

Applications

HSN fans are designed for transporting clean air. It has many applications in industry, where in technological processes need a small airflow and high pressure. Typical applications:

- supplying air to gas burner systems,
- filtration systems,
- air transport,
- air drying systems,
- cooling systems.

Construction

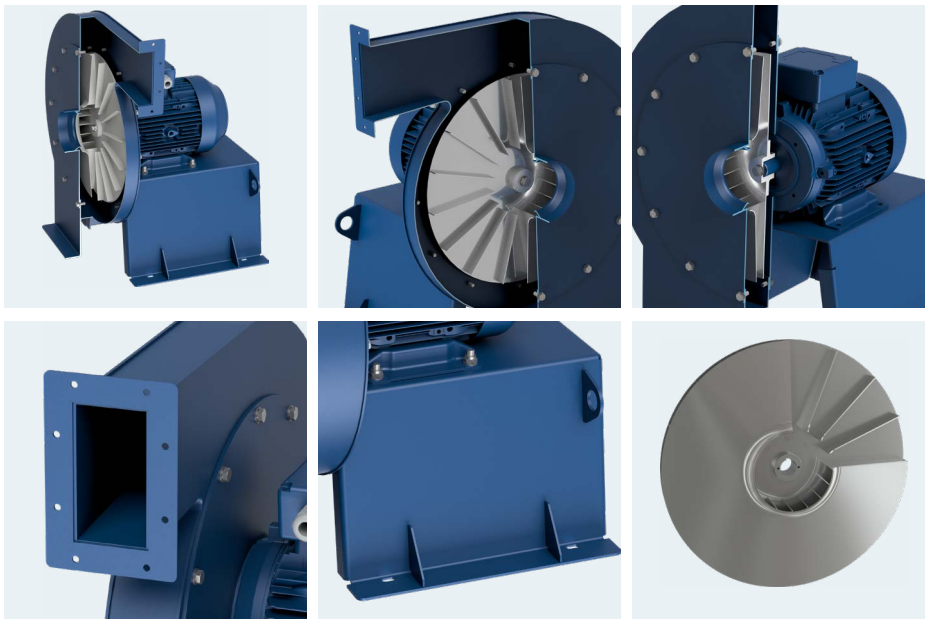
- high and very high-pressure, direct drive, radial fan,
- steel sheet rotor with backward inclined blades,
- steel welded housing,
- painted RAL 5010 (blue), corrosivity category C3,
- medium maximum temperature 80°C,
- ambient temperature of the motor from -30°C to +60°C (depending on model - see technical characteristic table),
- depending on the motor power, the fans are standard in two figures LG90 and LG270 (see specifications table),
- fans are standard in LG270 configuration.

Electric motor

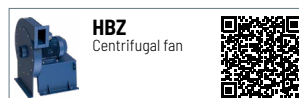
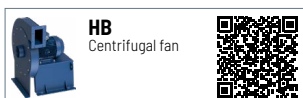
- asynchronous, three-phase 230V/400V 50Hz or 400/690V 50Hz, efficiency class IE3,
- degree of protection IP55,
- insulation class F,
- three-phase motors are adapted for frequency converter.

Special executions

- optional configuration LG/RD,
- color other than standard and higher category of corrosivity,
- housing and support made of galvanized steel sheet, stainless steel 1.4301, acid-proof steel 1.4404,
- motor with voltage and frequency of power, degree of protection different than standard, equipped with sensors or additional cooling,
- sealing between the housing and the motor,
- HT version - maximum transported medium temperature higher than standard,
- ambient temperature range below -30°C and above +40°C,
- belt drive, clutch,
- ATEX version.



RELATED PRODUCTS





NOMINAL DATA

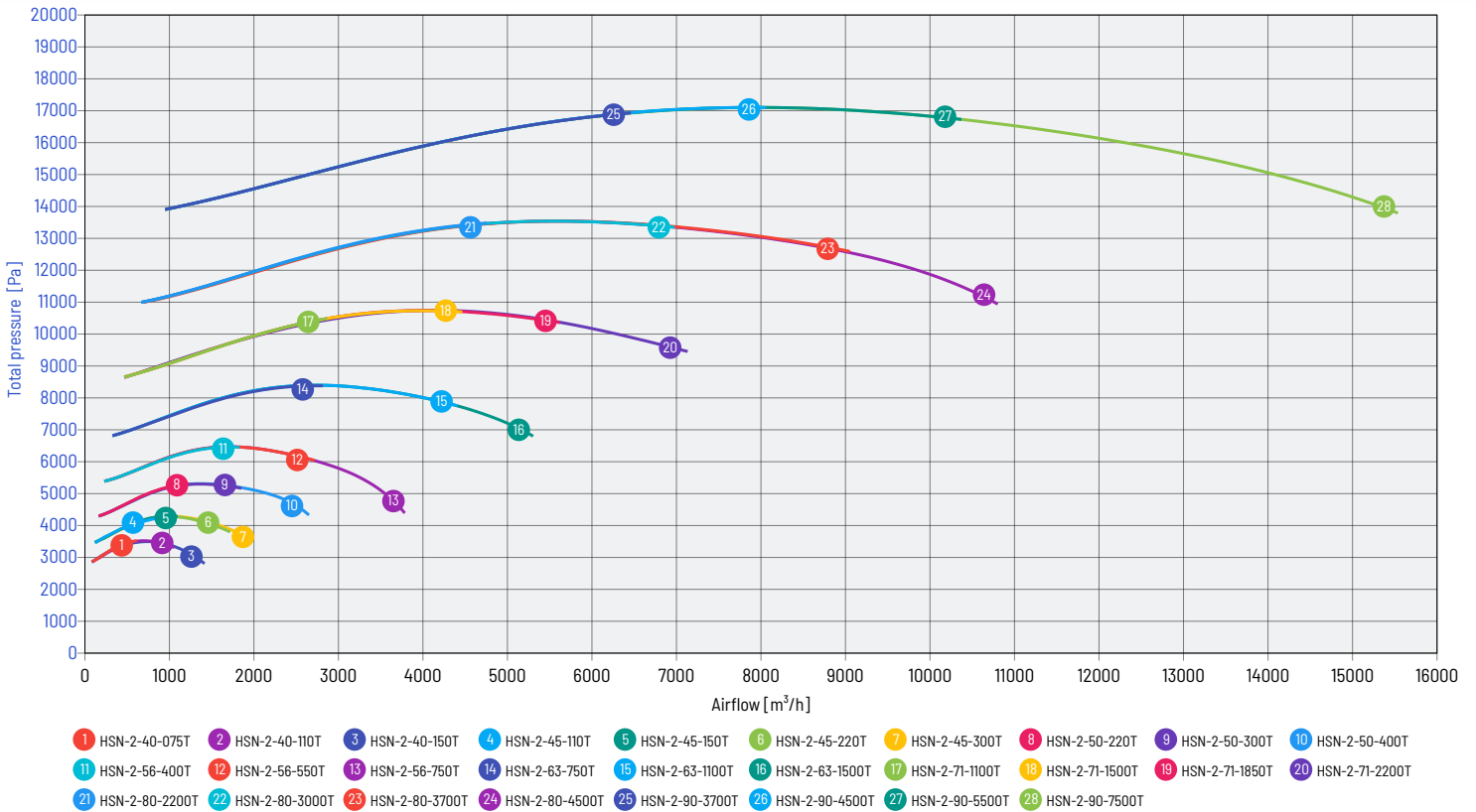
type	airflow max	pressure max	speed	voltage rated	current max abs.**	power motor	sound pressure level*	temp. operating min / max	temp. ambient min / max	weight	article number
2-POLE MOTORS 3000RPM											
HSN-2-40-075T	640 m ³ /h	3 200 Pa	2 890 rpm	400 V	1,7 A	0,75 kW	68 dB(A)	-30 / 80 °C	-30 / 60 °C	52,0 kg	436064020
HSN-2-40-110T	1 050 m ³ /h	3 200 Pa	2 890 rpm	400 V	2,5 A	1,1 kW	66 dB(A)	-30 / 80 °C	-30 / 60 °C	53,0 kg	436064021
HSN-2-40-150T	1 380 m ³ /h	3 200 Pa	2 880 rpm	400 V	3 A	1,5 kW	63 dB(A)	-30 / 80 °C	-30 / 40 °C	58,0 kg	436064022
HSN-2-45-110T	800 m ³ /h	3 890 Pa	2 890 rpm	400 V	2,5 A	1,1 kW	71 dB(A)	-30 / 80 °C	-30 / 60 °C	60,0 kg	436064520
HSN-2-45-150T	1 100 m ³ /h	3 890 Pa	2 925 rpm	400 V	3 A	1,5 kW	69 dB(A)	-30 / 80 °C	-30 / 40 °C	65,0 kg	436064521
HSN-2-45-220T	1 750 m ³ /h	3 890 Pa	2 910 rpm	400 V	4,3 A	2,2 kW	67 dB(A)	-30 / 80 °C	-30 / 40 °C	66,0 kg	436064522
HSN-2-45-300T	1 950 m ³ /h	3 890 Pa	2 880 rpm	400 V	5,3 A	3 kW	66 dB(A)	-30 / 80 °C	-30 / 40 °C	73,0 kg	436064523
HSN-2-50-220T	1 260 m ³ /h	4 800 Pa	2 910 rpm	400 V	4,3 A	2,2 kW	74 dB(A)	-30 / 80 °C	-30 / 40 °C	75,0 kg	436065020
HSN-2-50-300T	1 870 m ³ /h	4 800 Pa	2 915 rpm	400 V	5,3 A	3 kW	72 dB(A)	-30 / 80 °C	-30 / 40 °C	81,0 kg	436065021
HSN-2-50-400T	2 640 m ³ /h	4 800 Pa	2 895 rpm	400 V	7,3 A	4 kW	70 dB(A)	-30 / 80 °C	-30 / 40 °C	92,0 kg	436065022
HSN-2-56-400T	1 820 m ³ /h	6 020 Pa	2 895 rpm	400 V	7,3 A	4 kW	78 dB(A)	-30 / 80 °C	-30 / 40 °C	104,0 kg	436065620
HSN-2-56-550T	2 700 m ³ /h	6 020 Pa	2 940 rpm	400 V	10 A	5,5 kW	75 dB(A)	-30 / 80 °C	-30 / 40 °C	123,0 kg	436065621
HSN-2-56-750T	3 780 m ³ /h	6 020 Pa	2 930 rpm	400 V	13,3 A	7,5 kW	72 dB(A)	-30 / 80 °C	-30 / 40 °C	132,0 kg	436065622
HSN-2-63-750T	2 800 m ³ /h	7 620 Pa	2 930 rpm	400 V	13,3 A	7,5 kW	79 dB(A)	-30 / 80 °C	-30 / 40 °C	153,0 kg	436066320
HSN-2-63-1100T	4 400 m ³ /h	7 620 Pa	2 925 rpm	400 V	19,3 A	11 kW	78 dB(A)	-30 / 80 °C	-30 / 40 °C	212,0 kg	436066321
HSN-2-63-1500T	5 310 m ³ /h	7 620 Pa	2 940 rpm	400 V	26 A	15 kW	76 dB(A)	-30 / 80 °C	-30 / 40 °C	221,0 kg	436066322
HSN-2-71-1100T	2 900 m ³ /h	9 670 Pa	2 925 rpm	400 V	19,3 A	11 kW	85 dB(A)	-30 / 80 °C	-30 / 40 °C	233,0 kg	436067120
HSN-2-71-1500T	4 500 m ³ /h	9 670 Pa	2 940 rpm	400 V	26 A	15 kW	84 dB(A)	-30 / 80 °C	-30 / 40 °C	244,0 kg	436067121
HSN-2-71-1850T	5 650 m ³ /h	9 670 Pa	2 940 rpm	400 V	32,1 A	18,5 kW	81 dB(A)	-30 / 80 °C	-30 / 40 °C	251,0 kg	436067122
HSN-2-71-2200T	7 150 m ³ /h	9 670 Pa	2 950 rpm	400 V	38,1 A	22 kW	80 dB(A)	-30 / 80 °C	-30 / 40 °C	302,0 kg	436067123
HSN-2-80-2200T	4 800 m ³ /h	12 280 Pa	2 950 rpm	400 V	38,1 A	22 kW	89 dB(A)	-30 / 80 °C	-30 / 40 °C	327,0 kg	436068020
HSN-2-80-3000T	7 000 m ³ /h	12 280 Pa	2 965 rpm	400 V	53 A	30 kW	87 dB(A)	-30 / 80 °C	-30 / 40 °C	395,0 kg	436068021
HSN-2-80-3700T	9 000 m ³ /h	12 280 Pa	2 955 rpm	400 V	65 A	37 kW	85 dB(A)	-30 / 80 °C	-30 / 40 °C	410,0 kg	436068022
HSN-2-80-4500T	10 820 m ³ /h	12 280 Pa	2 960 rpm	400 V	77 A	45 kW	84 dB(A)	-30 / 80 °C	-30 / 40 °C	525,0 kg	436068023
HSN-2-90-3700T	6 500 m ³ /h	15 550 Pa	2 955 rpm	400 V	65 A	37 kW	93 dB(A)	-30 / 80 °C	-30 / 40 °C	454,0 kg	436069020
HSN-2-90-4500T	8 100 m ³ /h	15 550 Pa	2 960 rpm	400 V	77 A	45 kW	92 dB(A)	-30 / 80 °C	-30 / 40 °C	576,0 kg	436069021
HSN-2-90-5500T	10 400 m ³ /h	15 550 Pa	2 970 rpm	400 V	92 A	55 kW	90 dB(A)	-30 / 80 °C	-30 / 40 °C	611,0 kg	436069022
HSN-2-90-7500T	15 550 m ³ /h	15 550 Pa	2 960 rpm	400 V	127 A	75 kW	87 dB(A)	-30 / 80 °C	-30 / 40 °C	761,0 kg	436069023

* Measurement made at a distance of 1.5m from the outlet, for Q = 2/3 * Qmax

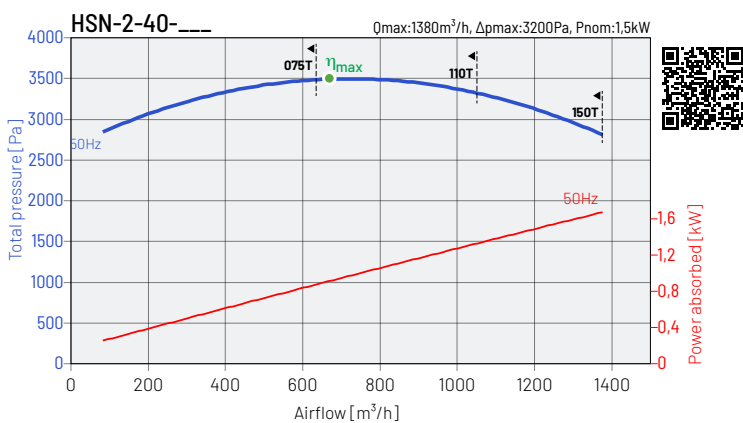
** the value of the rated current may vary depending on the manufacturer of the electric motor used.



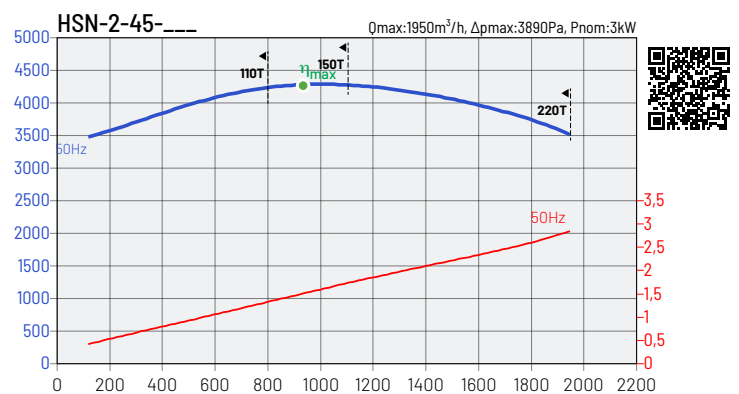
PERFORMANCE CHARACTERISTICS OF THE FANS



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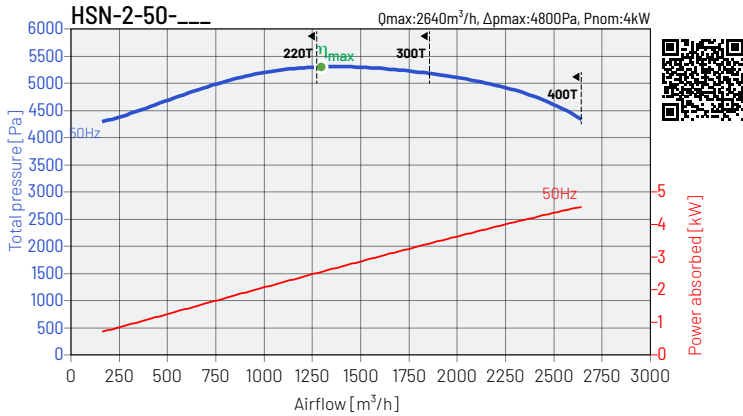
	MC	EC	SR	VSD	η %	N	kW	m³/h	Pa	rpm
075T	C	static	1	nie	56,6	63,2	0,93	656	2878	2890
110T	C	static	1	nie	57,3	63,9	0,92	656	2878	2890
150T	C	static	1	nie	58,1	64,8	0,90	656	2878	2880



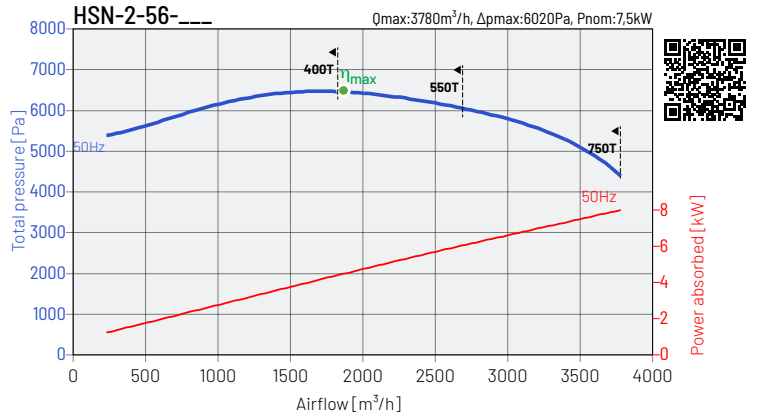
	MC	EC	SR	VSD	η %	N	kW	m³/h	Pa	rpm
110T	C	static	1	nie	57,0	62,1	1,58	934	3475	2890
150T	C	static	1	nie	57,8	62,9	1,56	934	3475	2925
220T	C	static	1	nie	59,0	64,2	1,53	934	3475	2910
300T	C	static	1	nie	59,8	65,0	1,51	934	3475	2880



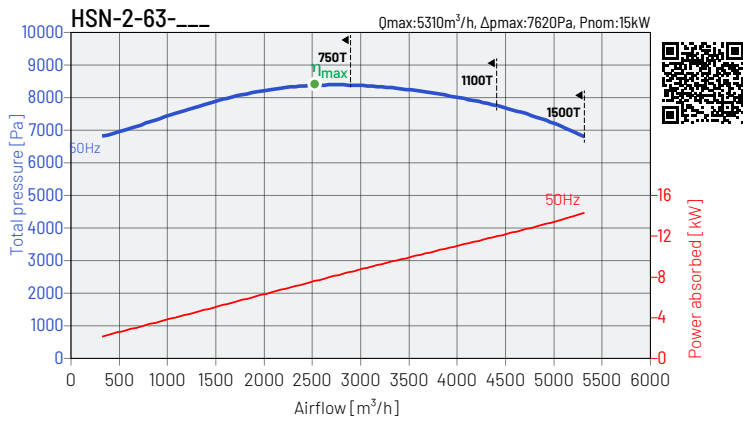
PERFORMANCE CHARACTERISTICS OF THE FANS



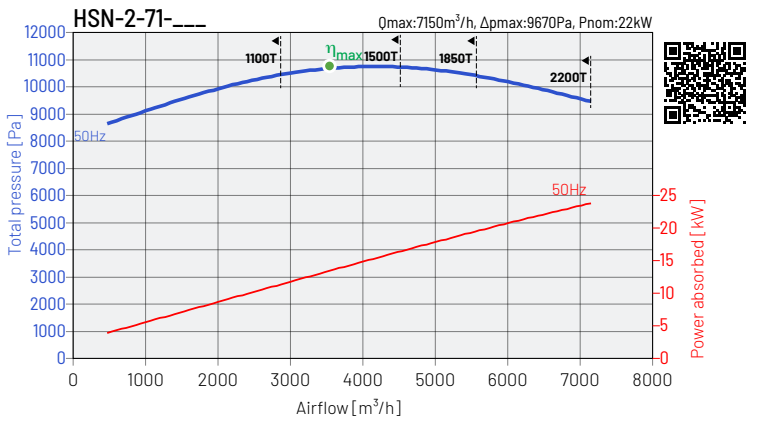
	MC	EC	SR	VSD	η %	N	kW	m ³ /h	Pa	rpm
220T	C	static	1	nie	59,0	62,8	2,59	1281	4292	2910
300T	C	static	1	nie	59,8	63,6	2,55	1281	4292	2915
400T	C	static	1	nie	60,5	64,3	2,52	1281	4292	2895



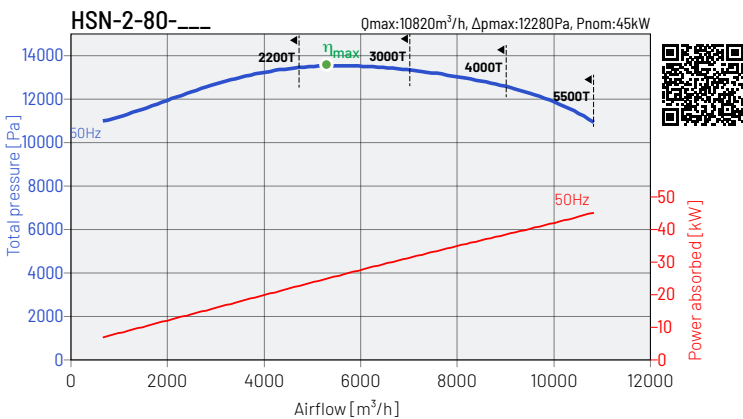
	MC	EC	SR	VSD	η %	N	kW	m ³ /h	Pa	rpm
400T	C	static	1	nie	61,6	63,8	4,45	1799	5481	2895
500T	C	static	1	nie	62,4	64,6	4,39	1799	5481	2940
750T	C	static	1	nie	63,0	65,3	4,35	1799	5481	2930



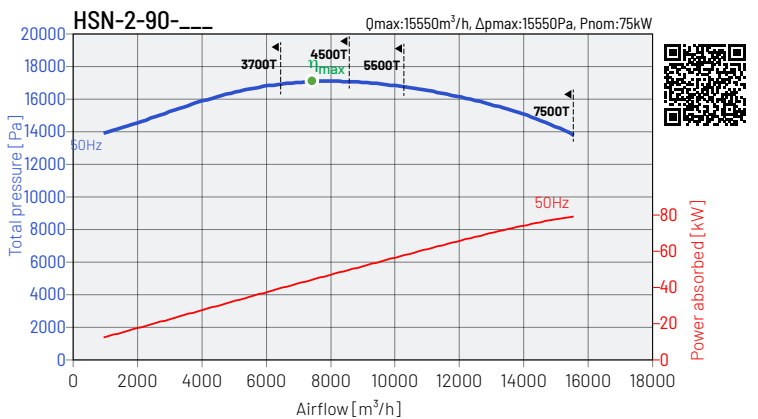
	MC	EC	SR	VSD	η %	N	kW	m ³ /h	Pa	rpm
750T	C	static	1	nie	61,8	62,5	7,84	2562	6810	2930
1100T	C	static	1	nie	62,6	63,3	7,74	2562	6810	2925
1500T	C	static	1	nie	63,1	63,8	7,68	2562	6810	2940



	MC	EC	SR	VSD	η %	N	kW	m ³ /h	Pa	rpm
1100T	C	static	1	nie	62,7	62,5	14,08	3667	8657	2925
1500T	C	static	1	nie	63,1	63,0	13,97	3667	8657	2940
1850T	C	static	1	nie	63,5	63,3	13,89	3667	8657	2940
2200T	C	static	1	nie	63,7	63,5	13,85	3667	8657	2950



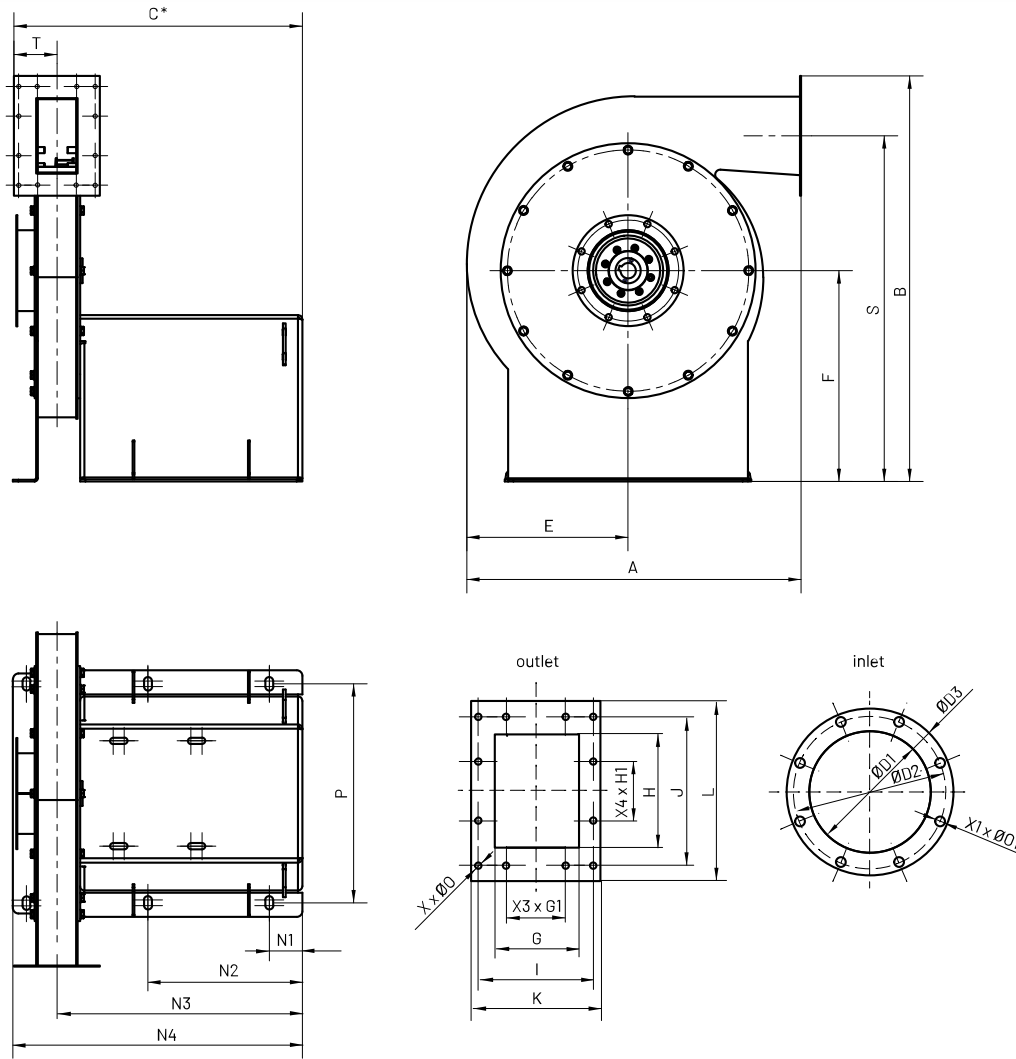
	MC	EC	SR	VSD	η %	N	kW	m ³ /h	Pa	rpm
2200T	C	static	1	nie	63,6	63,0	25,15	5246	10978	2950
3000T	C	static	1	nie	64,2	63,5	24,94	5246	10978	2965
3700T	C	static	1	nie	64,3	63,7	24,88	5246	10978	2955
4500T	C	static	1	nie	64,6	64,0	24,75	5246	10978	2960



	MC	EC	SR	VSD	η %	N	kW	m ³ /h	Pa	rpm
3700T	C	static	1	nie	64,4	63,3	44,84	7469	13908	2955
4500T	C	static	1	nie	64,7	63,6	44,60	7469	13908	2960
5500T	C	static	1	nie	64,9	63,8	44,46	7469	13908	2970
7500T	C	static	1	nie	65,0	64,0	44,37	7469	13908	2960



DIMENSIONS



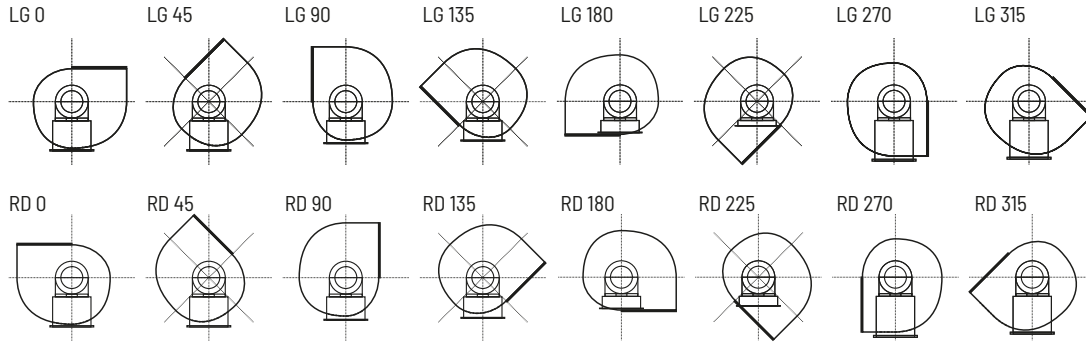
type	A mm	B mm	C* mm	ØD1 mm	ØD2 mm	ØD3 mm	E mm	F mm	G mm	H mm	I mm	J mm
HSN-2-40	603	731	520	140	182	200	291	380	69	132	138	178
HSN-2-45	678	770	528	160	200	220	326	380	77	148	138	178
HSN-2-50	754	814	532	180	219	240	362	390	85	165	138	198
HSN-2-56	837	840	544	200	241	260	405	380	108	185	138	218
HSN-2-63	937	964	544	225	265	290	455	450	108	208	138	238
HSN-2-71	1114	1076	551	250	292	310	512	500	118	235	138	262
HSN-2-80	1209	1261	700	280	332	360	577	600	137	264	178	318
HSN-2-90	1340	1478	838	315	366	390	648	750	155	297	198	318

* dimension for the longest motor version (depending on the motor manufacturer)

type	K mm	L mm	N1 mm	N2 mm	N3 mm	N4 mm	P mm	S mm	X1 x Ø01 mm	X3 x G1 mm	X4 x H1 mm	X x Ø0 mm
HSN-2-40	155	216	61	280	443	522	395	623	8x11,5	1x71	1x71	12x7
HSN-2-45	163	232	61	341	447	530	395	654	8x11,5	1x71	1x71	12x7
HSN-2-50	164	239	61	341	451	539	395	694	8x11,5	1x71	1x100	12x7
HSN-2-56	164	239	60	340	462	561	395	720	8x11,5	1x71	1x100	12x7
HSN-2-63	164	262	60	340	462	561	395	833	8x11,5	1x71	1x100	12x7
HSN-2-71	164	289	59	339	469	575	420	932	8x11,5	1x71	1x100	12x7
HSN-2-80	223	348	79	399	589	702	600	1087	8x11,5	1x71	1x125	12x10
HSN-2-90	221	361	106	526	681	834	740	1297	8x11,5	1x100	1x125	12x10



FIGURY



ELECTRICAL ACCESSORIES



type	inverter L	service switch	type	inverter L	service switch	type	inverter L	service switch
HSN-2-40-075T	L 0,75 kW	R-S 3-F + SP, 10A	HSN-2-56-400T	L 4,0 kW	R-S 3-F + SP, 10A	HSN-2-80-2200T	L 22,0 kW	R-S 3-F + SP, 40A
HSN-2-40-110T	L 1,5 kW	R-S 3-F + SP, 10A	HSN-2-56-550T	L 5,5 kW	R-S 3-F + SP, 16A	HSN-2-80-3000T	L 30,0 kW	R-S 3-F + SP, 63A
HSN-2-40-150T	L 1,5 kW	R-S 3-F + SP, 10A	HSN-2-56-750T	L 7,5 kW	R-S 3-F + SP, 16A	HSN-2-80-3700T	on request	on request
HSN-2-45-110T	L 1,5 kW	R-S 3-F + SP, 10A	HSN-2-63-750T	L 7,5 kW	R-S 3-F + SP, 16A	HSN-2-80-4500T	on request	on request
HSN-2-45-150T	L 1,5 kW	R-S 3-F + SP, 10A	HSN-2-63-1100T	L 11,0 kW	R-S 3-F + SP, 25A	HSN-2-90-3700T	on request	on request
HSN-2-45-220T	L 2,2 kW	R-S 3-F + SP, 10A	HSN-2-63-1500T	L 15,0 kW	R-S 3-F + SP, 40A	HSN-2-90-4500T	on request	on request
HSN-2-45-300T	L 4,0 kW	R-S 3-F + SP, 10A	HSN-2-71-1100T	L 11,0 kW	R-S 3-F + SP, 25A	HSN-2-90-5500T	on request	on request
HSN-2-50-220T	L 2,2 kW	R-S 3-F + SP, 10A	HSN-2-71-1500T	L 15,0 kW	R-S 3-F + SP, 40A	HSN-2-90-7500T	on request	on request
HSN-2-50-300T	L 4,0 kW	R-S 3-F + SP, 10A	HSN-2-71-1850T	L 18,5 kW	R-S 3-F + SP, 40A			
HSN-2-50-400T	L 4,0 kW	R-S 3-F + SP, 10A	HSN-2-71-2200T	L 22,0 kW	R-S 3-F + SP, 40A			

Article numbers

40016302	L 0.4kW	91040908-01	R-S 3-F + SP, 10A
40016312	L 0.75kW	91040908	R-S 3-F + SP, 16A
40016322	L 1.5kW	91040910	R-S 3-F + SP, 25A
40016332	L 2.2kW	91040924	R-S 3-F + SP, 40A
40016352	L 4.0kW	91040911-03	R-S 3-F + SP, 63A
40016362	L 5.5kW		
40016372	L 7.5kW		
40016383	L 11.0kW		
40016393	L 15.0kW		
40016412	L 18.5kW		
40016422	L 22.0kW		