1x125	2x125	10	12
310	320	366	400	8	12	322	229	366	273	402	309	1x125	2x125	10	12
350	360	405	440	8	12	361	256	405	300	441	336	1x125	2x125	10	12
400	405	448	485	8	12	404	288	448	332	484	368	2x125	3x125	14	12
450	455	497	535	8	12	453	322	497	366	533	402	2x125	3x125	14	12
500	505	551	585	8	14	507	361	551	405	587	441	2x125	3x125	14	12
560	565	629	665	16	14	569	404	629	464	669	504	2x160	3x160	14	14
630	635	698	735	16	14	638	453	698	513	738	553	2x160	3x160	14	14
710	715	775	815	16	14	715	507	775	567	815	607	2x160	4x160	16	14
800	805	861	905	16	14	801	569	871	639	921	689	2x200	3x200	14	14
900	905	958	1005	16	14	898	638	968	708	1018	758	3x200	4x200	18	14
1000	1007	1067	1107	16	14	1007	715	1077	785	1127	835	3x200	4x200	18	14
1120	1130	1200	1250	24	14	1130	801	1210	881	1270	941	3x200	5x200	20	18
1250	1260	1337	1380	24	17	1267	898	1347	978	1407	1038	4x200	6x200	24	18

(fig. 1)



(fig. 2)



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IZVOĐENJE NA ZAHTEV - ARRANGEMENT ON REQUEST

ARANZMAN 5
ARRANGEMENT

ARANZMAN 9
ARRANGEMENT

ARANZMAN
ARRANGEMENT 12