

R2E220-AA40-80

# AC centrifugal fan

backward curved, single inlet



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## Nominal data

Type	R2E220-AA40-80			
Motor	M2E068-BF			
Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Type of data definition		fa	fa	fa
Valid for approval / standard		CE	UL 2111	CE
Speed	min <sup>-1</sup>	2600	2700	2700
Power input	W	85	100	90
Current draw	A	0.38	0.43	0.40
Motor capacitor	µF	3	2	2
Capacitor voltage	VDB	400	400	400
Capacitor standard		P0 (CE)	UL	P0 (CE)
Min. back pressure	Pa	0	0	0
Max. ambient temperature	°C	55	55	55

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



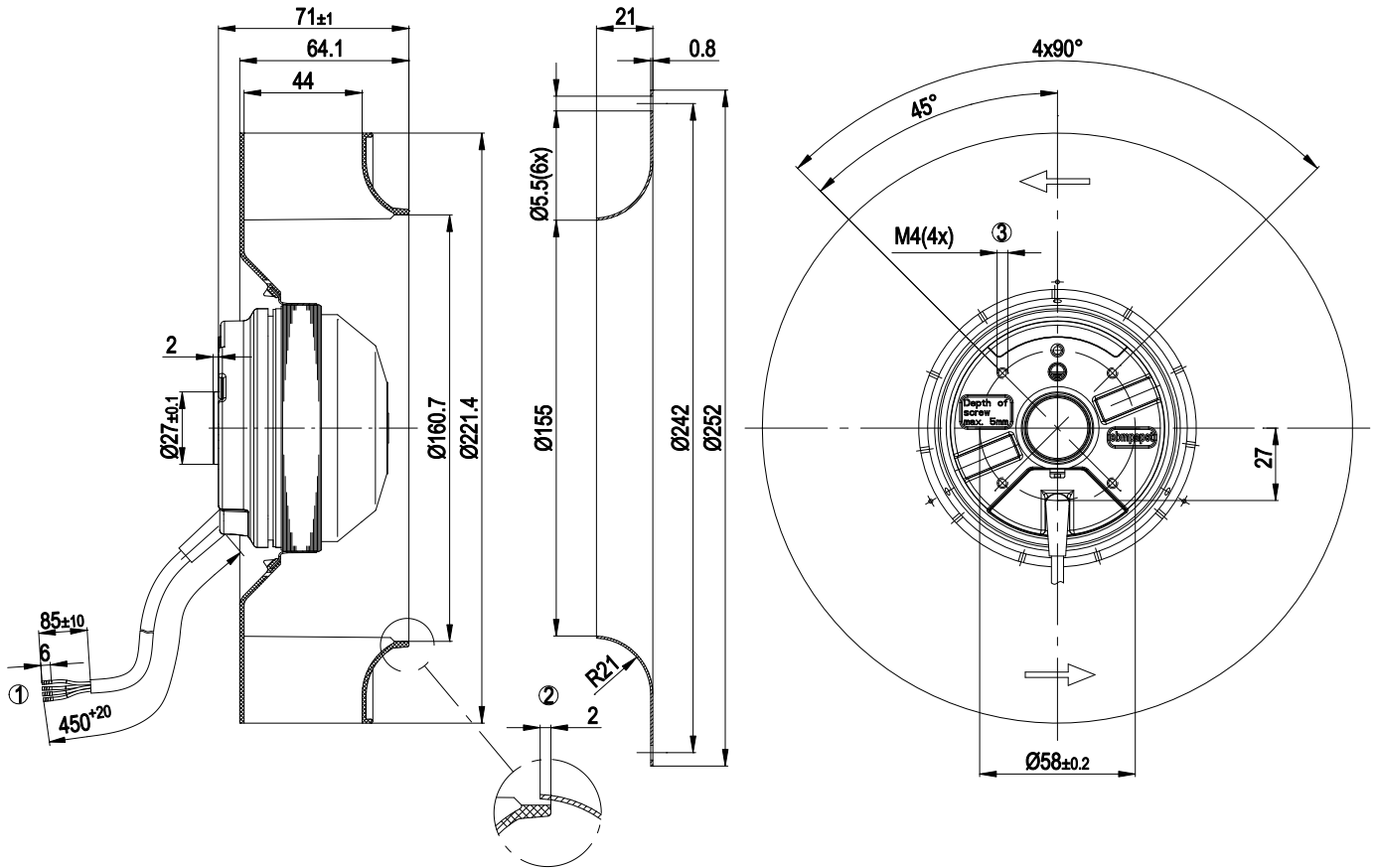
### Technical features

<b>Mass</b>	1.35 kg
<b>Size</b>	220 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	Plastic PA6, fibreglass-reinforced
<b>Number of blades</b>	11
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F1-2
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	None
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Variable
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE
<b>Approval</b>	CCC; UL 1004-1; CSA C22.2 Nr.100

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backward curved, single inlet

## Product drawing



- 1 Connection line PFA AWG20, 4 x 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. 5mm

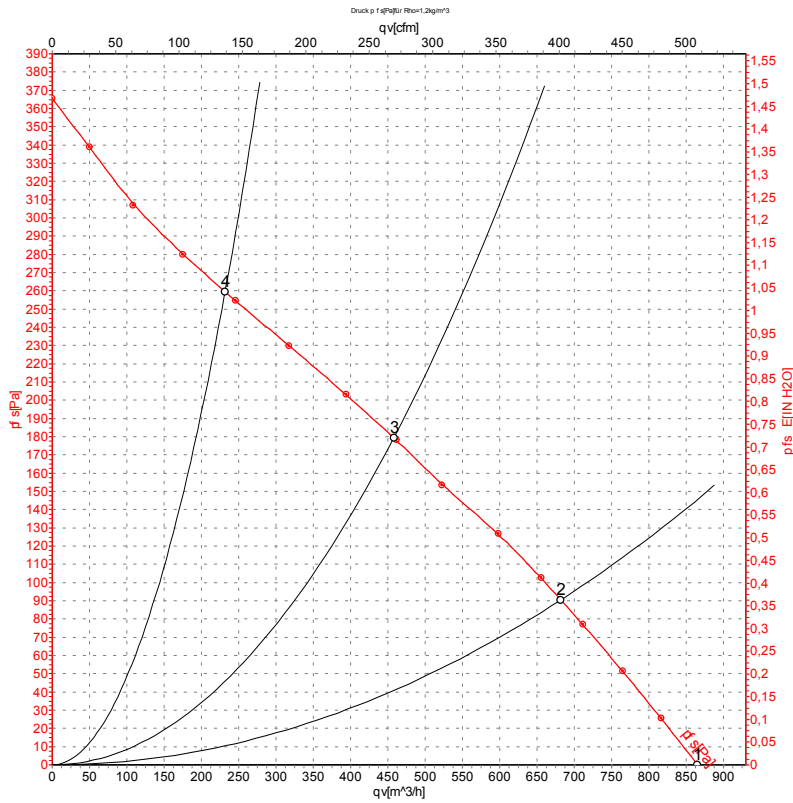
## Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				



## Charts: Air flow 50 Hz



Measurement: LU-106763

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<sub>WA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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.

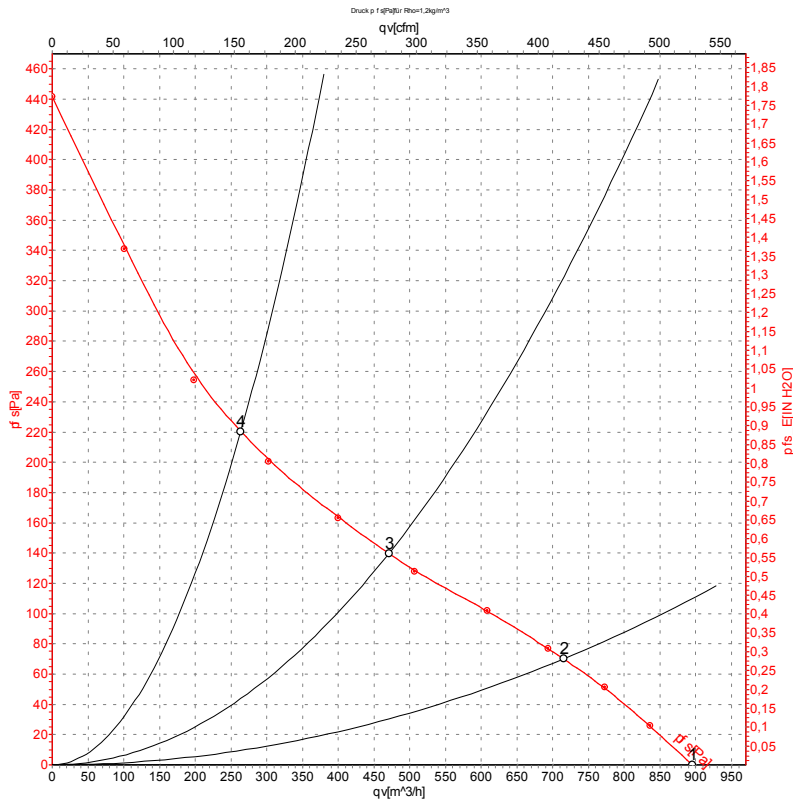
## Measured values

	U	f	n	P <sub>e</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	2405	85	0.38	865	0
2	230	50	2260	91	0.39	680	90
3	230	50	2155	94	0.41	460	180
4	230	50	2245	91	0.40	230	260

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase



## Charts: Air flow 60 Hz



Measurement: LU-106764

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<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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 <sub>e</sub>	I	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	60	2490	84	0.37	895	0
2	230	60	2265	90	0.39	715	70
3	230	60	2020	94	0.41	470	140
4	230	60	2100	93	0.40	265	220

U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

