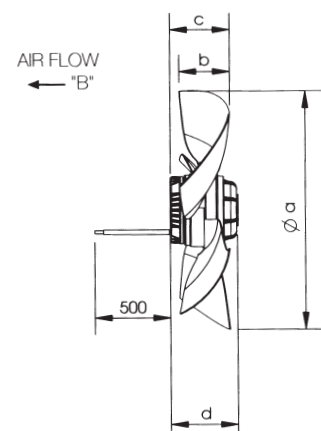


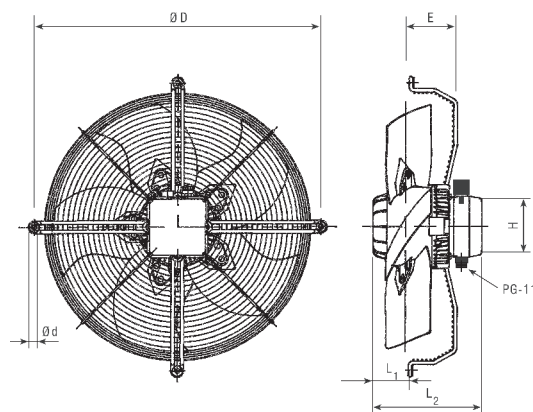


BMS MODEL/DIMENSIONS



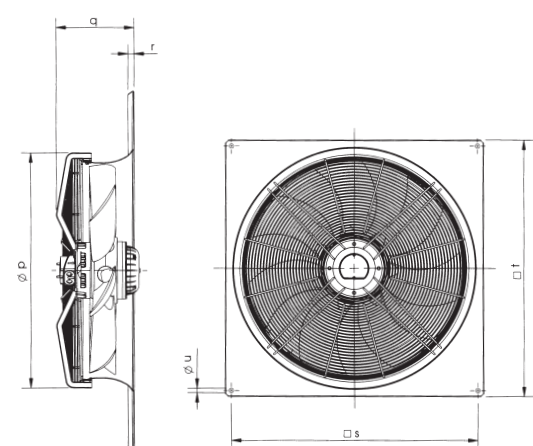
Model	A	B	C	D
200	199	33	49	75
250	253	33	52	75
300	302	63	75	85
350	354	70	88	100
400	396	67	90	100

BPN MODEL/DIMENSIONS



	L1	L2	L2	E	ØD	Ød	□H	□H
Ø		Single Phase	Three Phase				Single Phase	Three Phase
200	43	134	n/a	43	260	7	92	n/a
250	26	134	n/a	60	300	7	92	n/a
300	36	124	n/a	60	360	7	92	n/a
350	49	148	n/a	61	440	7	92	n/a
400	46	148	n/a	64	505	7	92	n/a
450	75	215	189	97	515	9.5	120	84
500	75	215	189	97	565	9.5	120	84
560	75	215	189	98.5	700	10	120	84
630	75	215	189	98.5	750	10	120	84
710	51	n/a	218	165	825	10.5	n/a	84

BZ MODEL/DIMENSIONS



Model	P	Q	R	S	T	U
630	676	217	20	750	805	11
800	865	272	17	910	970	14.5

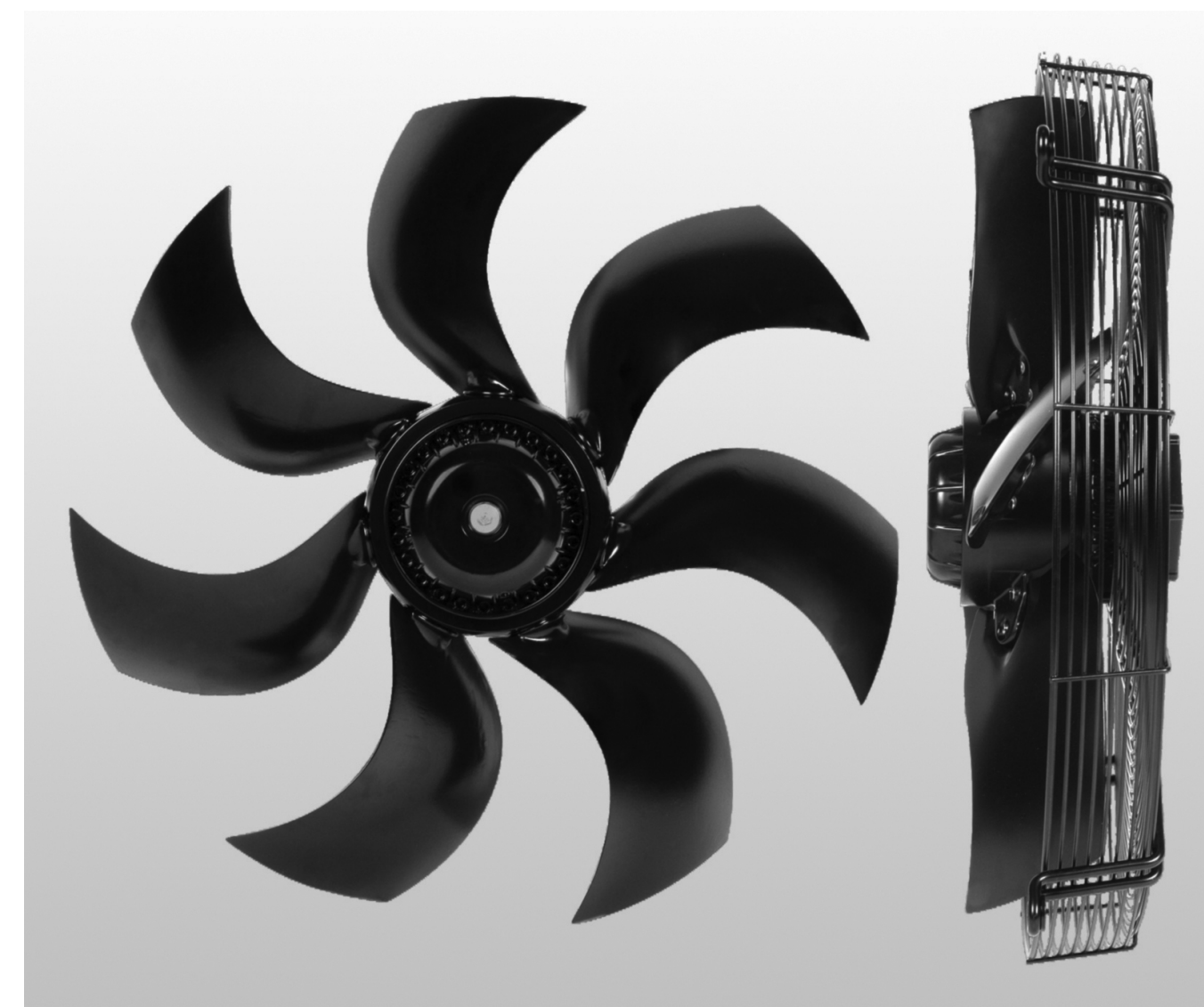
NOTE:

- All single phase fans are pre-connected for correct rotation **DO NOT** alter bridging straps. Refer to wiring diagram under J Box lid
- All three phase fans have hi (delta Δ) and lo (star Υ) speed feature. Refer to wiring diagram under J Box lid.

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ROTOREX



External Rotor Fans for Air-Conditioning and Refrigeration Equipment



ISO 9001





ROTOREX SERIES

The ROTOREX range is a series of external rotor motor axial fans, specially designed to use on Refrigeration and Air-Conditioning equipment, using the most advanced technology in order to ensure efficiency together with the lowest noise level. The range is available in 14 diameters (from 200mm to 1000mm), with different models according to the type of impeller, motor, support or electrical connection. Other versions not specified in this catalogue may be possible on request.

ELECTRIC MOTORS

The electric motor of the ROTOREX series is of induction type, asynchronous, with external rotor. They have been designed according to the IEC 34-1 and UNE 20-113 standards, and can be supplied in three phase versions at 50Hz or in single phase version 230V (220-240V) 50Hz. Under request other voltages are possible, as well as 60Hz versions. Depending on the model, motors of 2, 4 and 6 poles are available. The ball bearings are totally enclosed and greased for life, thus enabling a very low noise level and continuous operation.

The insulation is Class B for the models 200, 250, 300 and 400. For those, the working temperature range is -40 / +60°C. In the models from 450 up to 1000, the insulation is Class F, and the working temperature range varies between models.

The motor housings are made of aluminium and, together with the impellers and the supports, are painted in black polyester, for BPN models.

The enclosure is IP-44 as standard for the models 200, 250, 300, 350 and 400 (IP-54 special versions are available under request). The models from the 450 up to 1000 are IP-54 as standard, achieved by a specially designed labyrinth slot between the rotor and the back shield.

The motor-impeller assembly is dynamically balanced to ISO-1940 with a G-6.3 degree referred to 1500 rpm.

THERMAL PROTECTION

All the motors* are fitted with a thermal protection device of the self-resetting type, to protect the motor from dangerous overheating. The terminals of the thermal protection device are available for wiring to the control circuit of contactors or DOL starters in the case of three phase motors, or directly to the supply line in the single phase motors.

*(Except three phase 200-400)

SPEED CONTROL

The motors of the ROTOREX range can be speed controlled by a variation of the supply voltage with either electronic controllers or transformers. The three phase motors at 400V permit a second speed to be obtained by changing the wiring from Delta to Star ().

Current and power data absorbed by varying voltage or the wiring () are available on request.

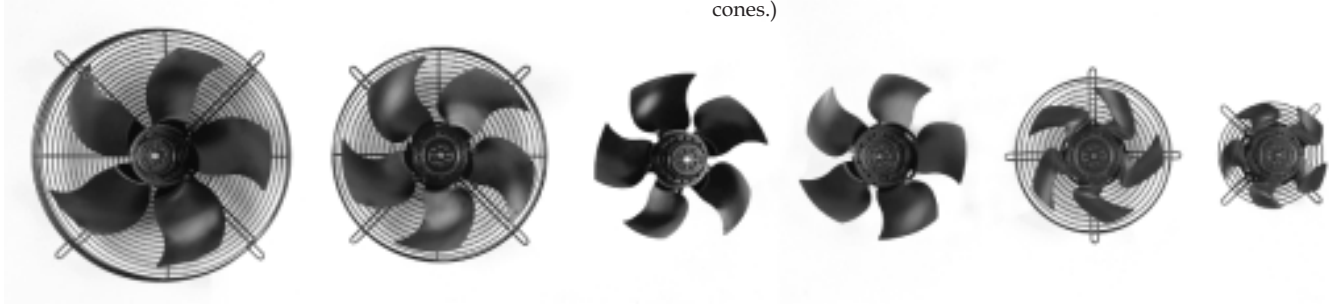
SUPPORT GUARD

The support guard on BPN models has been designed to facilitate the mounting of the fan as a part of any cooling or air-conditioning equipment. It is manufactured in electro welded steel wire, protected with polyester powder paint in black colour, and is according to DIN 31001 standard. BZ mdoels have square plate support.

IMPELLERS

The impellers of the ROTOREX series are the result of a long development using the most advanced software and testing means available, in order to obtain the highest possible aerodynamic characteristics together with the lowest noise levels*. In the models 450, 500, 560 and 630, three possible pitch angles are available: 25, 30 and 35°. All the models can be offered with form B (air direction impeller over the motor). Impellers are made of aluminium, and the finish for BPN models is with powder painting, of polyester type.

*(For best results, we recommend the use of our optional inlet cones.)



SINGLE AND THREE PHASE
EXTERNAL ROTOR AXIAL FANS

TYPE	VOLTS	CAP mF	AMPS	WATTS	RPM	L/S	PKG QTY	KG	VOL M³
Single Phase									
HRB/2-200 BMS	240	2	0.34	60	2775	208	1	3	0.017
HRB/2-250 BMS	240	4	0.55	128	2685	458	1	3	0.017
HRB/4-250 BMS	240	1.5	0.21	40	1450	242	1	3	0.017
HRB/4-300 BMS	240	3	0.33	78	1380	444	1	4	0.017
HRB/4-350 BMS	240	5	0.55	130	1400	786	1	5	0.028
HRB/4-400 BMS	240	4	0.71	160	1150	1049	1	5	0.028
HRB/2-200 BPN	240	2	0.34	60	2775	208	1	4	0.022
HRB/4-250 BPN	240	1.5	0.21	40	1450	242	1	4	0.022
HRB/4-300 BPN	240	3	0.33	78	1380	444	1	5	0.022
HRB/4-350 BPN	240	5	0.55	130	1400	786	1	6	0.039
HRB/4-400 BPN	240	4	0.71	160	1150	1049	1	6	0.039
HRB/4-450/30 BPN	240	10	2.4	490	1320	1681	1	8.0	0.075
HRB/4-500/25 BPN	240	12	2.65	600	1290	2097	1	9.0	0.084
HRB/4-500/30 BPN	240	16	3.3	780	1320	2417	1	10.0	0.084
HRB/6-500/35 BPN	240	7	1.3	300	867	1722	1	9.0	0.084
HRB/6-560/30 BPN	240	9	1.8	400	830	2153	1	15.0	0.127
HRB/6-630/35 BPN	240	15	3	700	830	3333	1	18.0	0.142
Three Phase									
HRT/4-400/BPN	415	n/a	0.32	160	1250	1049	1	6	0.039
HRT/4-450/30/BPN	415	n/a	0.9	480	1340	1681	1	8	0.075
HRT/4-500/25 BPN	415	n/a	1.9	620	1340	2097	1	9.0	0.084
HRT/4-500/30 BPN	415	n/a	2.5	730	1360	2417	1	11.0	0.084
HRT/4-560/25 BPN	415	n/a	3.4	1000	1350	2983	1	15.0	0.127
HRT/4-630/25 BPN	415	n/a	2.5	1400	1330	4111	1	22.0	0.142
HRT/6-630/30 BPN	415	n/a	1.35	640	830	3028	1	18.0	0.142
HRT/6-710/30 BPN	415	n/a	2.3	800	900	3889	1	25.0	0.174
Plate Mount									
HRBT/4-630/30 BZ	415	n/a	3.5	1850	1315	5136	1	40.0	0.228
HRT/6-800/28 BZ	415	n/a	3.5	1900	890	7166	1	40.0	0.345
HRT/8-800/28 BZ	415	n/a	1.83	760	630	5302	1	35	0.345

Note: All air flow readings have been taken at free air or zero pressure, system resistances

- HR 1 / 2 — 3 / 4 5 6 7
- 1 Motor
B - Single Phase
T - Three Phase

2 No Poles

3 Impeller Diameter in mm

4 Impeller Pitch Angle

5 Air Direction
B - Induced

6 Type of Connection
P - Junction Box
M - Fly Lead

7 Support Type
N - Flat Grille
PN - Basket Type
S - No Support
BZ - Square Plate Mount