

R2E220-AB06-05

# AC centrifugal fan

backward-curved, single-intake



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## Nominal data

Type	R2E220-AB06-05		
Motor	M2E068-CF		
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>	2700	3050
Power consumption	W	85	115
Current draw	A	0.38	0.51
Capacitor	µF	2.5	2.5
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	45	45
Starting current	A	0.85	0.85

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



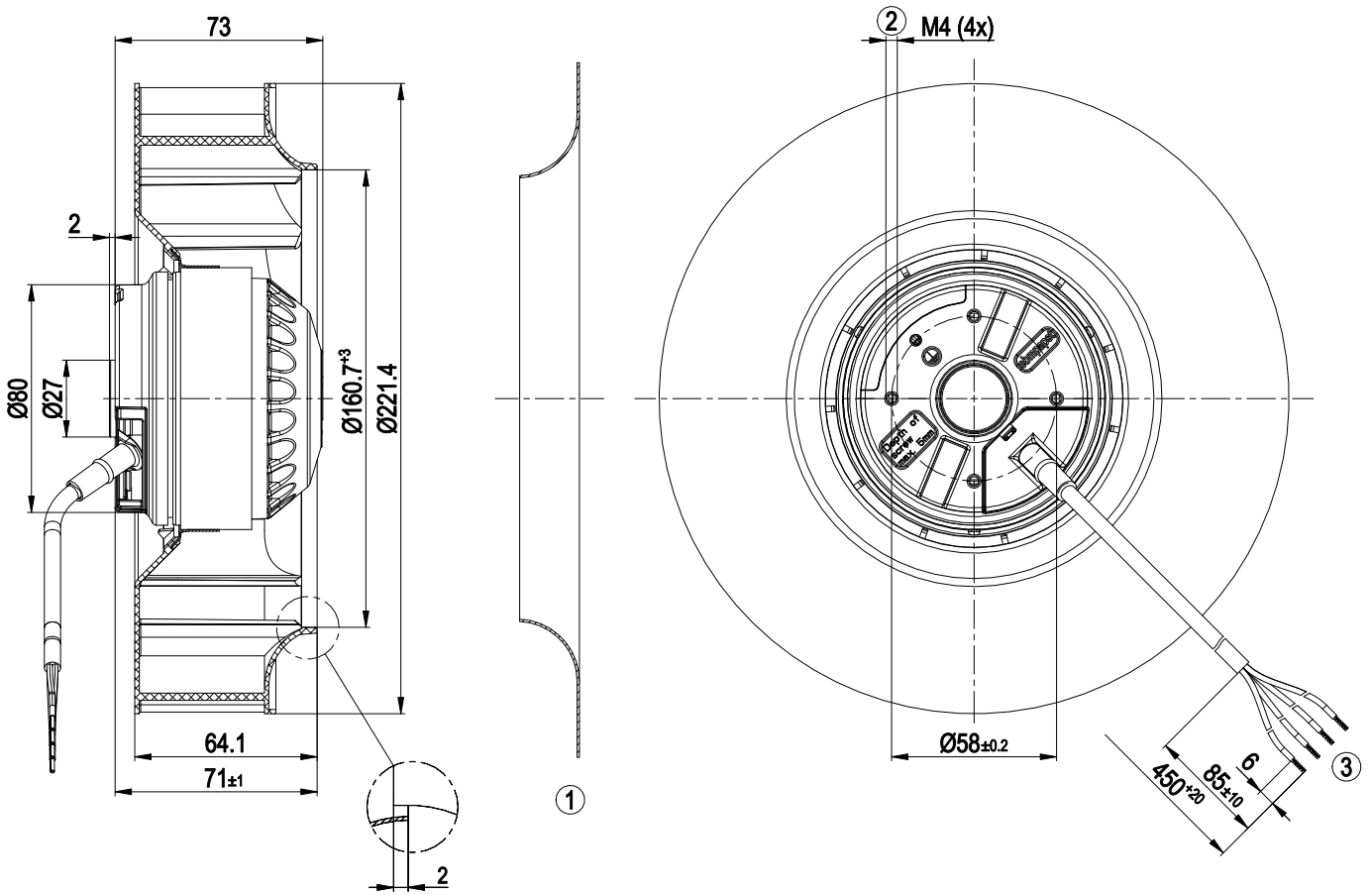
### Technical description

<b>Weight</b>	1.8 kg
<b>Fan size</b>	220 mm
<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>	CCC; EAC

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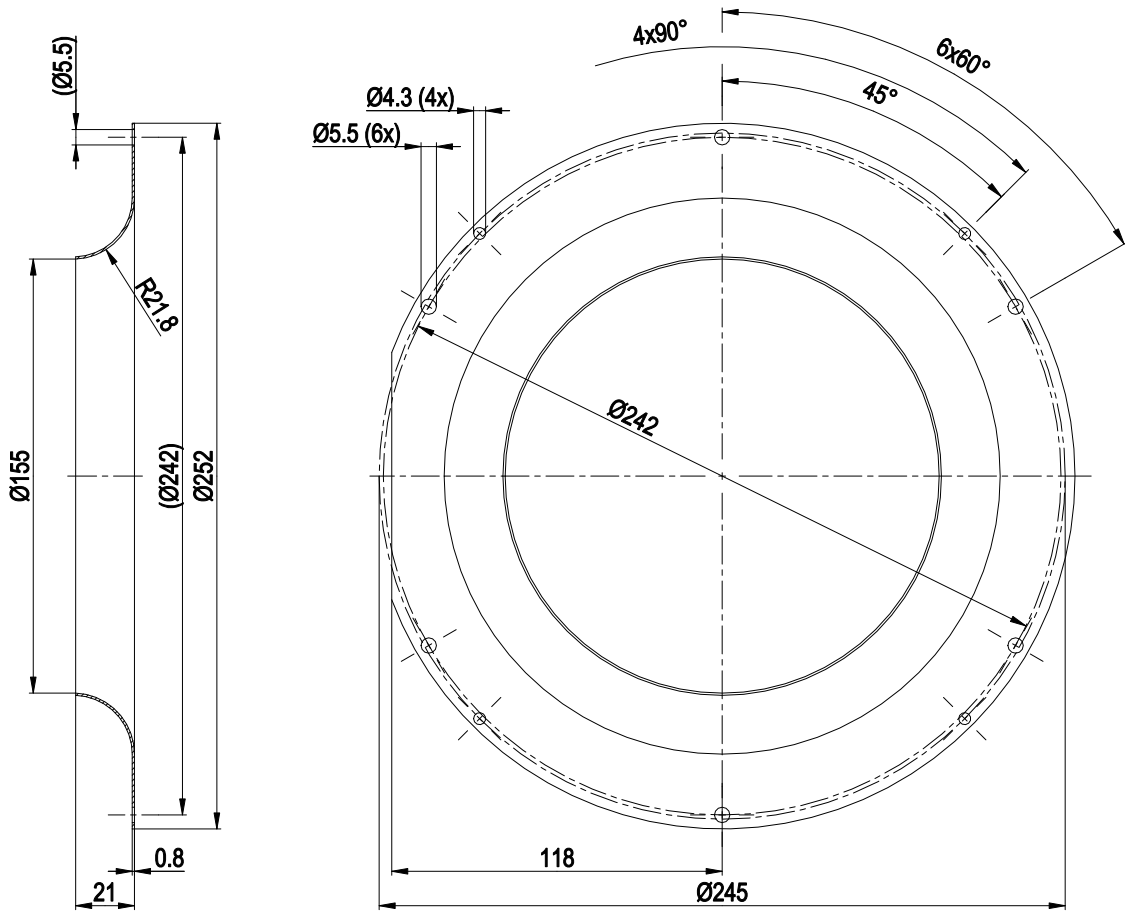
## Product drawing



- |   |  |
|---|--|
| 1 | Accessory part: Inlet ring 09609-2-4013, not included in scope of delivery |
| 2 | Max. clearance for screw 5 mm  |
| 3 | Cable PVC 4G 0.5 mm <sup>2</sup> , 4x crimped splices                      |

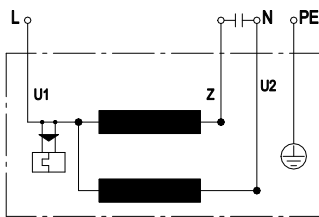


## Accessory part



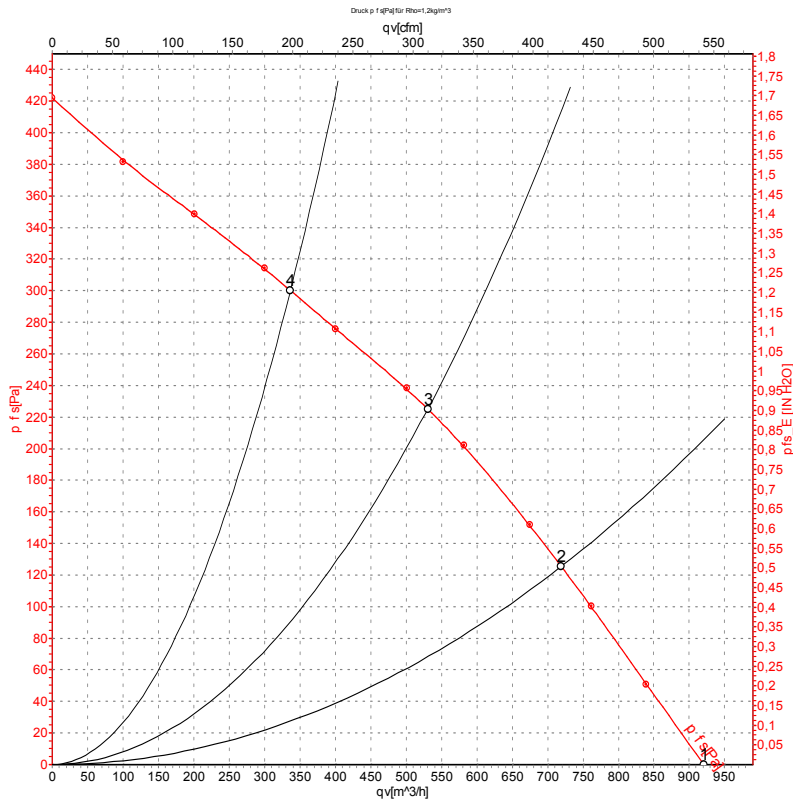
Inlet ring 09609-2-4013 not included in scope of delivery

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



Measurement: LU-106769-1

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.

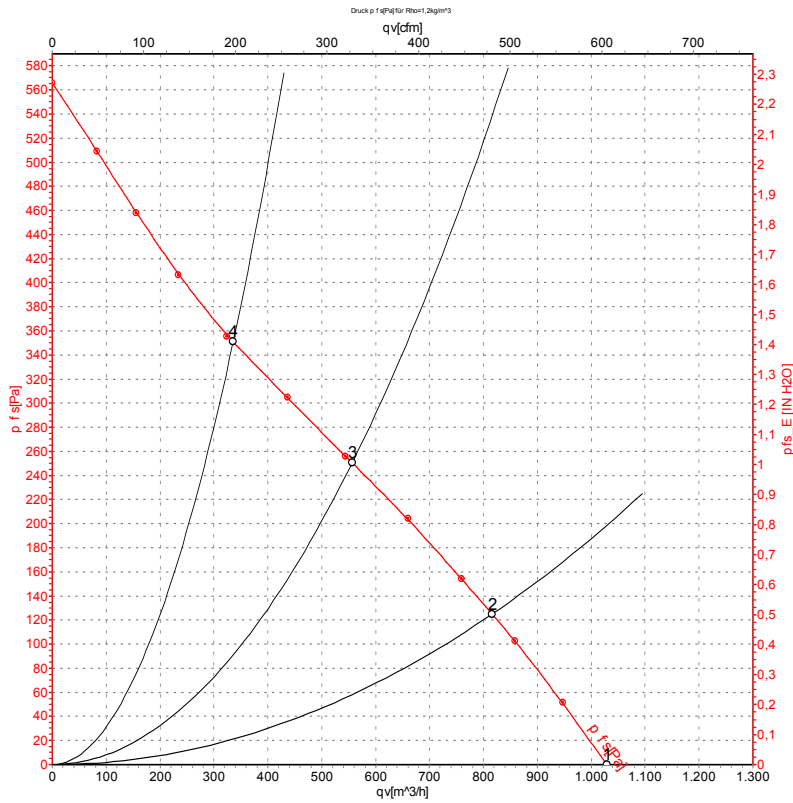
## Measured values

	U	f	n	P <sub>e</sub>	I	LpA <sub>in</sub>	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	50	2700	85	0.38	72	920	0	540	0.00
2	230	50	2540	97	0.43		720	125	425	0.50
3	230	50	2475	104	0.46		530	225	315	0.90
4	230	50	2495	102	0.45		335	300	200	1.20

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase



## Curves: Air performance 60 Hz



Measurement: LU-106770-1

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	LpA <sub>in</sub>	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	60	3050	115	0.51	75	1030	0	605	0.00
2	230	60	2770	128	0.55		815	125	480	0.50
3	230	60	2600	138	0.60		555	250	330	1.00
4	230	60	2680	133	0.58		335	350	200	1.41

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase

