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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-RB86-11			
Motor	M2E068-CF			
Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Method of obtaining data		ml	ml	ml
Valid for approval/standard		-	-	UL 2111
Speed (rpm)	min ⁻¹	2480	2600	2600
Power consumption	W	105	140	150
Current draw	A	0.93	1.23	1.26
Capacitor	µF	10	10	10
Capacitor voltage	VDB	250	250	250
Capacitor standard		S0 (CE)	S0 (CE)	UL
Min. back pressure	Pa	0	0	0
Min. back pressure	in. wg	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	80	80	80
Starting current	A	1.62	1.63	1.72

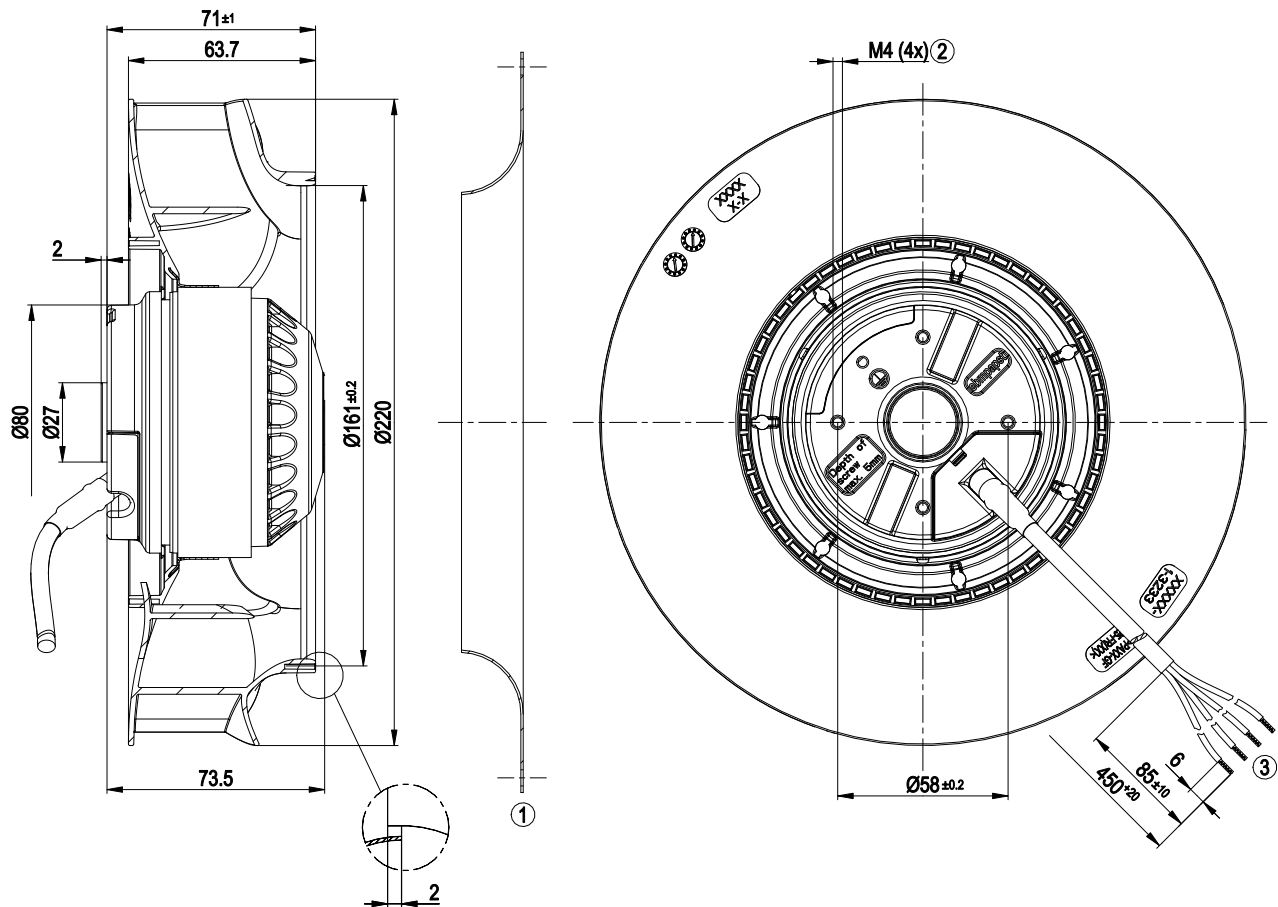
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
 Subject to change



Technical description

Weight	1.72 kg
Size	220 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PP plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
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 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
Comment on CE	Commissioning not permitted in the European Economic Area
Approval	CSA C22.2 No. 77; UL 1004-3

Product drawing

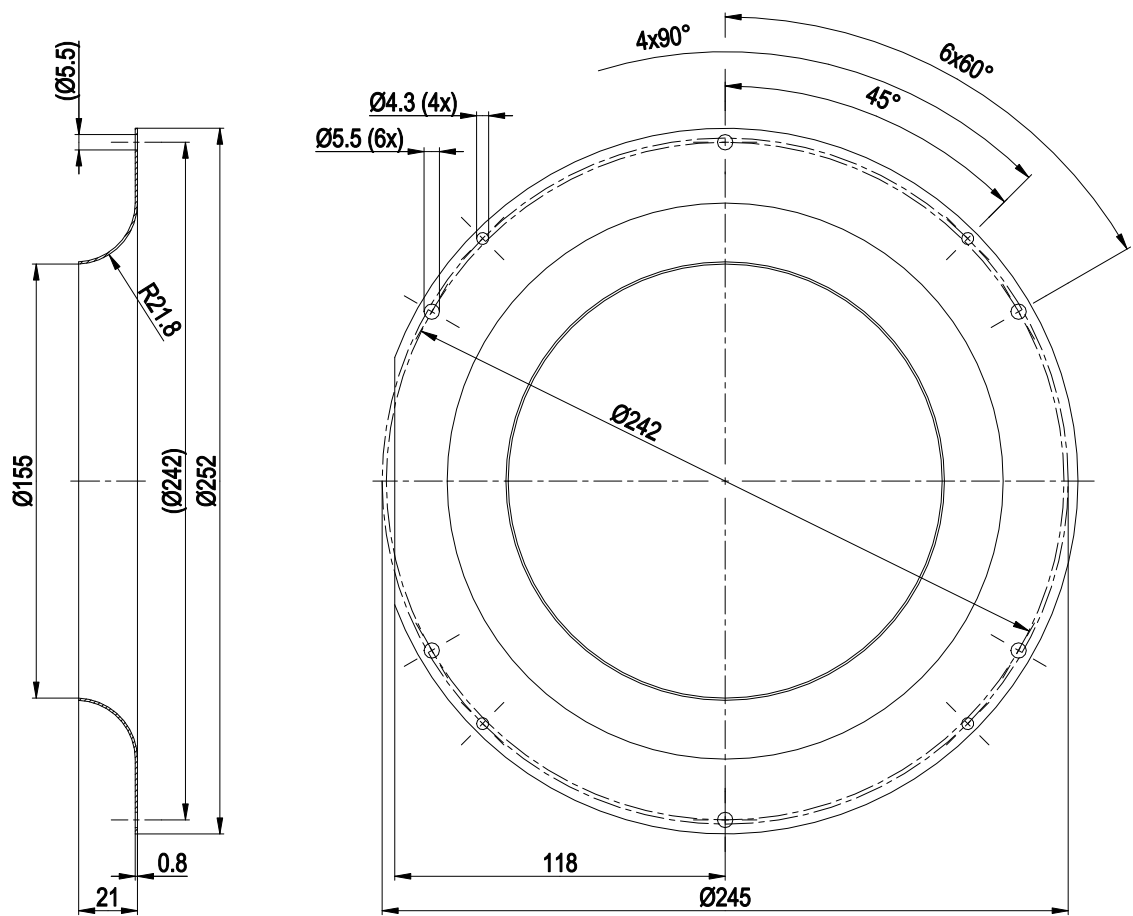


- | | |
|---|---|
| 1 | Cable PFA AWG20, 4x crimped splices |
| 2 | Accessory part: inlet ring 09609-2-4013 not included in scope of delivery |
| 3 | Max. clearance for screw 5 mm |

AC centrifugal fan - RadiCal

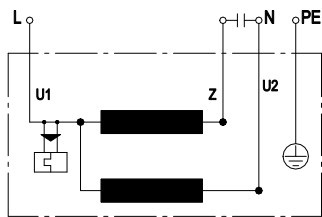
backward-curved, single-intake

Accessory part



Inlet ring 09609-2-4013

Connection diagram



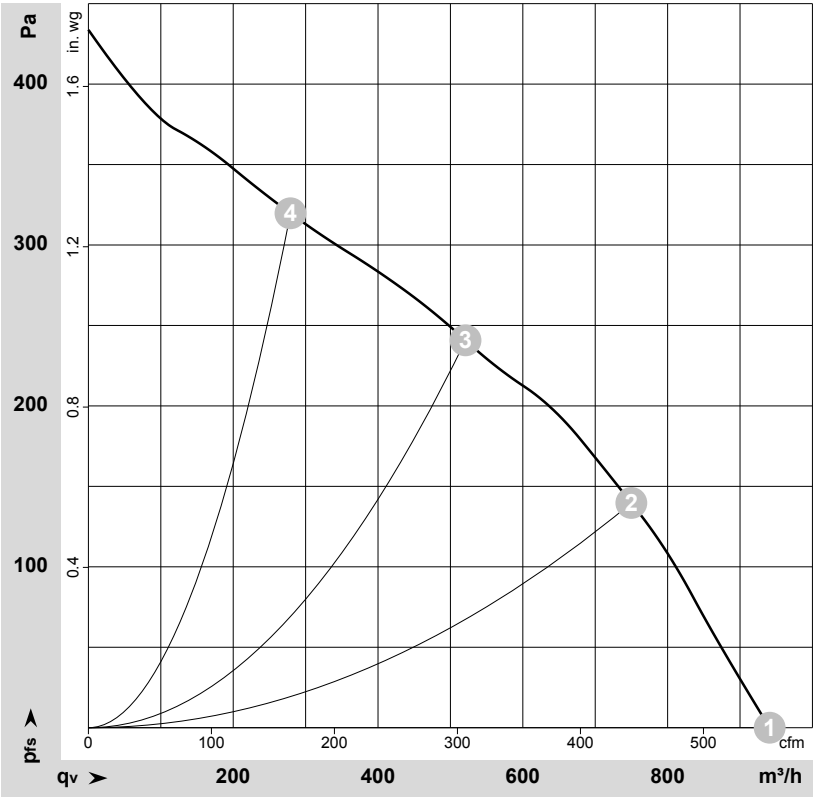
U1	blue	Z	brown	U2	black
PE	green/yellow				



AC centrifugal fan - RadiCal

backward-curved, single-intake

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-137611-1

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~	115	50	2600	92	0.82	940	0	555	0.00
2	1~	115	50	2525	100	0.88	750	140	440	0.56
3	1~	115	50	2480	105	0.93	520	240	305	0.96
4	1~	115	50	2555	97	0.86	280	320	165	1.28

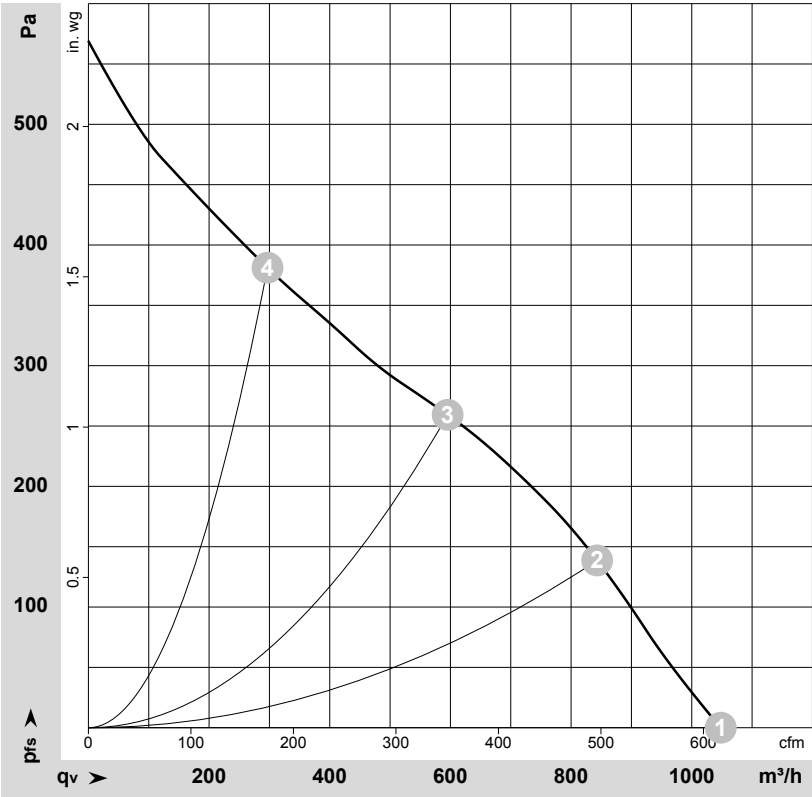
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



AC centrifugal fan - RadiCal

backward-curved, single-intake

Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-137606-1

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~	115	60	2885	129	1.12	1050	0	615	0.00
2	1~	115	60	2735	135	1.17	845	140	495	0.56
3	1~	115	60	2600	140	1.23	595	260	350	1.04
4	1~	115	60	2780	131	1.14	295	380	175	1.53

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



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