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**Nominal data**

<b>Type</b>	<b>R2E220-AE86-13</b>		
<b>Motor</b>	<b>M2E068-DF</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	2750	3110
Power consumption	W	85	125
Current draw	A	0.4	0.55
Capacitor	µF	3	3
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	S0 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	50

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



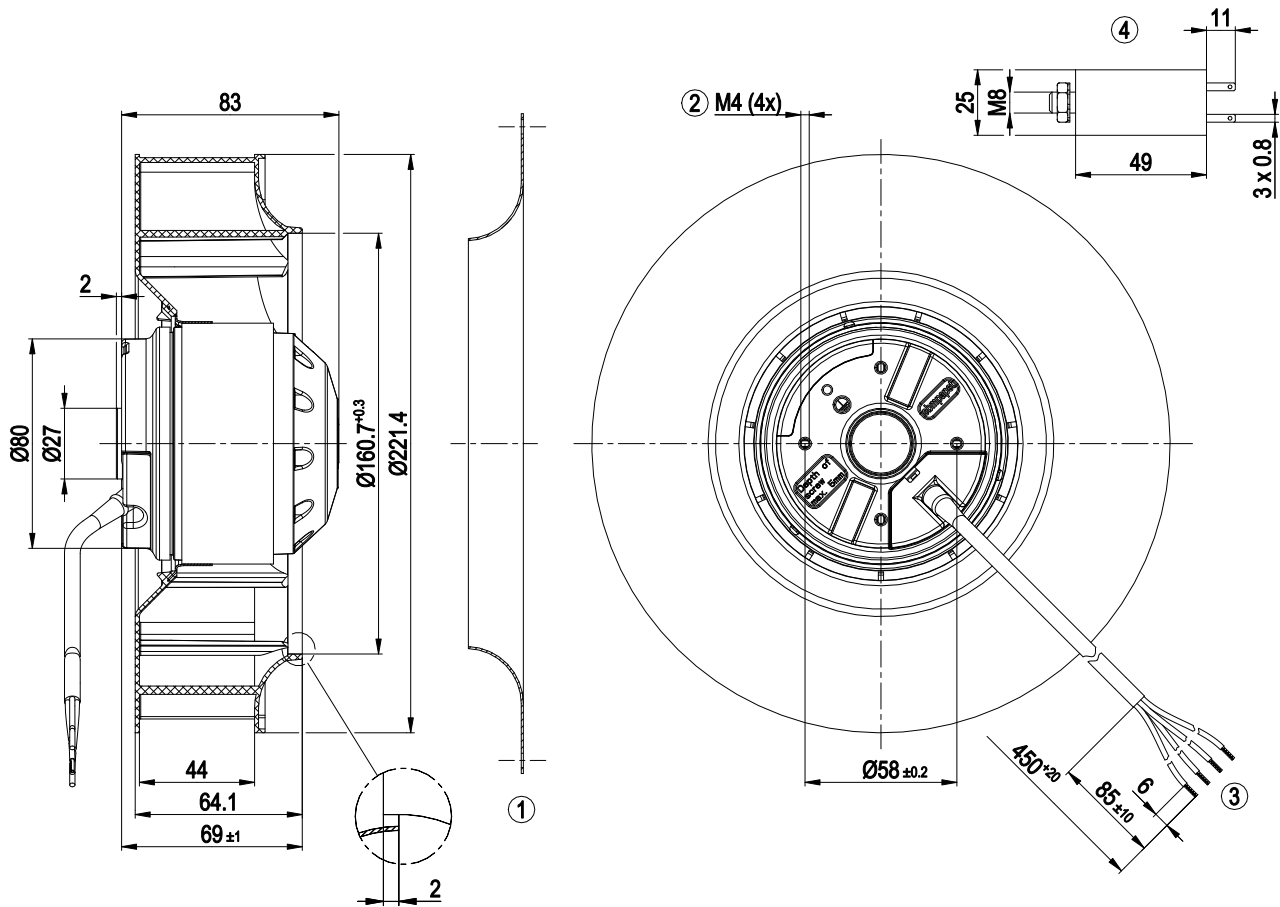
### Technical description

<b>Weight</b>	2.3 kg
<b>Size</b>	220 mm
<b>Motor size</b>	68
<b>Rotor surface</b>	Painted black
<b>Impeller material</b>	PA plastic
<b>Number of blades</b>	11
<b>Direction of rotation</b>	Clockwise, viewed toward rotor
<b>Degree of protection</b>	IP44; installation- and position-dependent as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Moisture (F) / Environmental (H) protection class</b>	H1
<b>Max. permitted ambient temp. for motor (transport/storage)</b>	+ 80 °C
<b>Min. permitted ambient temp. for motor (transport/storage)</b>	- 40 °C
<b>Installation position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensation drainage holes</b>	On rotor side
<b>Mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) internally connected
<b>With cable</b>	Variable
<b>Protection class</b>	I (with customer connection of protective earth)
<b>Conformity with standards</b>	EN 60335-1; CE
<b>Approval</b>	CSA C22.2 No. 100; UL 1004-1

# AC centrifugal fan

backward-curved, single-intake

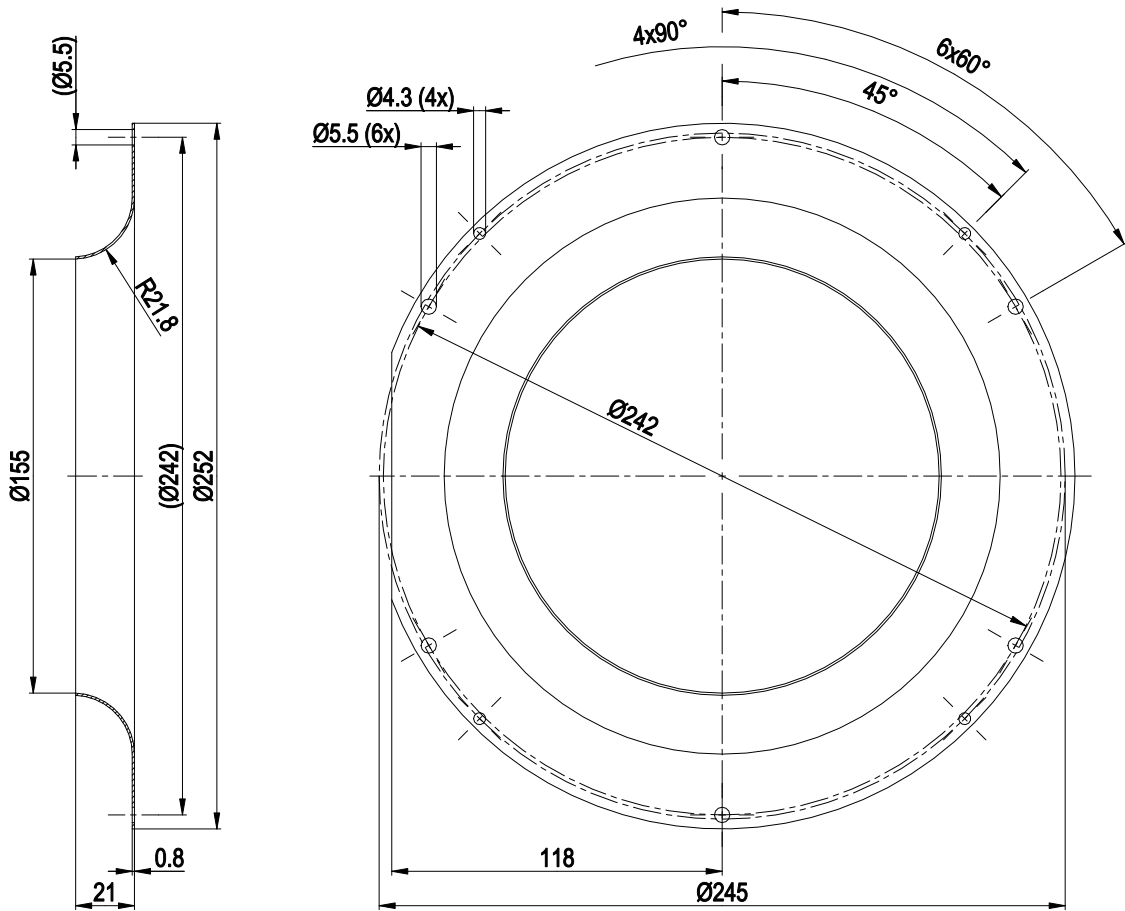
## Product drawing



- |   |  |
|---|--|
| 1 | Accessory part: inlet ring 09609-2-4013 not included in scope of delivery  |
| 2 | Max. clearance for screw 5 mm  |
| 3 | Cable PVC AWG20, 4x crimped splices  |
| 4 | Accessory part: capacitor, nut and toothed lock washer included separately |

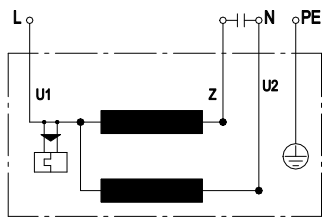


## Accessory part



Inlet ring 09609-2-4013 not included in scope of delivery

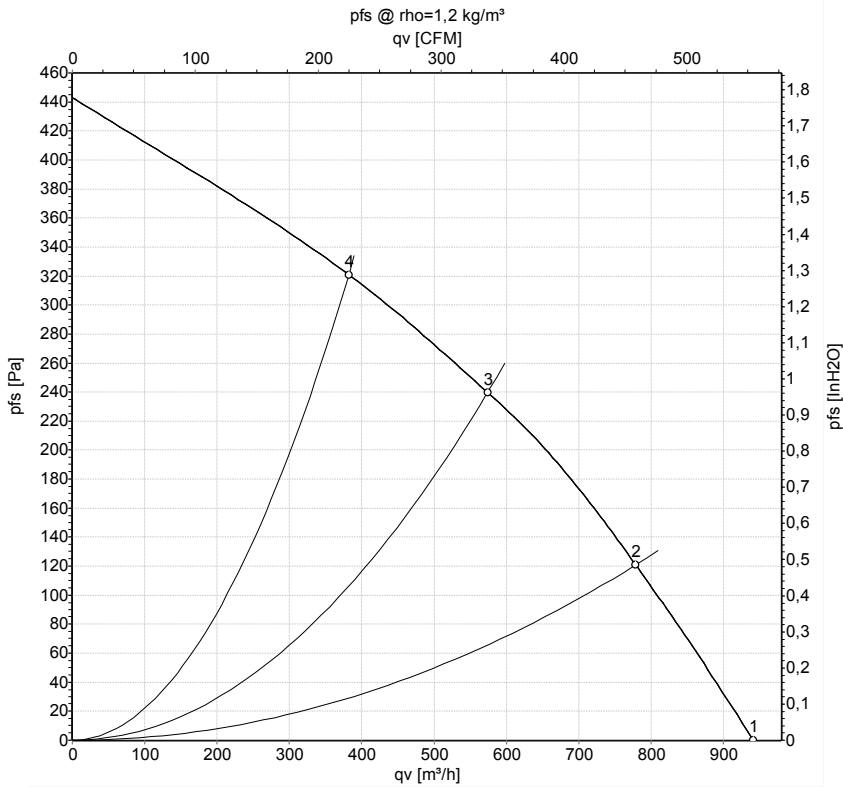
## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



## Curves: Air performance 50 Hz



Measurement: LU-43947-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

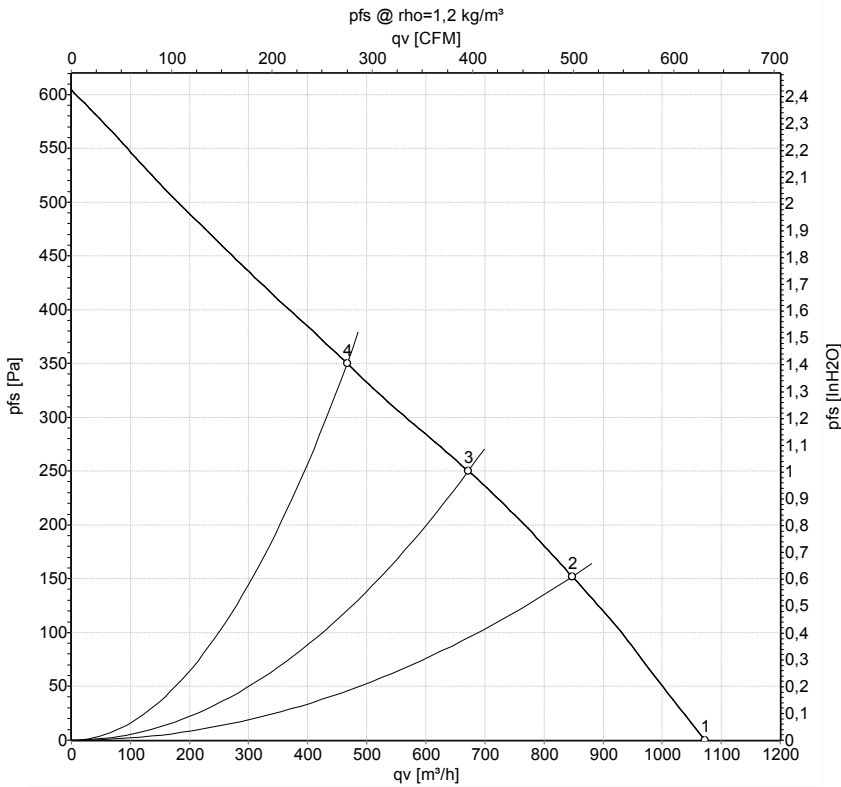
## Measured values

	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	50	2750	85	0.40	940	0	555	0.00
2	230	50	2665	102	0.45	780	120	460	0.48
3	230	50	2600	112	0.50	575	240	340	0.96
4	230	50	2620	109	0.48	380	320	225	1.28

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



## Curves: Air performance 60 Hz



Measurement: LU-43948-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m³/h	Pa	cfm	in. wg
1	230	60	3150	120	0.52	1070	0	630	0.00
2	230	60	2935	142	0.62	850	150	500	0.60
3	230	60	2815	153	0.66	670	250	395	1.00
4	230	60	2800	155	0.69	465	350	275	1.41

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

