R2E220-AA44-98

AC centrifugal fan

backward-curved

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**R2E220-AA44-98**
Motor	**M2E068-BF**

Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min^{-1}	2550	2700
Power consumption	W	75	100
Current draw	A	0.67	0.88
Capacitor	µF	10	10
Capacitor voltage	VDB	220	220
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	30	30
Starting current	A	1.0	1.05

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

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Technical description

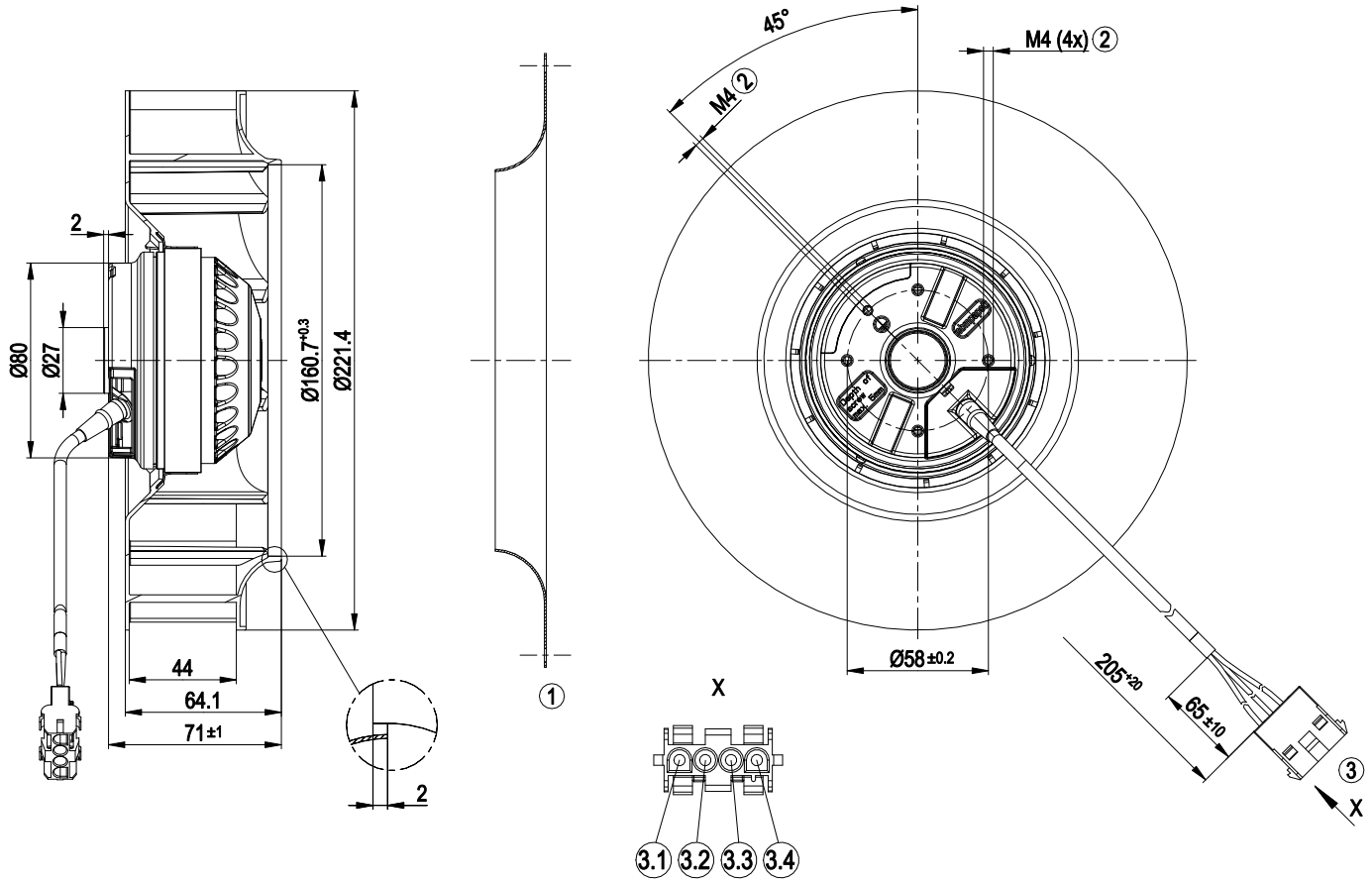
Weight	1.3 kg
Size	220 mm
Motor size	68
Rotor surface	Unpainted
Impeller material	PA plastic
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
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 (if the protective earth is connected by the customer to the marked PE connection point)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 113; CCC; UL 507

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Product drawing



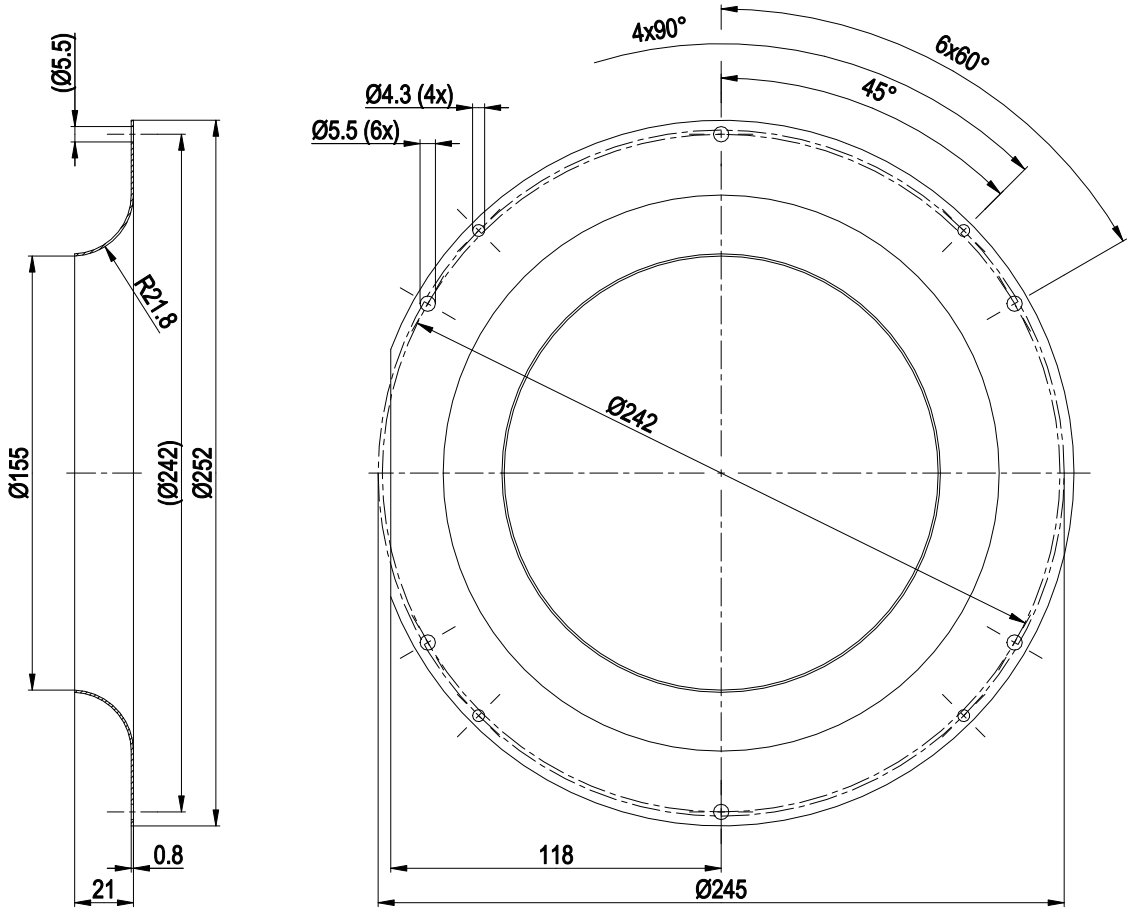
1	Accessory part: Inlet ring 09609-2-4013, not included in scope of delivery
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20
	4-pole connector housing TE 926305-7, 3x plug pin TE 926885-1
3.1	L (blue)
3.2	N (black)
3.3	Z (brown)
3.4	Vacant

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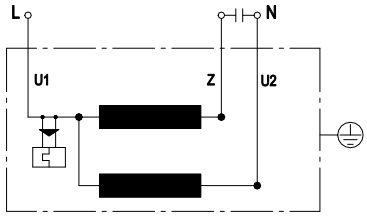
backward-curved

Accessory part



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

Connection diagram



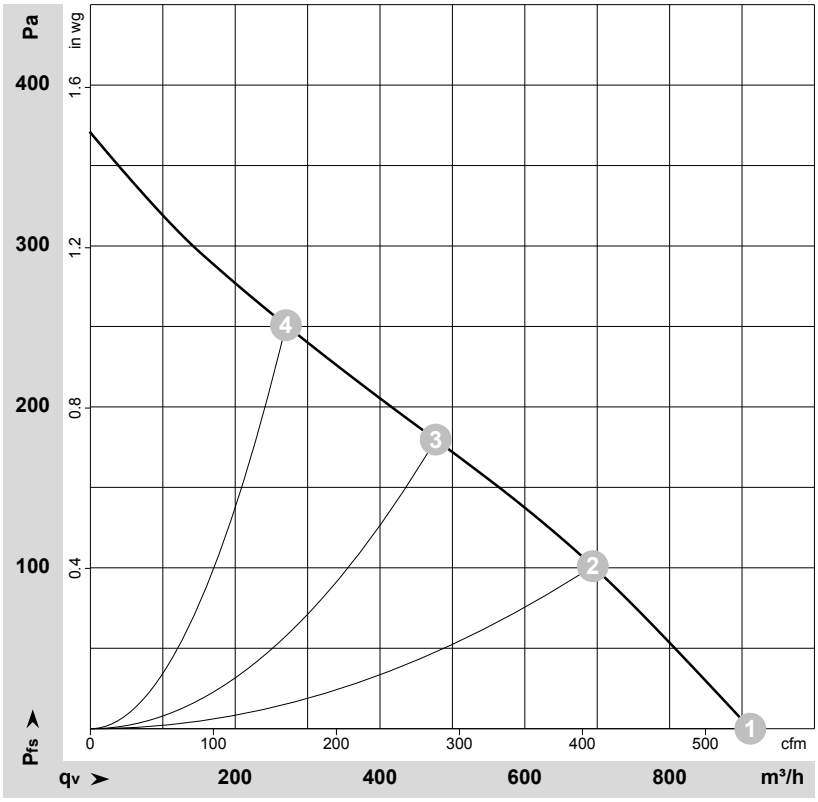
U1	blue	Z	brown	U2	black

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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-65498-1

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	m^3/h	Pa	cfm	in. wg
1	115	50	2500	80	0.70	910	0	535	0.00
2	115	50	2290	88	0.76	695	100	410	0.40
3	115	50	2180	91	0.79	475	180	280	0.72
4	115	50	2245	88	0.76	270	250	160	1.00

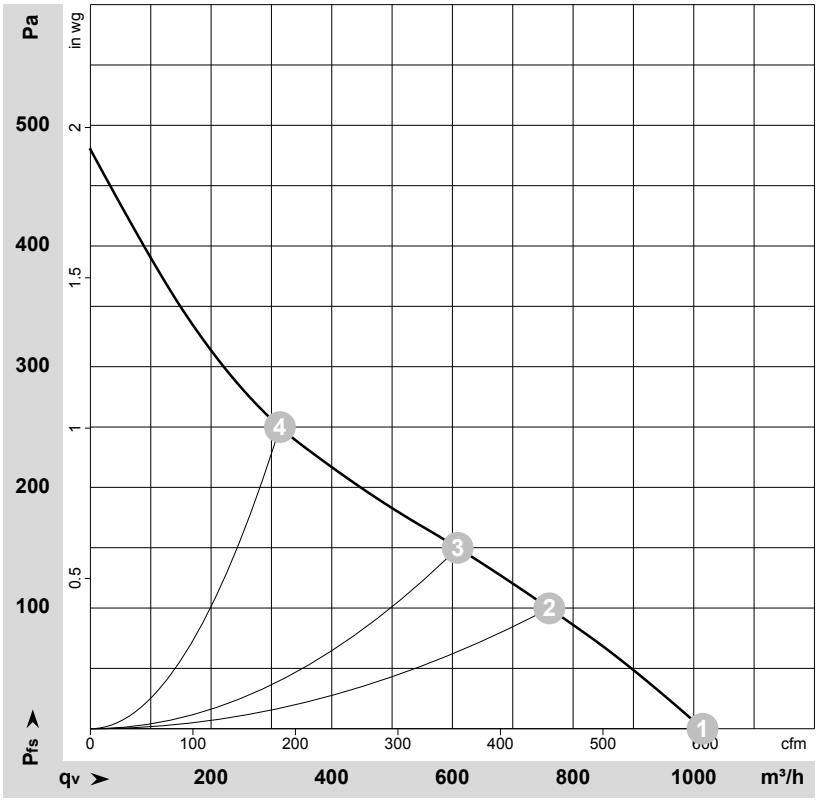
U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-65497-1

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	m^3/h	Pa	cfm	in. wg
1	115	60	2750	100	0.88	1015	0	595	0.00
2	115	60	2445	110	0.96	760	100	450	0.40
3	115	60	2275	113	0.99	610	150	360	0.60
4	115	60	2270	112	0.97	315	250	185	1.00

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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