

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-AB06-67		
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 ⁻¹	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

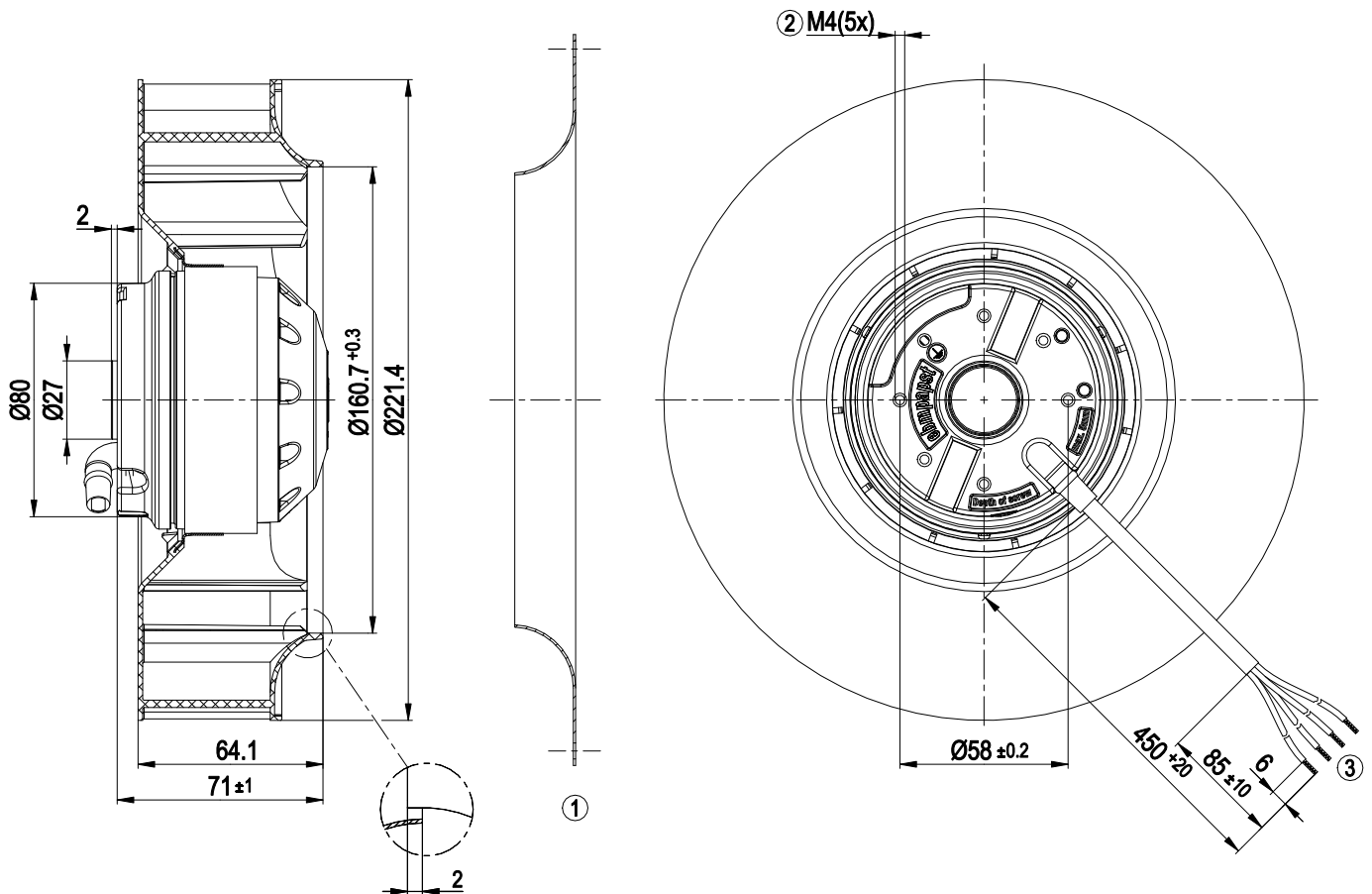
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

Weight	1.86 kg
Size	220 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA plastic, sheet-metal plate painted black
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2+
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; (sealed, without air gap)
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 assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 100; UL 1004-1

Product drawing

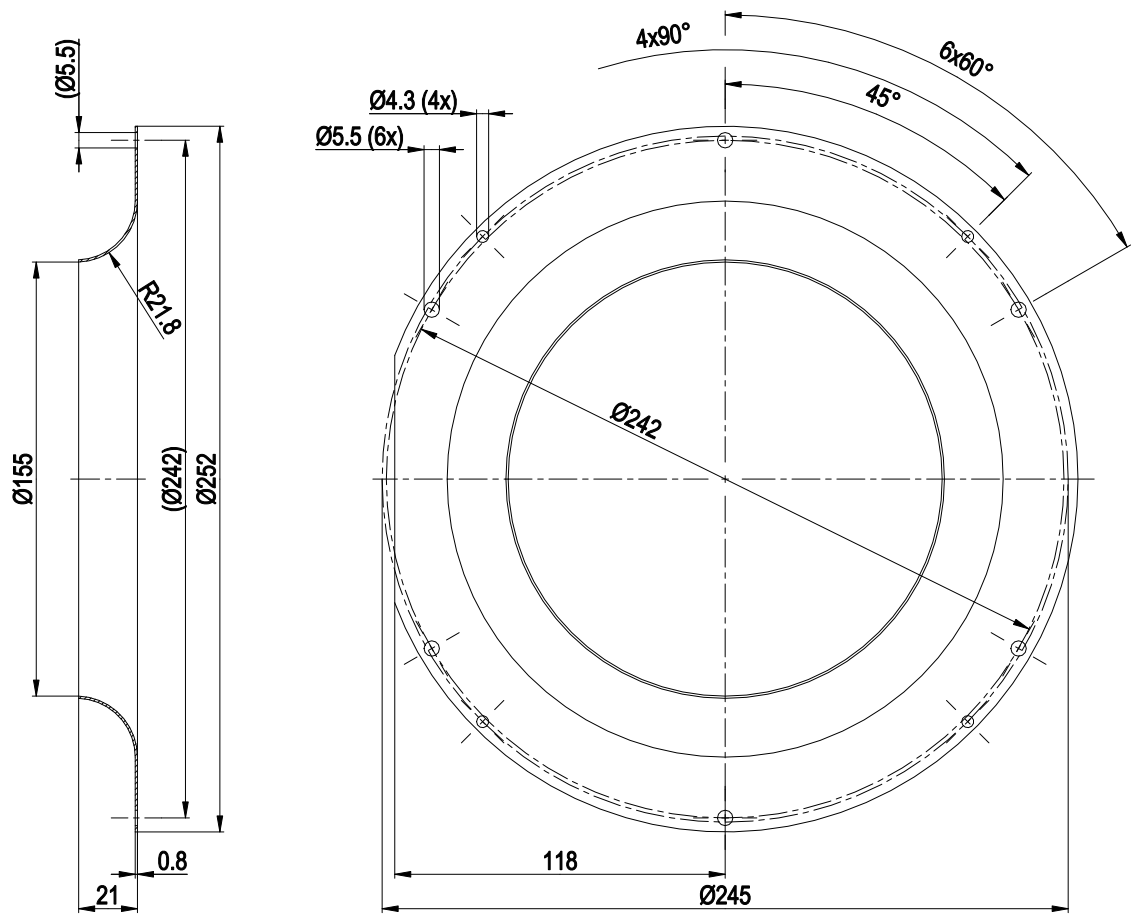


1	Accessory part: Inlet ring 09609-2-4013, not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20
	4x splice

AC centrifugal fan

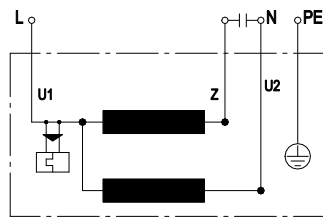
backward-curved, single-intake

Accessory part



Inlet ring 09609-2-4013

Connection diagram



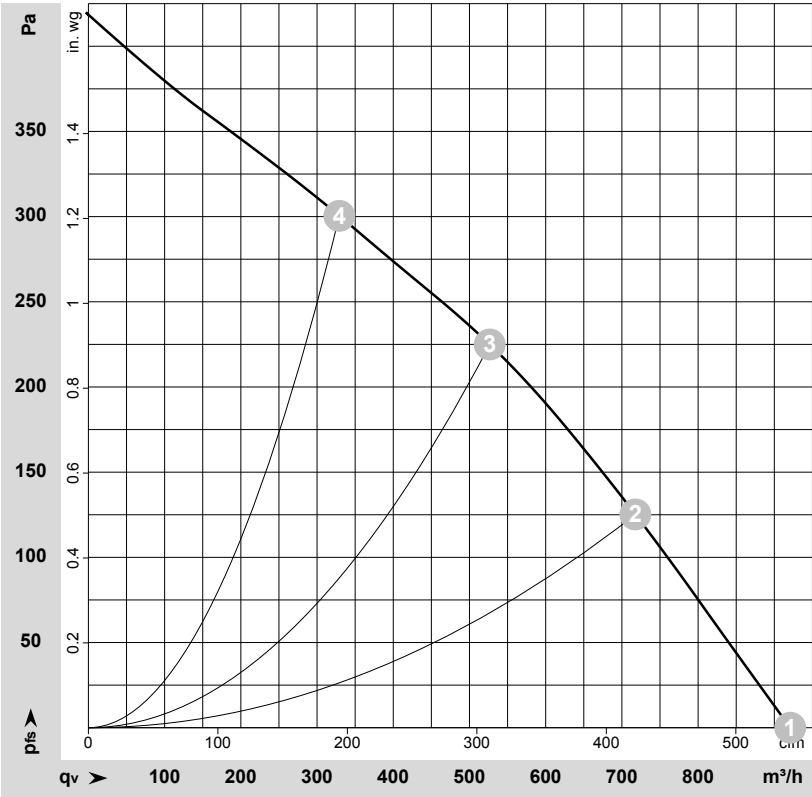
U1	blue	Z	brown	U2	black
PE	green/yellow				



AC centrifugal fan

backward-curved, single-intake

Curves: Air performance 50 Hz



$\rho = 1.185 \text{ kg/m}^3 \pm 2 \%$

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

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa	cfm	in. wg
1	1~	230	50	2700	85	0.38	920	0	540	0.00
2	1~	230	50	2540	97	0.43	720	125	425	0.50
3	1~	230	50	2475	104	0.46	525	225	310	0.90
4	1~	230	50	2500	101	0.45	330	300	195	1.20

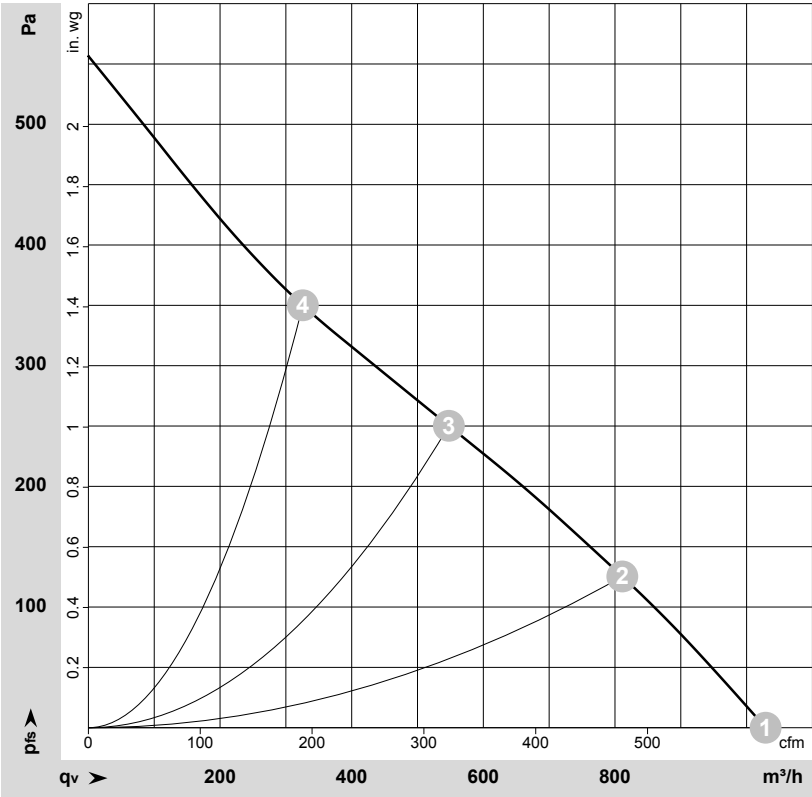
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



AC centrifugal fan

backward-curved, single-intake

Curves: Air performance 60 Hz



$\rho = 1.185 \text{ kg/m}^3 \pm 2 \%$

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

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	1~	230	60	3050	115	0.51	1030	0	605	0.00
2	1~	230	60	2765	128	0.56	810	125	475	0.50
3	1~	230	60	2595	138	0.60	550	250	325	1.00
4	1~	230	60	2690	133	0.58	325	350	190	1.41

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

