

R2E220-RA38-01

AC centrifugal fan - RadiCal

®

backward-curved



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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2E220-RA38-01		
Motor	M2E068-BF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2100	2050
Power consumption	W	88	107
Current draw	A	0.39	0.47
Capacitor	µF	2	2
Capacitor voltage	VDB	450	450
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	60
Starting current	A	0.51	0.52

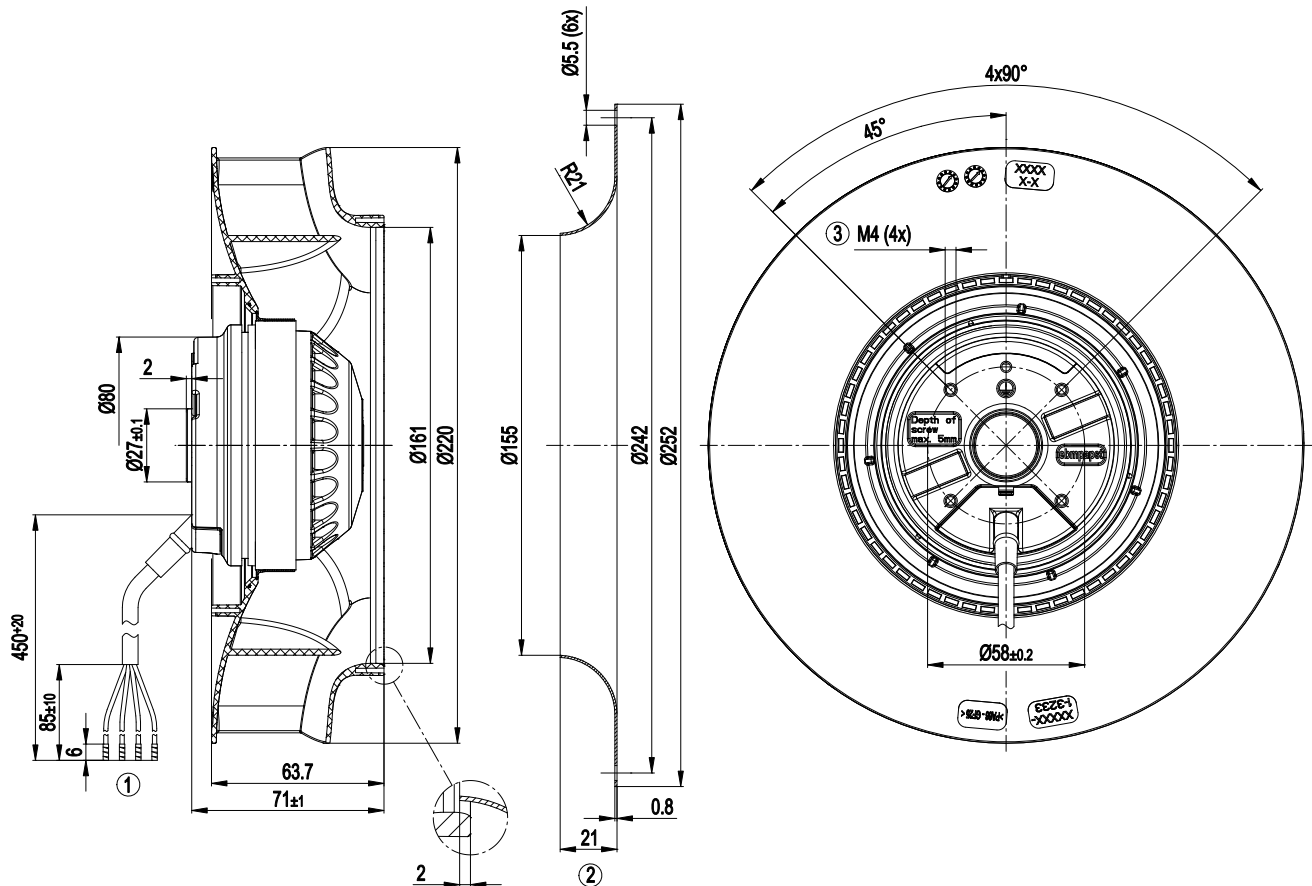
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

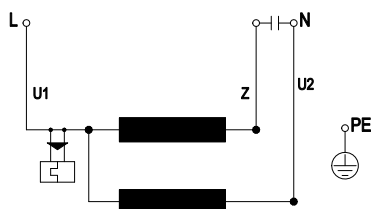
Weight	1.3 kg
Motor size	220 mm
Rotor surface	Painted black
Impeller material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP 44; installation- and position-dependent as per EN 60034-5
Insulation class	«F»
Moisture protection class	F1-2
Max. 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 top; rotor on bottom on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing for motor	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	GOST; CCC; VDE

Product drawing



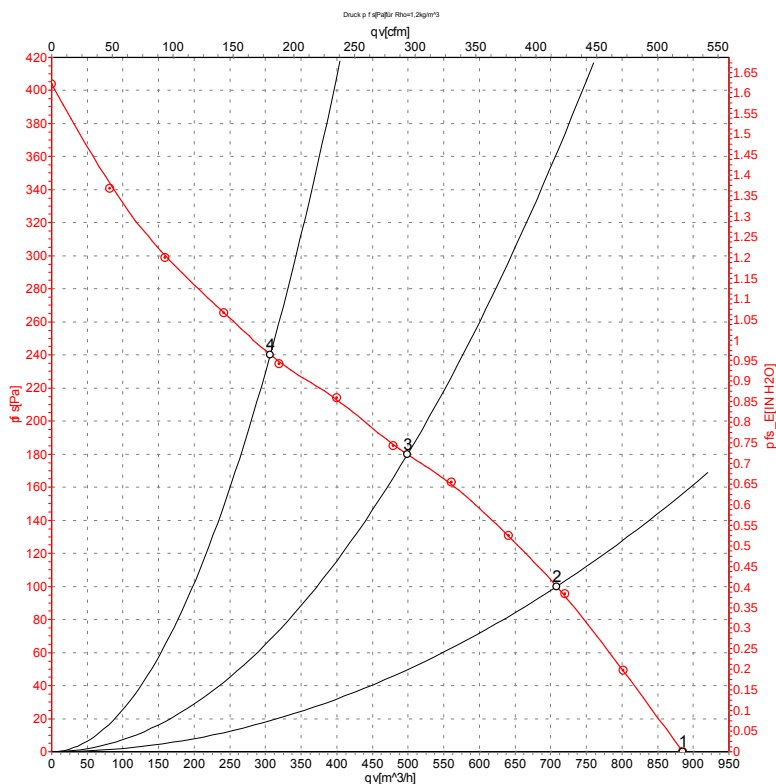
- | | |
|---|---|
| 1 | Connection cable silicone 4G 0,5 mm ² |
| 2 | Accessory part: inlet ring 09609-2-4013 not included in scope of delivery |
| 3 | Max. clearance for screw 5 mm |

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

Curves: Air performance 50 Hz



Measurement: LU-130008

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 must be checked in the installed unit.

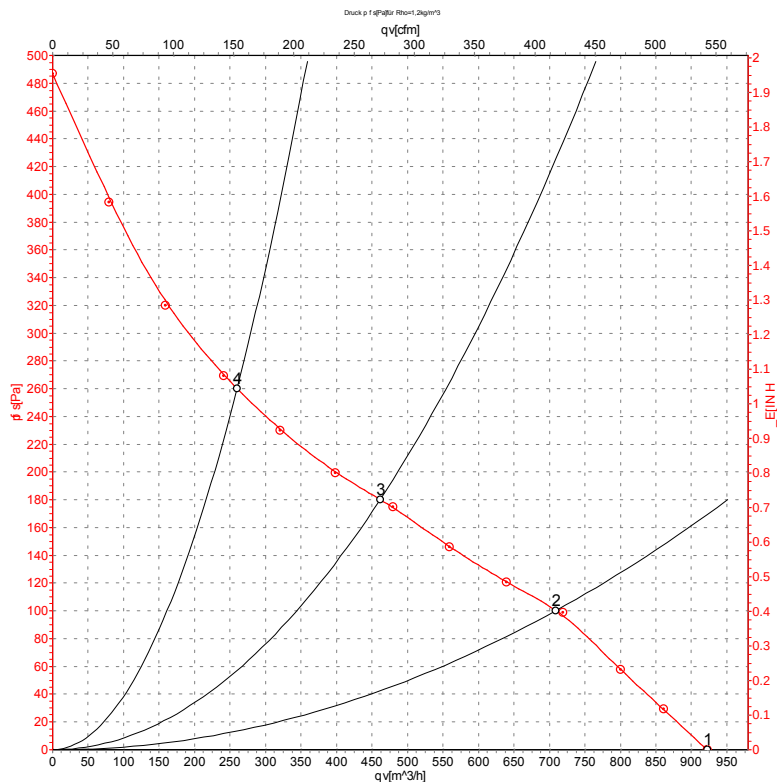
Measured values

	U	f	n	P _e	I	LpA _{in}	LwA _{in}	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	230	50	2350	80	0.36	59	68	885	0
2	230	50	2240	86	0.38	54	62	710	100
3	230	50	2100	88	0.39	51	60	500	180
4	230	50	2185	86	0.38	54	63	305	240

U = Power supply · f = Frequency · n = Speed (rpm) · P

LwA_{in} = Intake sound power level · qv = Air flow · pP_e = Power consumption · I = Current draw · LpA_{in} = Intake sound pressure levelp_s = Pressure increase

Curves: Air performance 60 Hz



Measurement: LU-130009

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 must be checked in the installed unit.

Measured values

	U	f	n	P _e	I	L _{pAin}	L _{wAin}	q _v	P _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	230	60	2450	102	0.46	60	69	920	0
2	230	60	2220	106	0.46	54	62	710	100
3	230	60	2050	107	0.47	51	60	460	180
4	230	60	2215	105	0.46	56	65	260	260

U = Power supply · f = Frequency · n = Speed (rpm) · P

L_{wAin} = Intake sound power level · q_v = Air flow · pP_e = Power consumption · I = Current draw · L_{pAin} = Intake sound pressure levelP_{ts} = Pressure increase