

HPB-F 105/100Hz Centrifugal fan

The power of AIR



Application

The fan is intended for transport systems of non-aggressive and non-explosive gases pollution. Typical applications are:

- pneumatic transport,
- blowing in drying systems (e.g. graphic machines and plastic processing),
- air blowing systems in combustion/thermal treatment systems (e.g. melting furnaces).

Construction

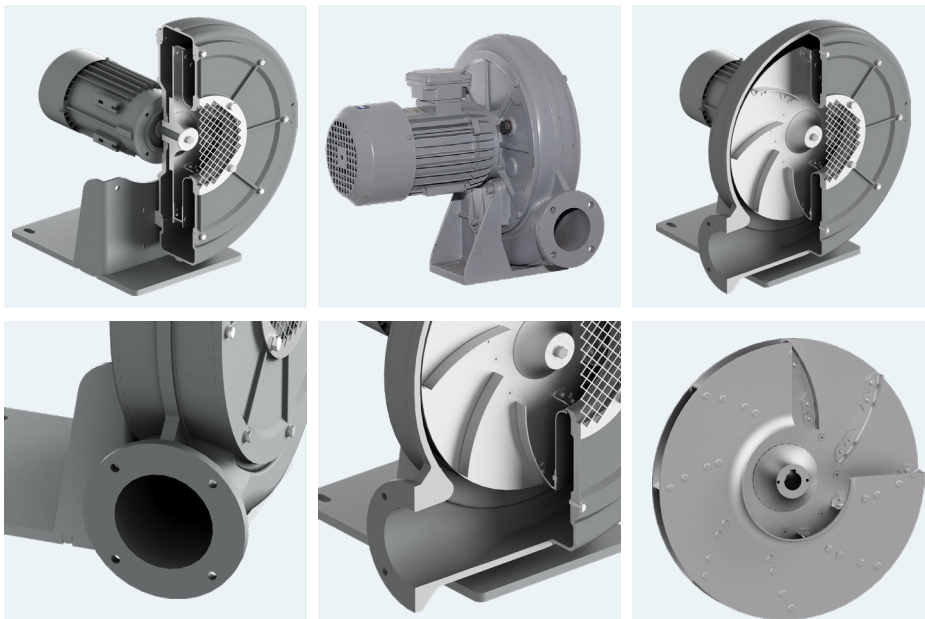
- high-pressure direct drive centrifugal fan,
- riveted rotor made of aluminum sheet, with B-type blades, dynamically balanced according to ISO 1940-1,
- cast aluminum housing,
- base welded from steel sheet,
- fan painted gray RAL7042 (engine in manufacturer's color),
- maximum temperature of the pumped medium 80°C,
- engine ambient temperature from -15°C to +40°C,
- LG270 standard figure.

Electric motor

- asynchronous, three-phase, 230/400V, 105/110Hz or 400V, 110Hz (depending on engine power),
- insulation class F,
- protection level IP55,
- equipped with PTC thermal protection,
- required use of a frequency converter for proper operation of the fan,
- equipped with one EMC gland = power supply, + one M16 gland for the PTC sensor

Special execution

- any LG/RD figure,
- painting in a color other than the standard one,
- rotor made of galvanized steel sheet,
- rotor made of stainless steel sheet 1.4301,
- rotor made of acid-resistant steel sheet 1.4404,
- motor with a different IP protection level,
- engine equipped with sensors or additional cooling.



RELATED PRODUCTS



HPB-F INT
Centrifugal fan




HPB-F 200Hz
Centrifugal fan

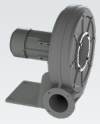



HPB-F 87Hz
Centrifugal fan




HPBx
Centrifugal fan





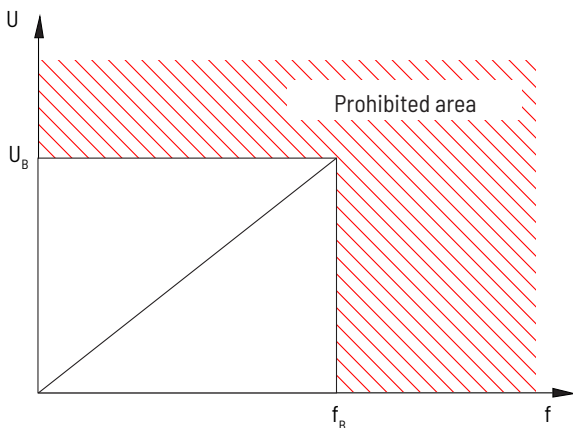
NOMINAL DATA

Type	Airflow max	Pressure max	Speed	Voltage rated	Current max abs.**	Power motor	Sound pressure level*	Frequency	Temp. ambient min / max	Weight	Article number
HPB-F-020-075T	560 m ³ /h	4 500 Pa	5 700 rpm	3~400 V	2,0 A	0,75 kW	87 dB(A)	105 Hz	-15 / 40 °C	12,0 kg	46511898
HPB-F-020-110T	635 m ³ /h	4 500 Pa	5 710 rpm	3~400 V	2,6 A	1,1 kW	87 dB(A)		-15 / 40 °C	12,0 kg	46511899
HPB-F-025-110T	675 m ³ /h	5 600 Pa	5 710 rpm	3~400 V	2,6 A	1,1 kW	90 dB(A)		-15 / 40 °C	14,2 kg	46511902
HPB-F-025-150T	935 m ³ /h	5 600 Pa	5 650 rpm	3~400 V	3,6 A	1,5 kW	96 dB(A)		-15 / 40 °C	15,5 kg	46511903
HPB-F-030-110T	945 m ³ /h	5 105 Pa	5 710 rpm	3~400 V	2,5 A	1,1 kW	97 dB(A)		-15 / 40 °C	15,5 kg	46511904
HPB-F-030-150T	1 175 m ³ /h	5 105 Pa	5 650 rpm	3~400 V	3,6 A	1,5 kW	98 dB(A)		-15 / 40 °C	16,2 kg	46511905
HPB-F-040-220T	1 400 m ³ /h	8 300 Pa	5 820 rpm	3~400 V	5,1 A	2,2 kW	92 dB(A)		-15 / 40 °C	19,6 kg	46511906
HPB-F-040-300T	1 600 m ³ /h	8 300 Pa	5 830 rpm	3~400 V	6,0 A	3 kW	100 dB(A)		-15 / 40 °C	22,5 kg	46511907
HPB-F-200-300T	1 675 m ³ /h	11 000 Pa	5 830 rpm	3~400 V	6,0 A	3 kW	94 dB(A)		-15 / 40 °C	35,3 kg	46511908
HPB-F-200-400T	1 820 m ³ /h	11 000 Pa	5 790 rpm	3~400 V	8,7 A	4 kW	99 dB(A)		-15 / 40 °C	36,3 kg	46511909
HPB-F-260-400T	1 300 m ³ /h	12 500 Pa	6 420 rpm	3~400 V	8,7 A	4 kW	101 dB(A)	110 Hz	-15 / 40 °C	40,0 kg	46511910
HPB-F-260-550T	1 425 m ³ /h	12 500 Pa	6 470 rpm	3~400 V	12,0 A	5,5 kW	100 dB(A)		-15 / 40 °C	52,7 kg	46511911
HPB-F-260-750T	2 200 m ³ /h	12 500 Pa	6 380 rpm	3~400 V	15,0 A	7,5 kW	99 dB(A)		-15 / 40 °C	55,0 kg	46511912
HPB-F-300-750T	1 820 m ³ /h	17 250 Pa	6 380 rpm	3~400 V	15,0 A	7,5 kW	100 dB(A)		-15 / 40 °C	58,7 kg	46511913
HPB-F-300-1100T	2 550 m ³ /h	17 250 Pa	6 475 rpm	3~400 V	19,8 A	11 kW	104 dB(A)		-15 / 40 °C	96,7 kg	46511914
HPB-F-300-1500T	3 200 m ³ /h	17 250 Pa	6 500 rpm	3~400 V	29,8 A	15 kW	105 dB(A)		-15 / 40 °C	110,0 kg	46511915
HPB-F-360-1500T	3 950 m ³ /h	16 050 Pa	6 500 rpm	3~400 V	29,8 A	15 kW	102 dB(A)		-15 / 40 °C	126,0 kg	46511916
HPB-F-360-1850T	5 050 m ³ /h	16 050 Pa	6 500 rpm	3~400 V	33,9 A	18,5 kW	101 dB(A)		-15 / 40 °C	123,0 kg	46511917
HPB-F-400-1850T	3 100 m ³ /h	19 600 Pa	6 500 rpm	3~400 V	33,9 A	18,5 kW	119 dB(A)		-15 / 40 °C	123,0 kg	46511918
HPB-F-400-2200T	4 450 m ³ /h	19 600 Pa	6 500 rpm	3~400 V	40,6 A	22 kW	125 dB(A)		-15 / 40 °C	147,5 kg	46511919

* Measurement made at a distance of 1.5m from the outlet, for $Q = 2/3 \cdot Q_{max}$

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

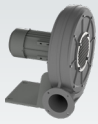
The motor power converter (inverter) must have the following U(f) assignment:



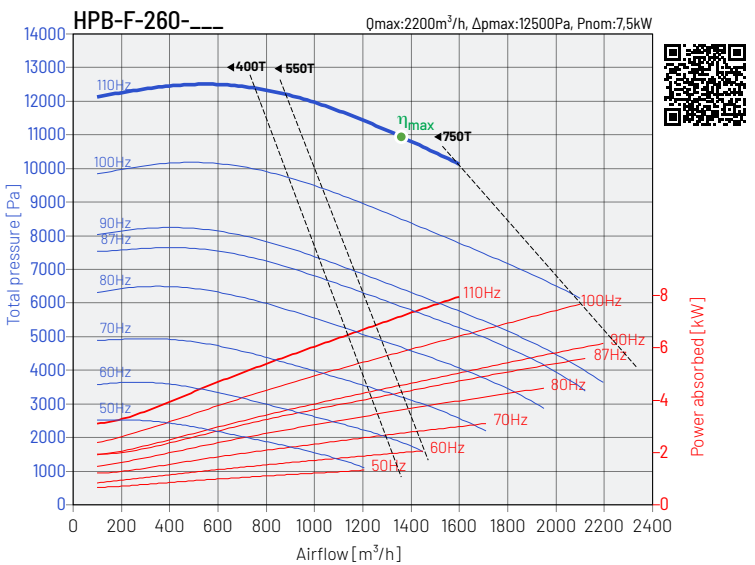
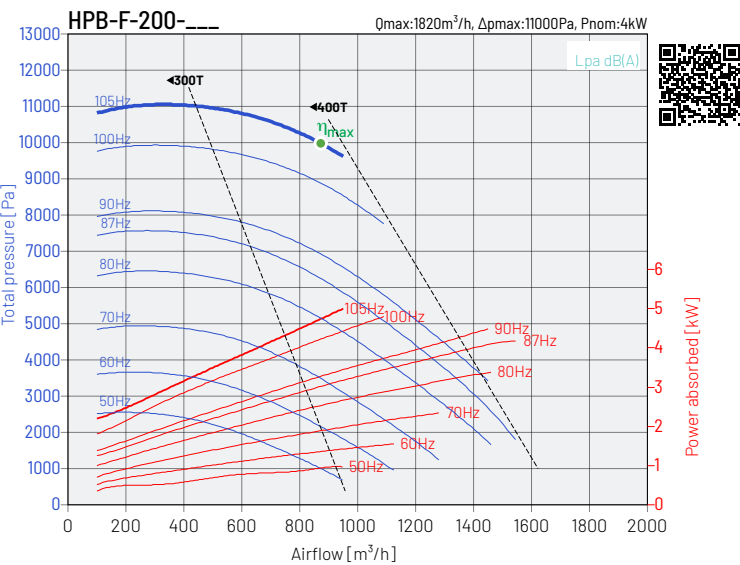
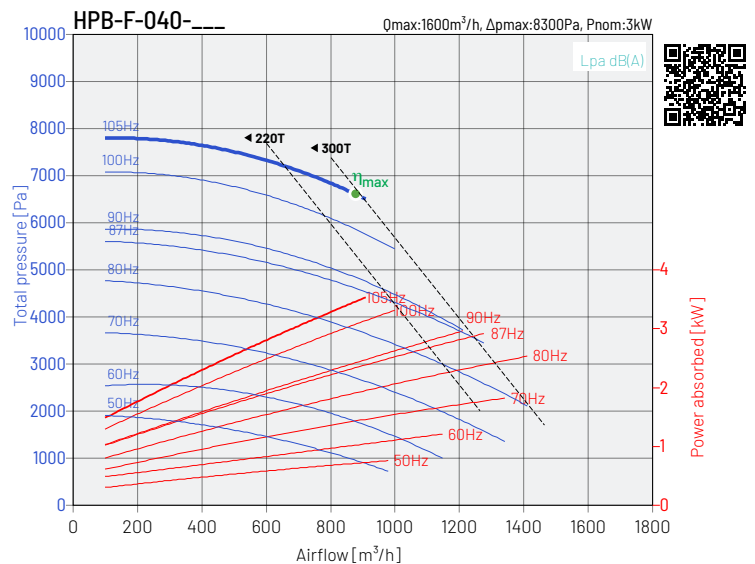
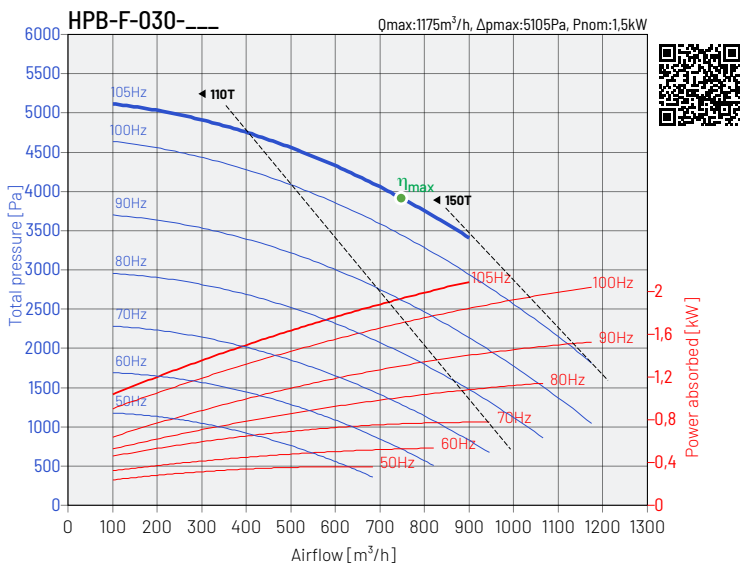
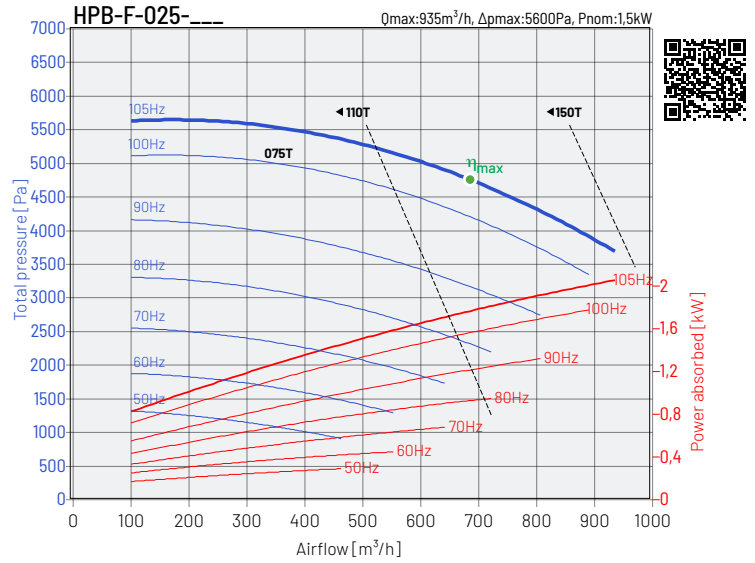
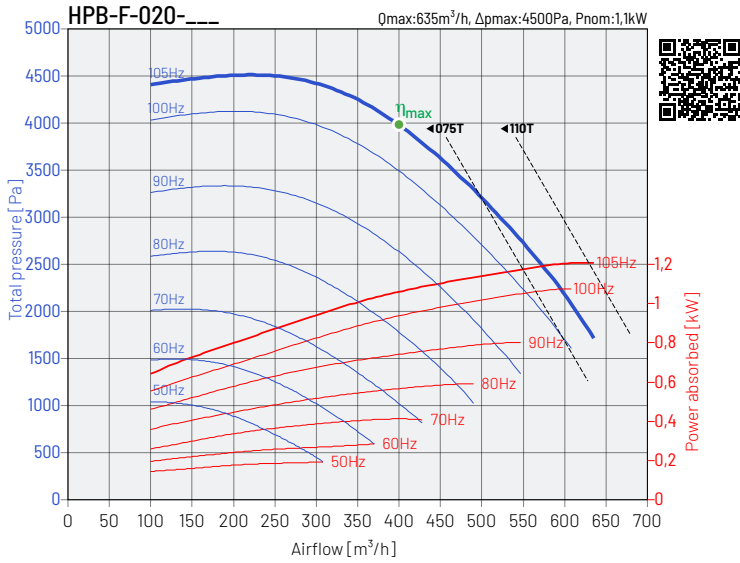
If the recommendations are not followed, the motor current increases disproportionately and the drive motor does not reach its rated speed. In no case should you set a higher frequency (rotational speed) on the transducer than the frequency of 105/110Hz given on the nameplate, as the motor may be overloaded or the fan may be damaged due to too high rotational speed. The so-called boost, because it causes the drive motor to heat up too much.

To protect the drive motor, connect a temperature sensor to the appropriate inputs of the transmitter.

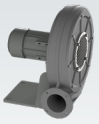
U_b - rated motor operating voltage (max value)
 f_b - maximum frequency 105/110Hz



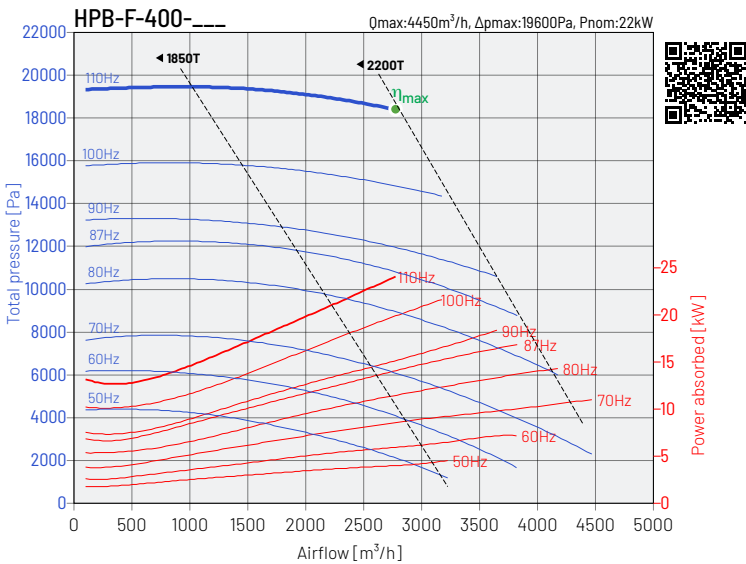
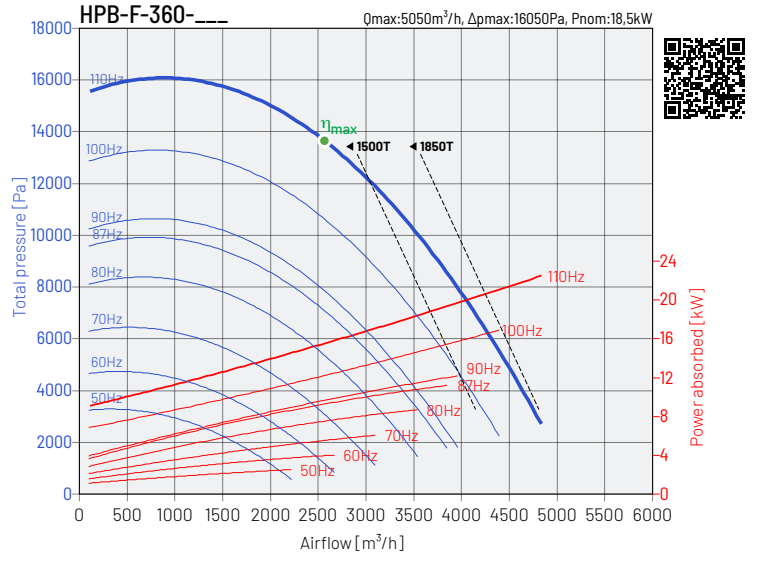
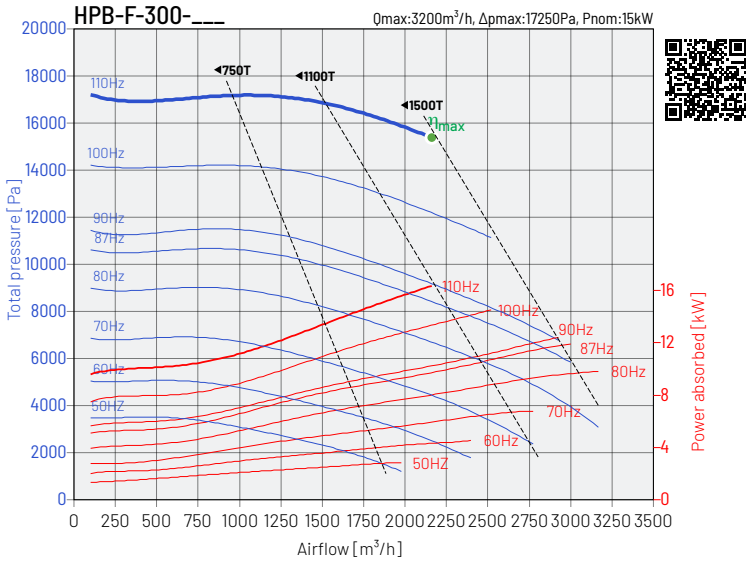
PERFORMANCE CHARACTERISTICS OF THE FANS



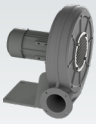
The performance characteristics of the fans are determined for a medium with a temperature of 20°C. Sound pressure level dB (A), determined at a distance of 1.5 m



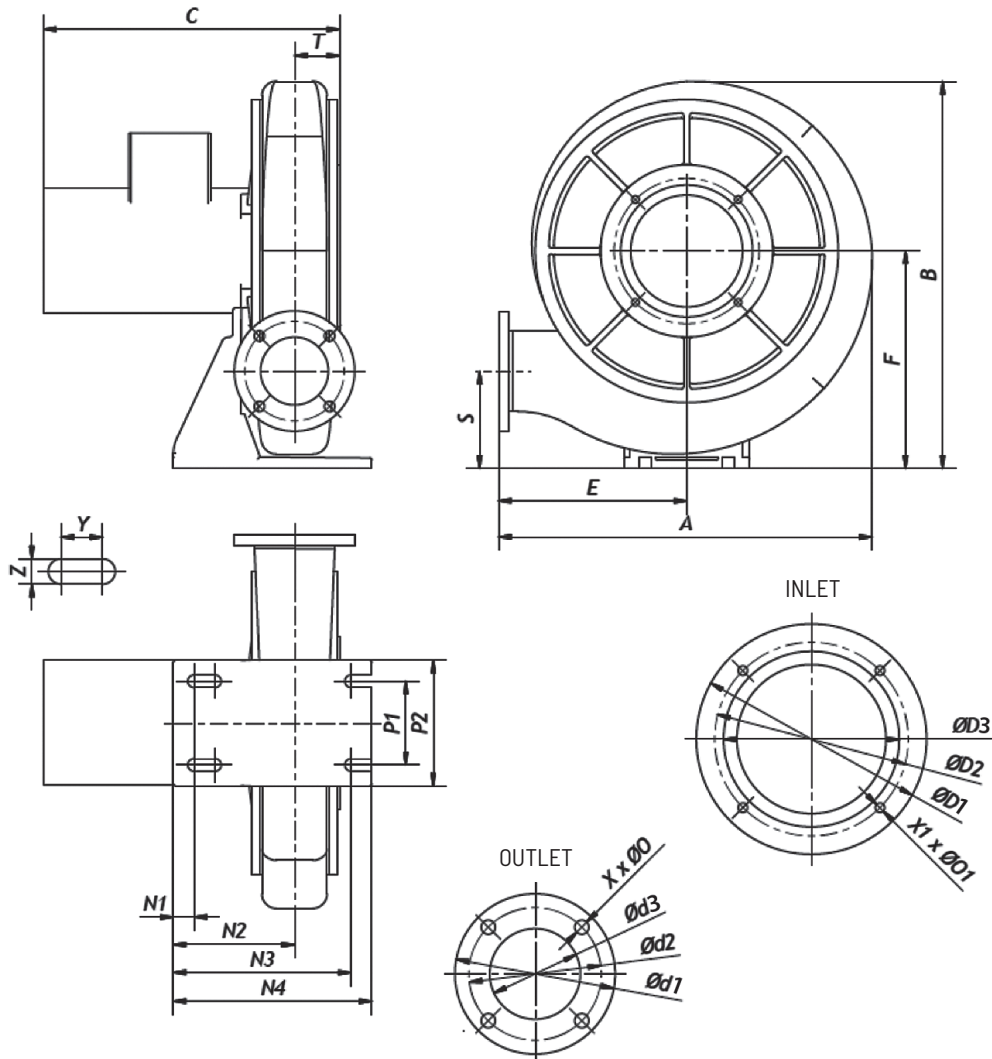
PERFORMANCE CHARACTERISTICS OF THE FANS



The performance characteristics of the fans are determined for a medium with a temperature of 20°C. Sound pressure level dB (A), determined at a distance of 1,5 m

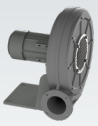


DIMENSIONS

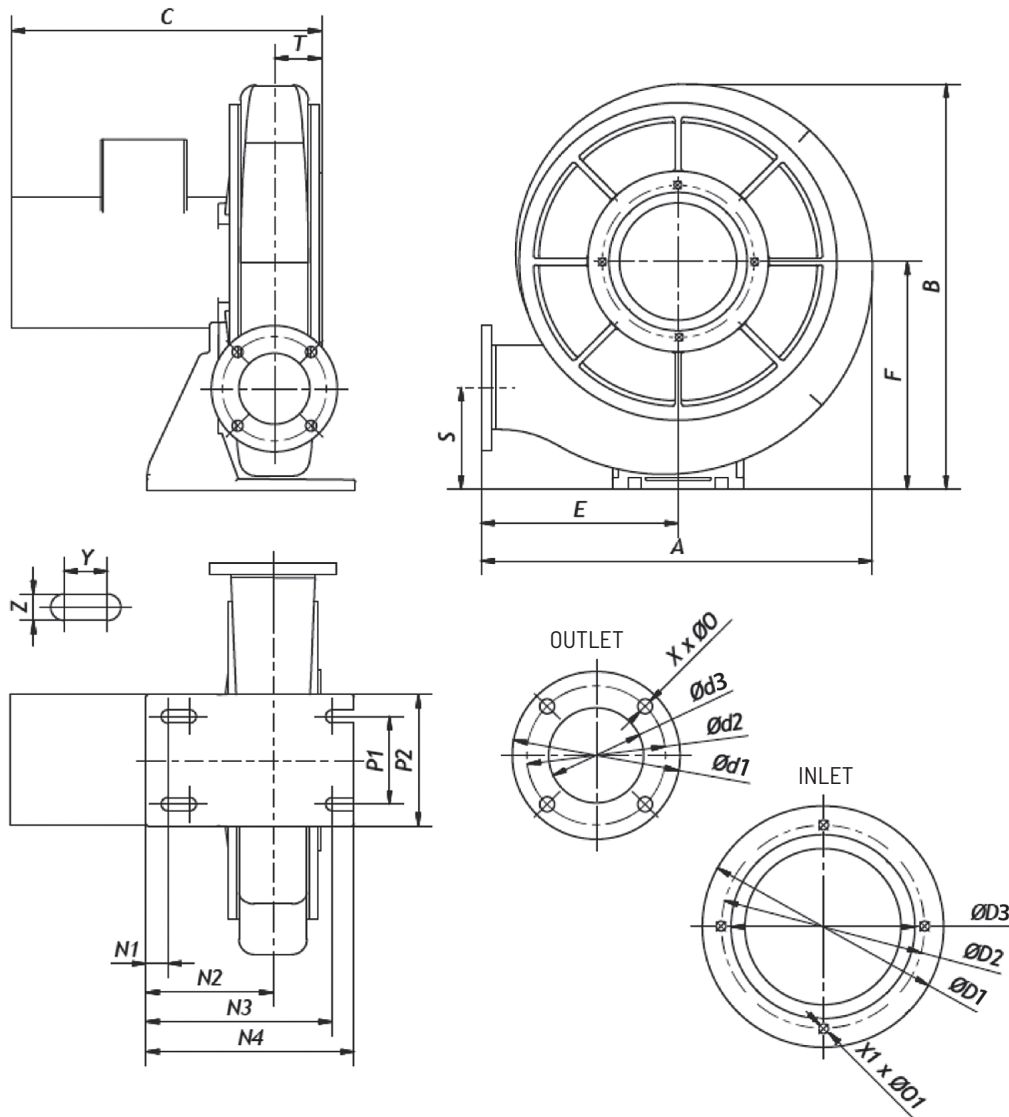


Type	A	B	C*	Ød1	Ød2	Ød3	ØD1	ØD2	ØD3	E	F	N1	N2	N3	N4	P1	P2	S	T	X	Ø0	X1	Ø01	Y	Z
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
HPB-F-020-075T	327	333	280	115	95	65	165	139	126	160	174	29,5	107	158	180	80	120	59	62	4	10	4	8	19	14
HPB-F-020-110T	327	333	280	115	95	65	165	139	126	160	174	29,5	107	158	180	80	120	59	62	4	10	4	8	19	14
HPB-F-025-110T	357	370	321	115	95	65	165	139	126	180	174	29,5	107	158	180	80	120	59	62	4	10	4	8	19	14
HPB-F-025-150T	357	370	321	115	95	65	165	139	126	180	174	29,5	107	158	180	80	120	59	62	4	10	4	8	19	14
HPB-F-030-110T	357	370	309	160	135	100	165	139	126	180	208	20	116	170	190	80	120	93	43	4	11	4	7	20	12
HPB-F-030-150T	357	370	330	160	135	100	165	139	126	180	208	20	116	170	190	80	120	93	43	4	11	4	7	20	12

*Dimension C depends on the engine length

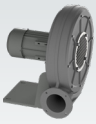


DIMENSIONS



Type	A	B	C*	Ød1	Ød2	Ød3	ØD1	ØD2	ØD3	E	F	N1	N2	N3	N4	P1	P2	S	T	X	Ø0	X1	Ø01	Y	Z
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
HPB-F-040-220T	405	444	362	165	139	100	200	165	150	200	245	20	127	170	190	80	120	85	60	4	10	4	7	20	12
HPB-F-040-300T	405	444	380	165	139	100	200	165	150	200	245	20	127	170	190	80	120	85	60	4	10	4	7	20	12

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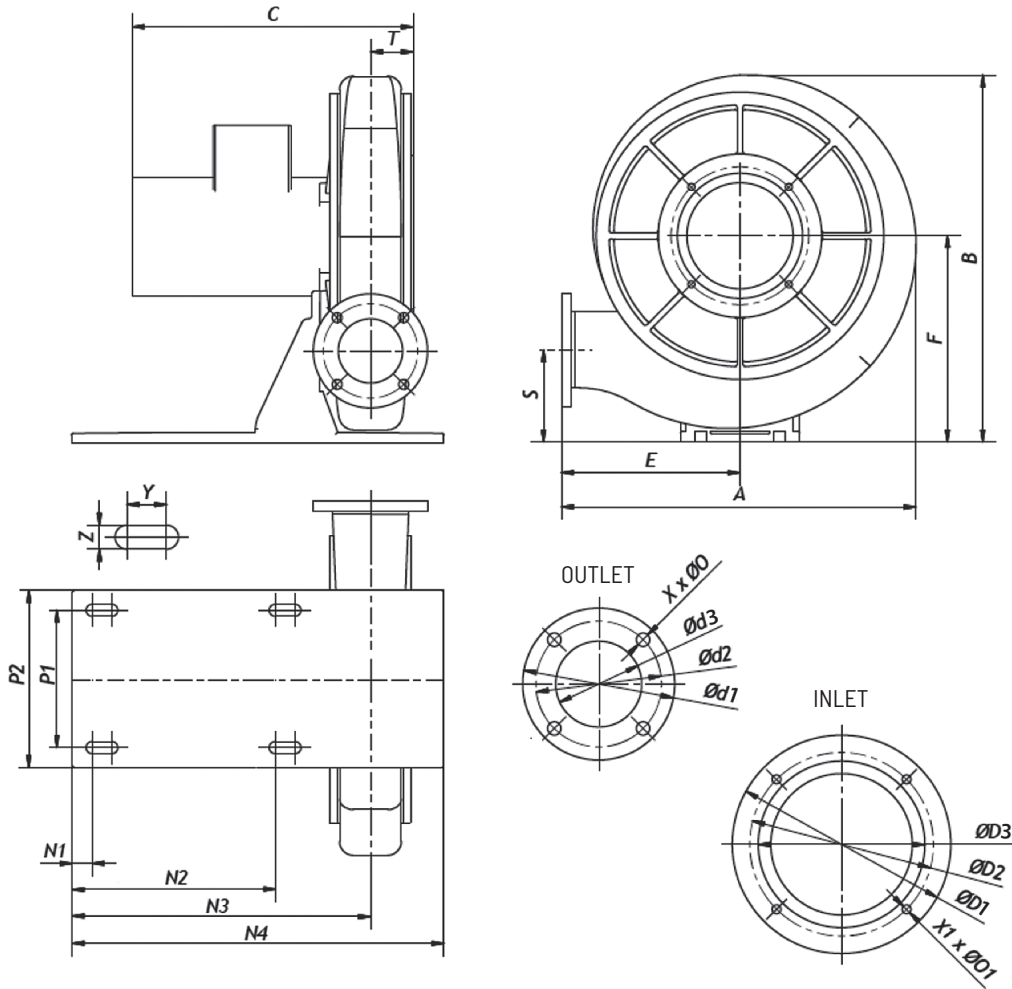


HPB-F 105/100Hz Centrifugal fan

The power of AIR

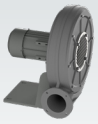


DIMENSIONS



Type	A	B	C*	Ød1	Ød2	Ød3	ØD1	ØD2	ØD3	E	F	N1	N2	N3	N4	P1	P2	S	T	X	ØØ	X1	ØØ1	Y	Z
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
HPB-F-200-300T	450	514	358	165	139	100	165	139	126	210	290	18	218	328	350	200	250	91	59	4	10	4	7	13	13
HPB-F-200-400T	450	514	-	165	139	100	165	139	126	210	290	18	218	328	350	200	250	91	59	4	10	4	7	13	13
HPB-F-260-400T	450	514	380	165	139	100	200	182	162	210	290	18	218	328	350	200	250	91	59	4	10	4	7	13	13
HPB-F-260-550T	450	514	482	165	139	100	200	182	162	210	290	18	218	328	350	200	250	91	59	4	10	4	7	13	13
HPB-F-260-750T	450	514	482	165	139	100	200	182	162	210	290	18	218	328	350	200	250	91	59	4	10	4	7	13	13

*Dimension C depends on the engine length

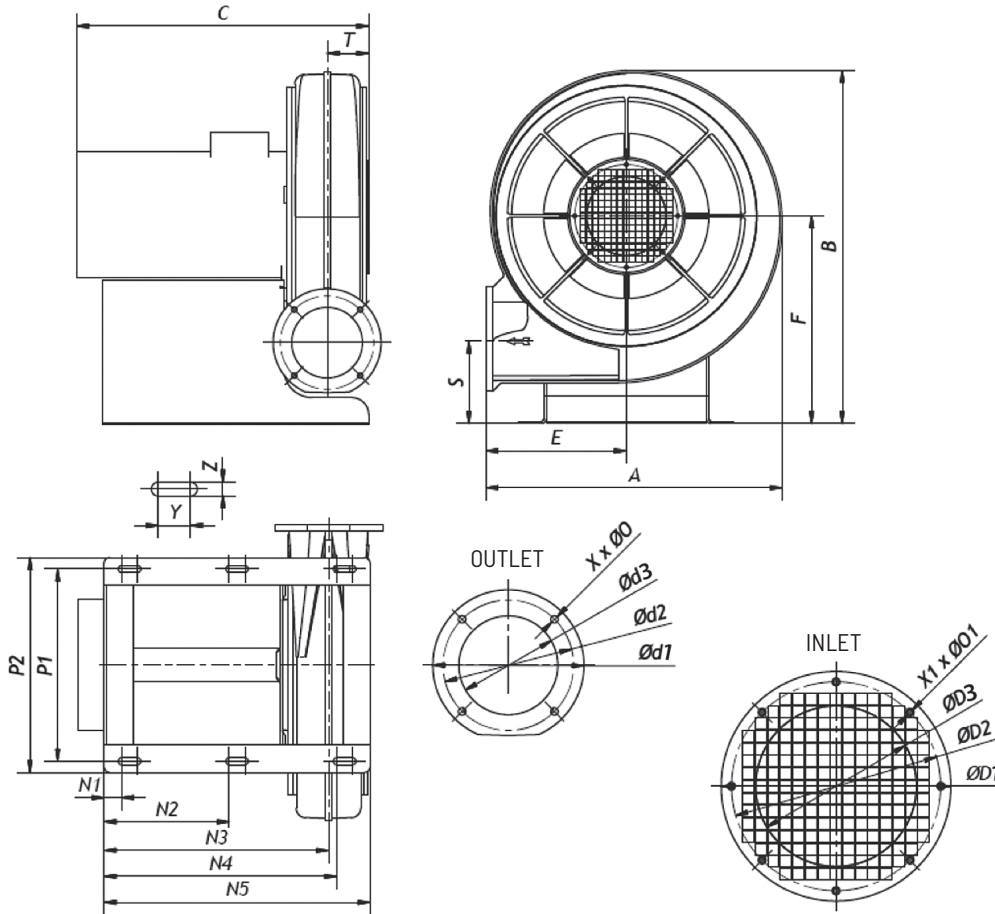


HPB-F 105/100Hz Centrifugal fan

The power of AIR

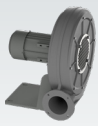


DIMENSIONS



Type	A	B	C*	Ød1	Ød2	Ød3	ØD1	ØD2	ØD3	E	F	N1	N2	N3	N4	N5	P1	P2	S	T	X	Ø0	X1	Ø01	Y	Z
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
HPB-F-300-750T	523	624	516	191	165	125	200	182	140	248	367	31	221	396	411	470	340	380	145	73	4	10	8	5	28	12
HPB-F-300-1100T	523	644	685	191	165	125	200	182	140	248	387	31	221	396	411	470	340	380	165	73	4	10	8	5	28	12
HPB-F-300-1500T	523	644	685	191	165	125	200	182	140	248	387	31	221	396	411	470	340	380	165	73	4	10	8	5	28	12

*Dimension C depends on the engine length

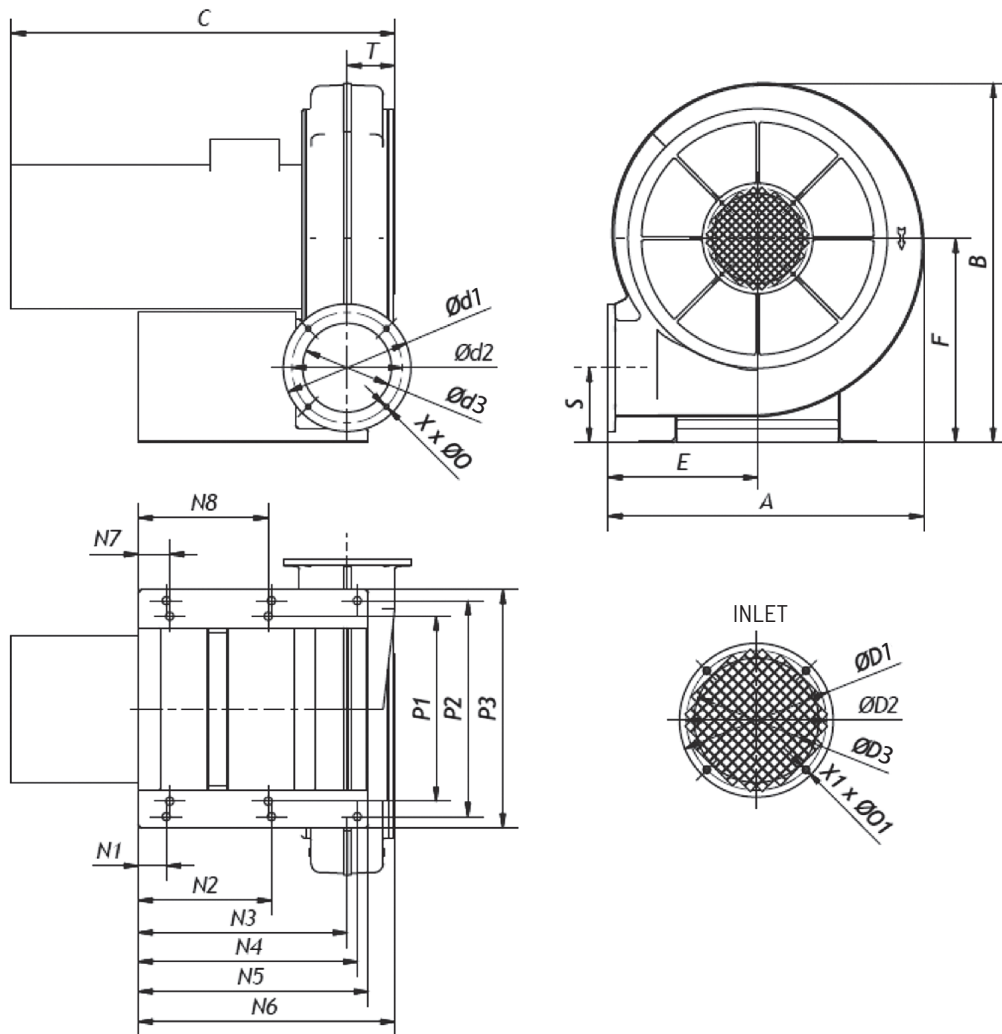


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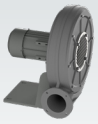


DIMENSIONS



Type	A	B	C*	$\varnothing d1$	$\varnothing d2$	$\varnothing d3$	$\varnothing D1$	$\varnothing D2$	$\varnothing D3$	E	F	N1	N2	N3	N4	N5	N6	N7	N8	P1	P2	P3	S	T	X	$\varnothing 0$	X1	$\varnothing 01$	X2
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
HPB-F-360-1500T	570	649	692	230	200	160	200	182	162	270	368	50	240	377	395	415	463	56	234	334	390	430	135	86	4	10	4	7	10
HPB-F-360-1050T	570	649	692	230	200	160	200	182	162	270	368	50	240	377	395	415	463	56	234	334	390	430	135	86	4	10	4	7	10

*Dimension C depends on the engine length

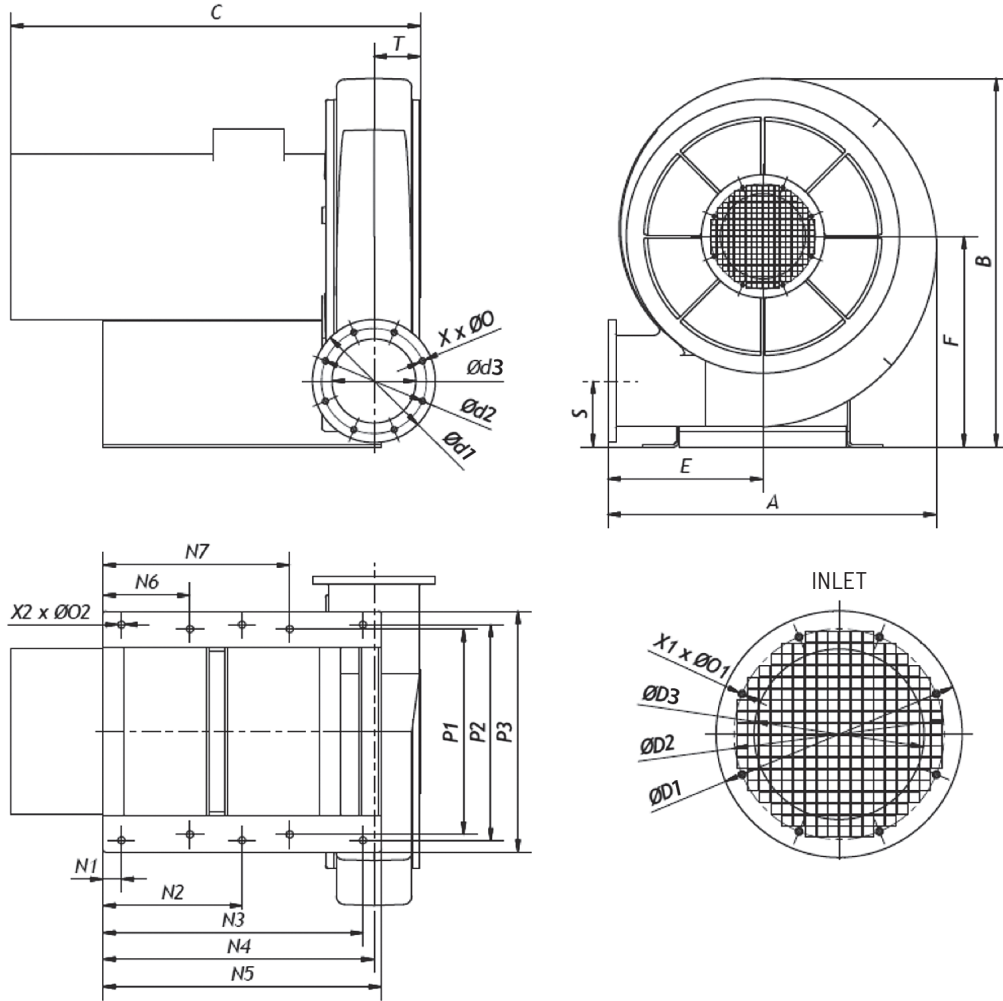


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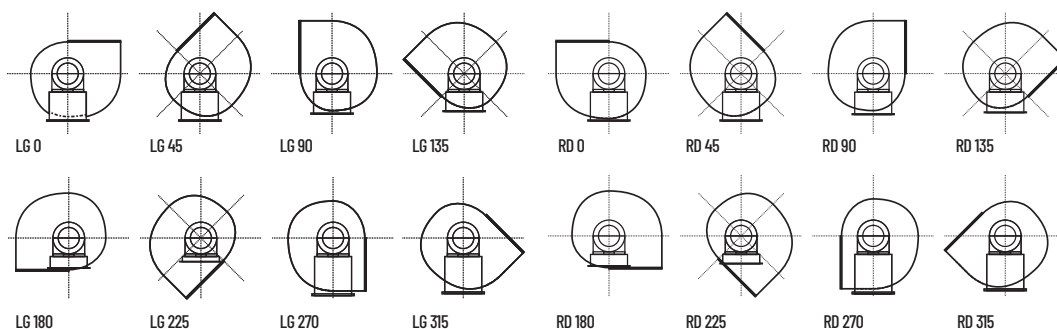
DIMENSIONS

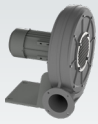


Type	A	B	C*	$\varnothing d1$	$\varnothing d2$	$\varnothing d3$	$\varnothing D1$	$\varnothing D2$	$\varnothing D3$	E	F	N1	N2	N3	N4	N5	N6	N7	P1	P2	P3	S	T	X	$\varnothing 0$	X1	$\varnothing 01$	X2
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
HPB-F-400-1850T	625	700	779	234	200	160	234	200	162	295	400	35	282	495	516	530	166	356	390	410	458	125	88	8	12	8	5	10
HPB-F-400-2200T	625	700	779	234	200	160	234	200	162	295	400	35	282	495	516	530	166	356	390	410	458	125	88	8	12	8	5	10

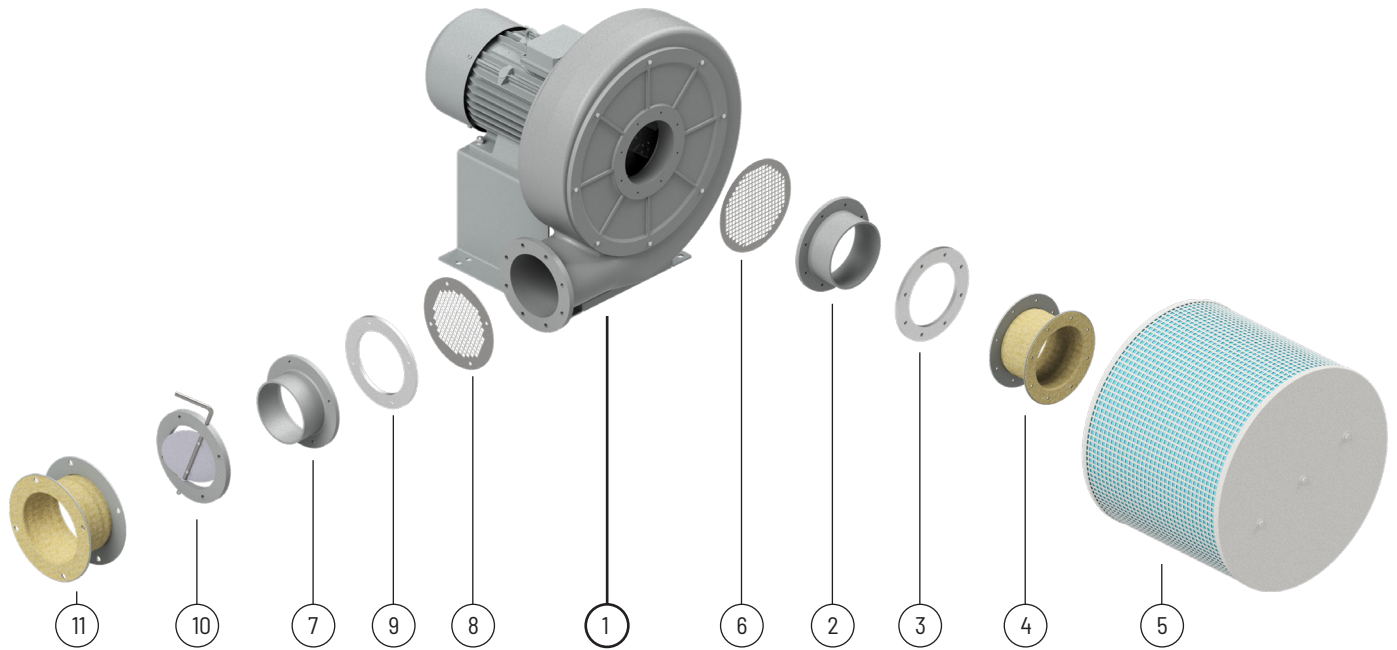
*Dimension C depends on the engine length

FIGURES





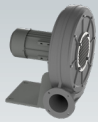
MOUNTING ACCESSORIES



Article numbers

Type	Suction connector	Welding flange	Flexible connector	Inlet filter	Inlet guard
			Inlet		
HPB-F-020	45510440	45515460	42519930	25511485-22	26510223
HPB-F-025	46515040	45515460	42519930	25511485-22	26510223
HPB-F-030	46515040	45515460	42519930	25511485-22	26510223
HPB-F-040	46515053	-	42519930-01	25511485-24	26510223-05
HPB-F-200	46515040	45515460	42519930	25511485	26510223
HPB-F-260	46515050	45515510	42519931	42519931	25511384
HPB-F-300	46515050	45515510	42519932	42519932	25511508
HPB-F-360	46515050	45515510	42519931	42519931	25511693
HPB-F-400	46515052	45516588	42519933	42519933	25511528

Type	Outlet connector	Outlet guard	Welding flange	Choke valve	Flexible connector
			Outlet		
HPB-F-020	45510450	45510550	45515450	45510415	42519930
HPB-F-025	45510450	45510550	45515450	-	42519930
HPB-F-030	45510470	45510570	45516578	45510415	42519930
HPB-F-040	46515040-01	26510224	45515500	-	26510223-05
HPB-F-200	46515040-01	26510224	45515500	-	26510223
HPB-F-260	46515040-01	26510224	45515500	-	25511384
HPB-F-300	46515060-10	25511503	45516580	25511347	25511508
HPB-F-360	46515065-01	26510173	45516587	25511348	25511693
HPB-F-400	46515065-01	26510173	45516587	25511348	25511528

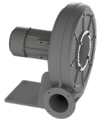


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ELECTRICAL ACCESSORIES



Type	Inverter L	Service switch
HPB-F-020-075T	L 0,75 kW	RS 3F-3B SP 16A
HPB-F-020-110T	L 1,5 kW	RS 3F-3B SP 16A
HPB-F-025-110T	L 1,5 kW	RS 3F-3B SP 16A
HPB-F-025-150T	L 1,5 kW	RS 3F-3B SP 16A
HPB-F-030-110T	L 1,5 kW	RS 3F-3B SP 16A
HPB-F-030-150T	L 1,5 kW	RS 3F-3B SP 16A
HPB-F-040-220T	L 2,2 kW	RS 3F-3B SP 16A
HPB-F-040-300T	L 4,0 kW	RS 3F-3B SP 16A
HPB-F-200-300T	L 4,0 kW	RS 3F-3B SP 16A
HPB-F-200-400T	L 4,0 kW	RS 3F-3B SP 16A
HPB-F-260-400T	L 4,0 kW	RS 3F-3B SP 16A
HPB-F-260-550T	L 5,5 kW	RS 3F-3B SP 16A / RS 3F-3B SP 25A
HPB-F-260-750T	L 7,5 kW	RS 3F-3B SP 25A
HPB-F-300-750T	L 7,5 kW	RS 3F-3B SP 25A
HPB-F-300-1100T	L 11,0 kW	RS 3F-3B SP 25A
HPB-F-300-1500T	L 15,0 kW	RS 3F-3B SP 40A
HPB-F-360-1500T	L 15,0 kW	RS 3F-3B SP 40A
HPB-F-360-1850T	L 18,5 kW	RS 3F-3B SP 40A
HPB-F-400-1850T	L 18,5 kW	RS 3F-3B SP 40A
HPB-F-400-2200T	L 22,0 kW	RS 3F-3B SP 63A

Article numbers

40016451	L 0,75kW	91040908	RS 3F-3B SP 16A
40016452	L 1,5kW	91040910-01	RS 3F-3B SP 25A
40016453	L 2,2kW	91040911-02	RS 3F-3B SP 40A
40016454	L 4,0kW	91040911-03	RS 3F-3B SP 63A
40016455	L 5,5kW		
40016456	L 7,5kW		
40016457	L 11,0kW		
40016458	L 15,0kW		
40016459	L 18,5kW		
40016460	L 22,0kW		