

AC centrifugal fan

backward-curved, single-intake

ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2E220-AE86-13		
Motor	M2E068-DF		
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 ⁻¹	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	inH ₂ O	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	55	50

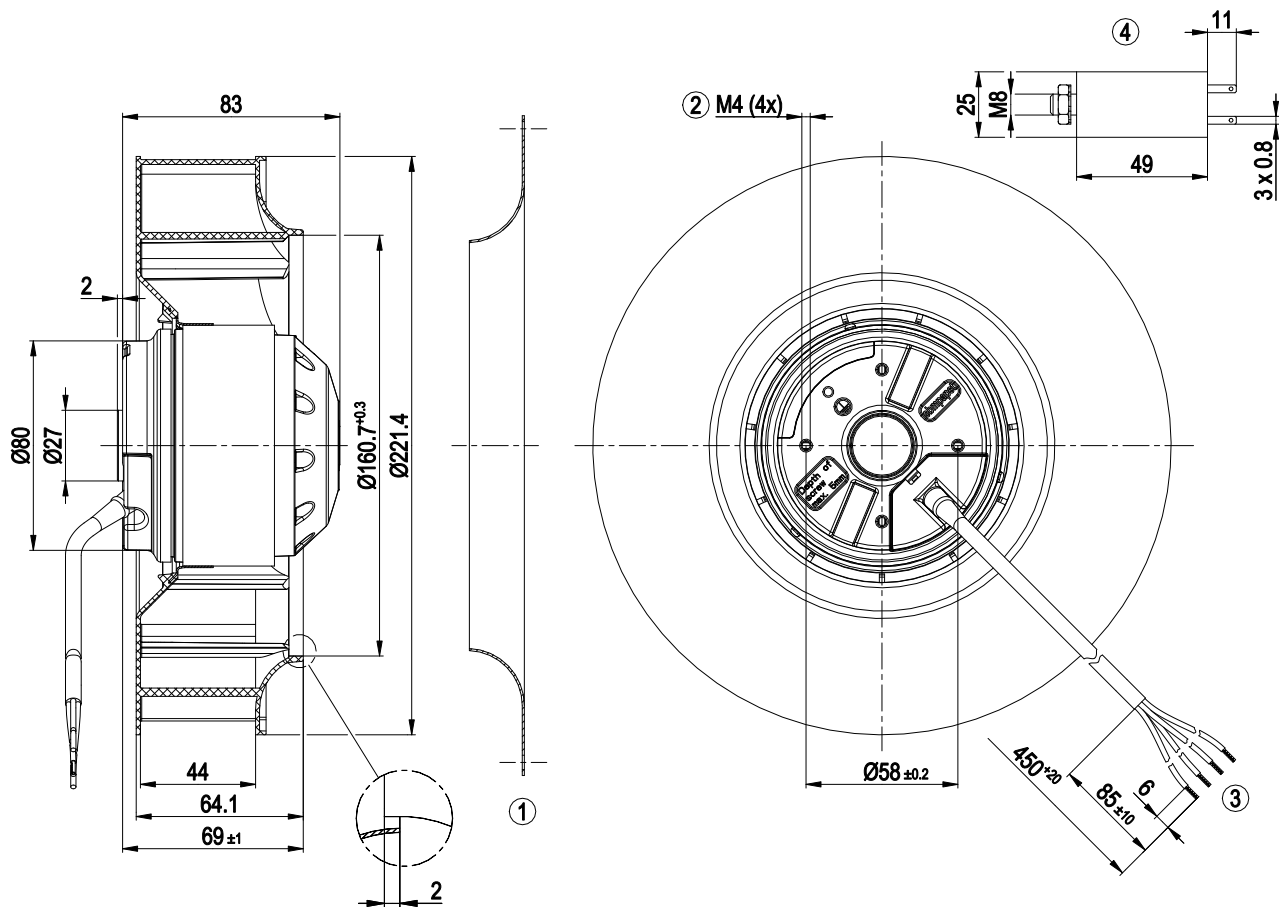
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

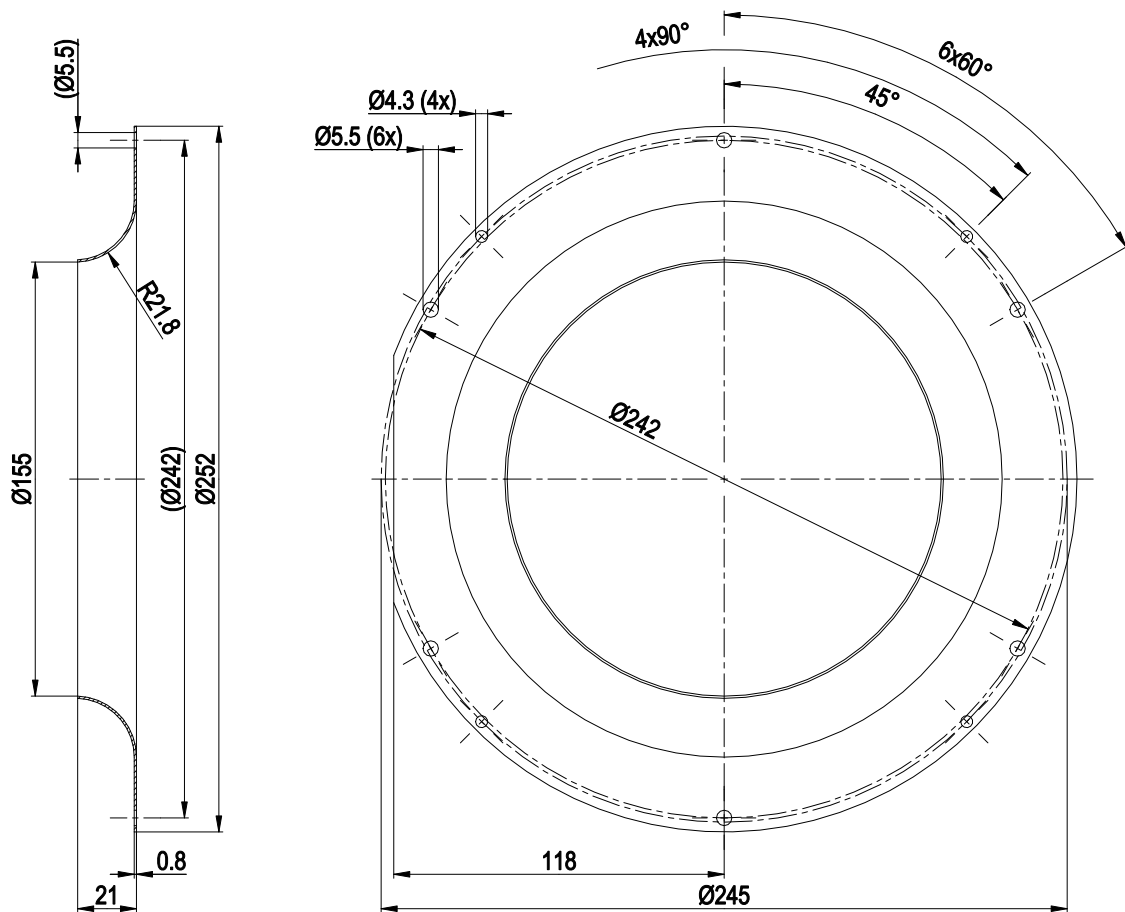
Weight	2.3 kg
Fan size	220 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

Product drawing



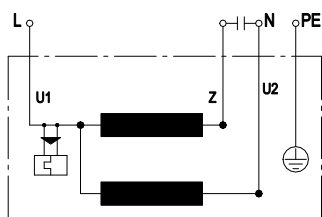
- | | |
|---|--|
| 1 | Accessory part: inlet ring 09609-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 5 mm |
| 3 | Cable PVC AWG20, 4x crimped splices |
| 4 | Accessory part: capacitor, nut and toothed lock washer included separately |

Accessory part



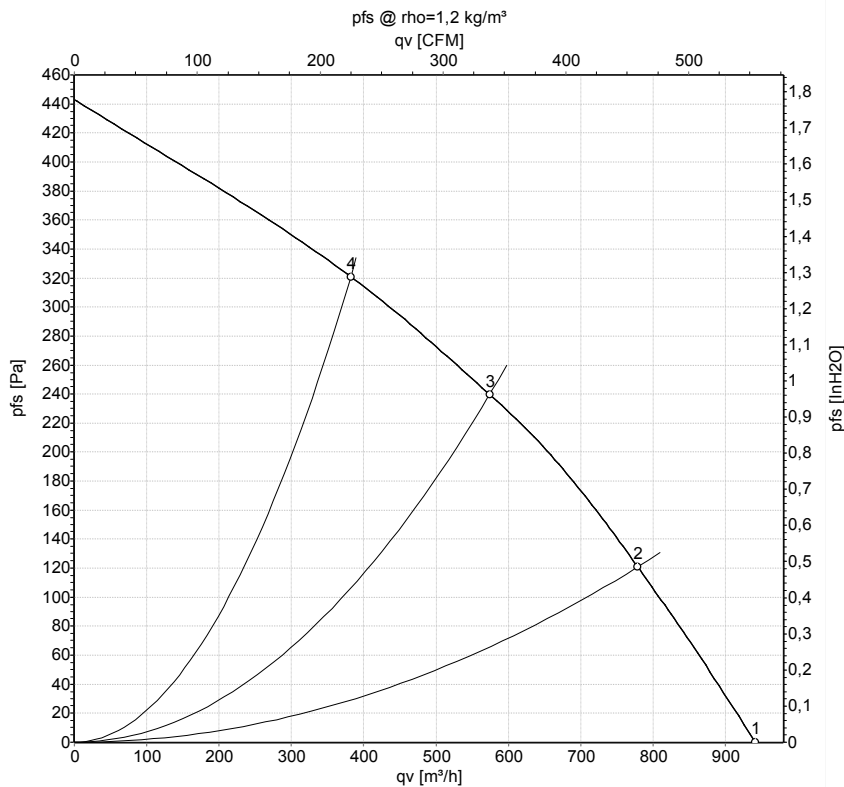
Inlet ring 09609-2-4013 not included in scope of delivery

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

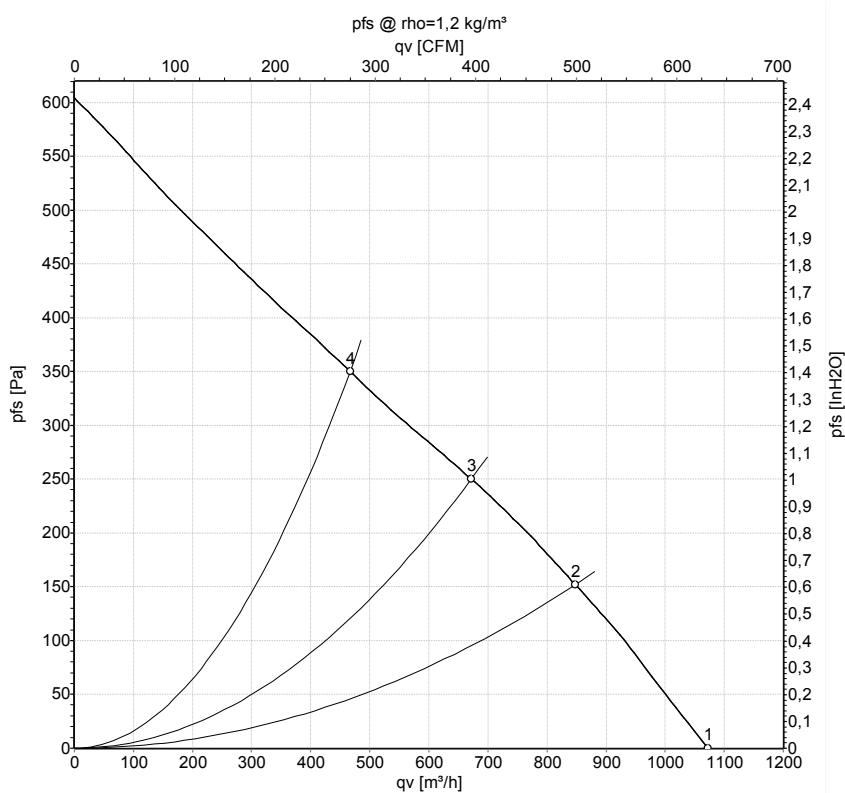
	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	inH2O
1	230	50	2750	85	0.40	940	0	555	0.00
2	230	50	2665	102	0.45	780	120	460	0.48
3	230	50	2600	112	0.50	575	240	340	0.96
4	230	50	2620	109	0.48	380	320	225	1.28

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

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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 _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	inH2O
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 = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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