

AC centrifugal fan

backward curved



R2E220-AB84-52 ebmpapst Datasheet
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Nominal data

Type	R2E220-AB84-52			
Motor	M2E068-CF			
Phase		1~	1~	1~
Nominal voltage	VAC	100	100	100
Frequency	Hz	50	60	60
Type of data definition		fa	fa	fa
Valid for approval / standard		CE	UL	CE
Speed	min ⁻¹	2700	3000	3000
Power input	W	85	135	115
Current draw	A	0.88	1.14	1.16
Motor capacitor	µF	12	12	12
Capacitor voltage	VDB	220	220	220
Capacitor standard		P2 (CE)	UL	P2 (CE)
Min. back pressure	Pa	0	0	0
Max. ambient temperature	°C	50	50	50
Starting current	A	2		1.9

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

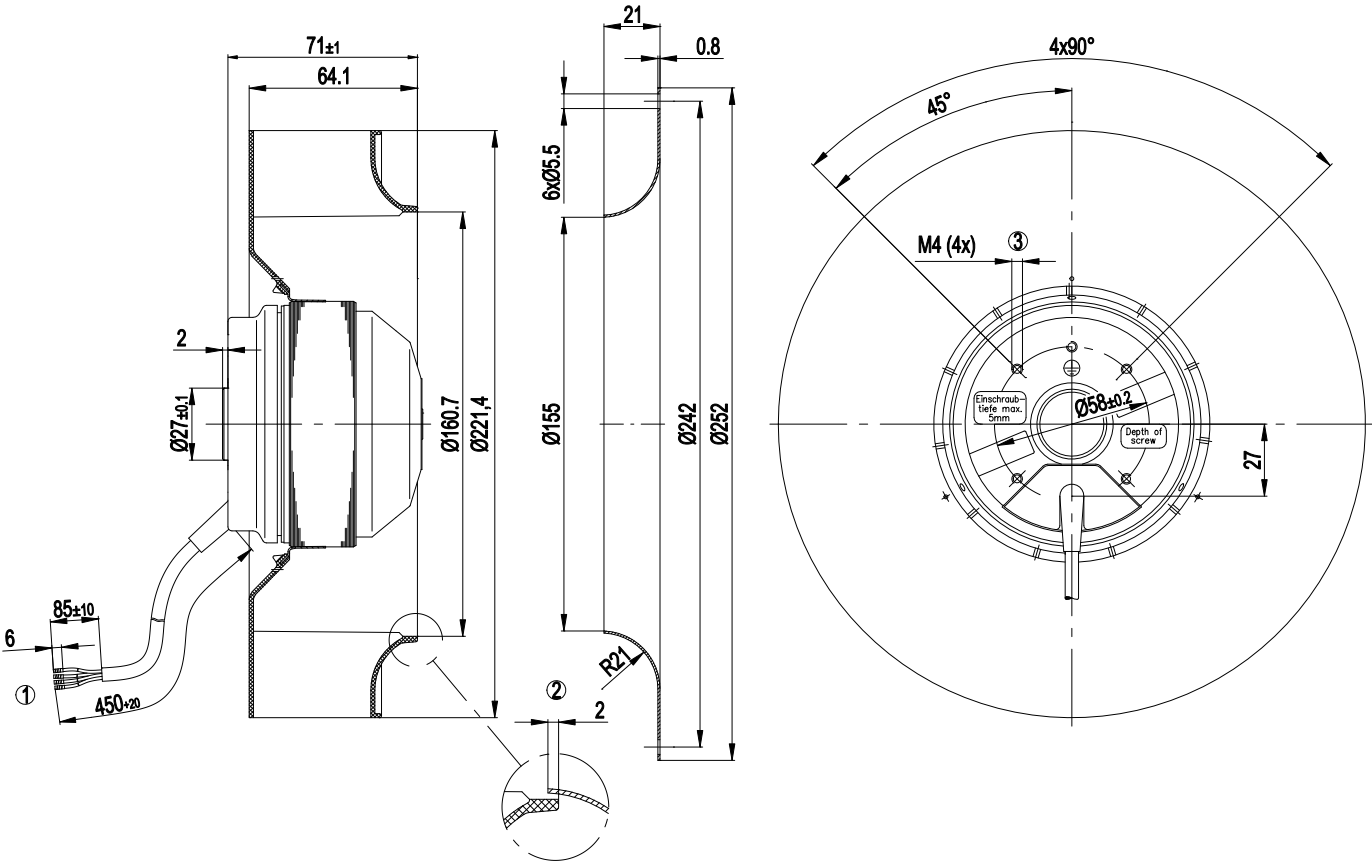


Technical features

Mass	1.75 kg
Size	220 mm
Surface of rotor	Coated in black
Material of impeller	Plastic PA6, fibreglass-reinforced
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC; UL 2111; CSA C22.2 Nr.77

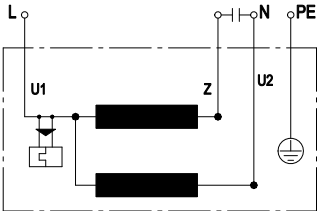


Product drawing



1	Connection line PVC 4G AWG20 UL, 4x brass lead tips crimped
2	Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 5 mm

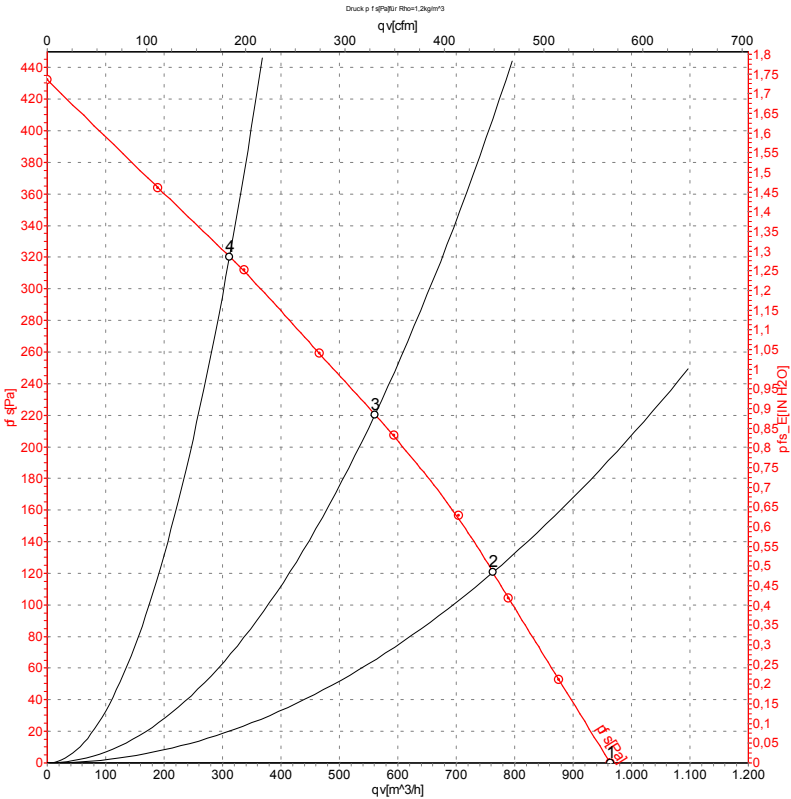
Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				



Charts: Air flow 50 Hz



Measurement: LU-52818

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: L_{WA} measured as per ISO 13347 /
L_{pA} measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

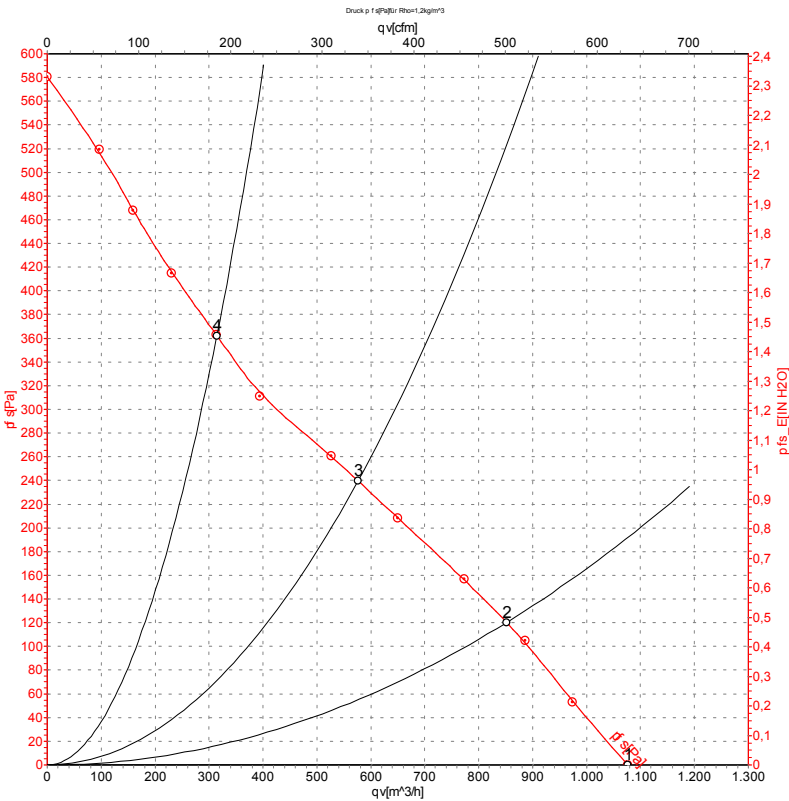
Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	100	50	2700	85	0.88	965	0
2	100	50	2580	100	1.01	765	120
3	100	50	2515	108	1.09	560	220
4	100	50	2550	104	1.05	310	320

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



Charts: Air flow 60 Hz



Measurement: LU-52817

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: L_{WA} measured as per ISO 13347 /
L_{pA} measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	U	f	n	P _e	I	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	100	60	3000	115	1.16	1075	0
2	100	60	2805	132	1.31	850	120
3	100	60	2590	144	1.44	575	240
4	100	60	2650	140	1.40	315	360

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

