

R2E225-RA92-09

AC centrifugal fan - RadiCal

®

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	R2E225-RA92-09		
Motor	M2E068-DF		
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	2500	2600
Power consumption	W	155	210
Current draw	A	0.68	0.92
Capacitor	µF	3.5	3.5
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	65
Starting current	A	1.25	1.2

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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio *	1.00

*Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

		Actual	Req. 2013	Req. 2015
Overall efficiency η	%	42.5	38.5	42.5
Efficiency grade N		62	58	62
Power consumption P_e	kW	0.14		
Air flow q_v	m ³ /h	705		
Pressure increase p_{fs}	Pa	320		
Speed (rpm) n	min ⁻¹	2560		

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

LU-127147

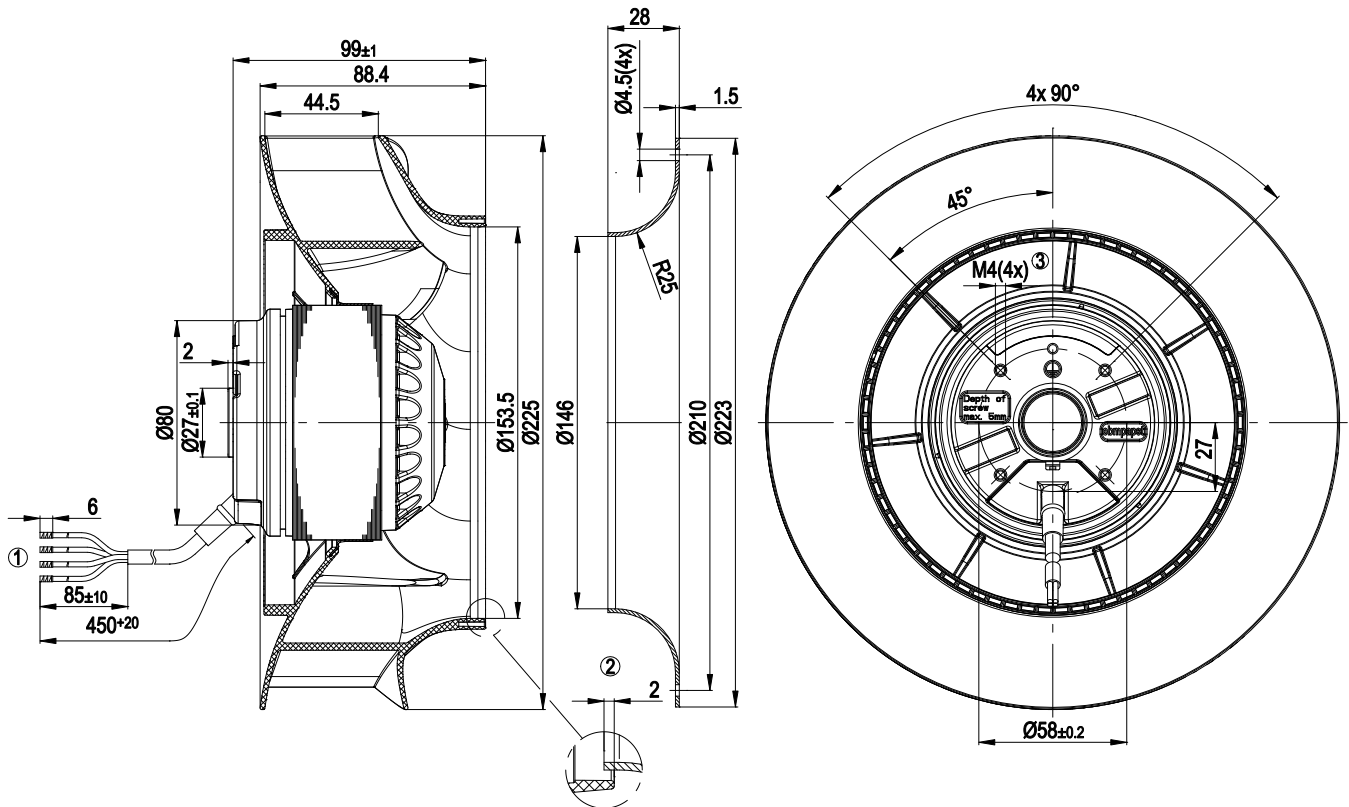


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Technical description

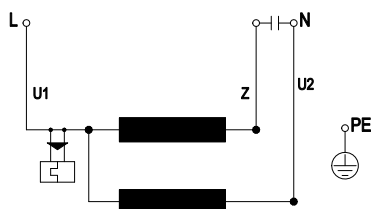
Motor size	225 mm
Rotor surface	Painted black
Impeller material	PA6 plastic, glass-fiber reinforced
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP 44; installation- and position-dependent as per EN 60034-5
Insulation class	«F»
Moisture protection class	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 bottom; rotor on top 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	CCC; EAC

Product drawing



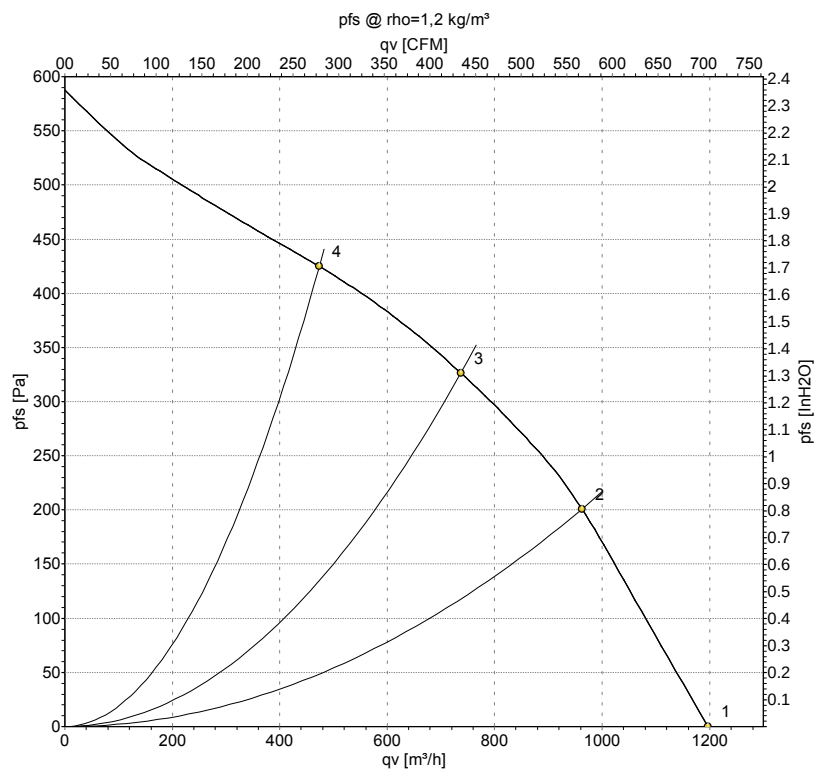
- | | |
|---|---|
| 1 | Connection cable silicone 4G 0,5 mm² |
| 2 | Accessory part: inlet ring 96358-2-4013 not included in scope of delivery |
| 3 | Max. clearance for screw 5 mm |

Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

Curves: Air performance 50 Hz



Measurement: LU-154575

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.

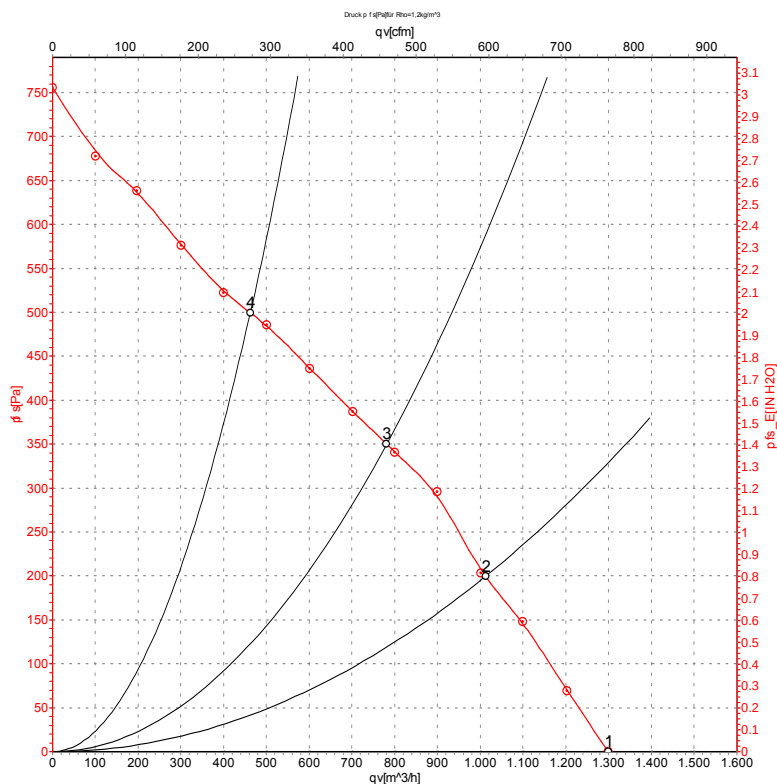
Measured values

	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	2660	130	0.57	66	73	1195	0
2	230	50	2500	155	0.68	63	70	965	200
3	230	50	2560	150	0.65	58	66	735	325
4	230	50	2615	139	0.61	63	70	475	425

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

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

Curves: Air performance 60 Hz



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 _{ts}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/h	Pa
1	230	60	2900	190	0.83	69	76	1300	0
2	230	60	2700	210	0.92	64	72	1010	200
3	230	60	2700	207	0.90	60	68	780	350
4	230	60	2815	196	0.85	66	73	460	500

U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Intake sound pressure level · LwA_{in} = Intake sound power level · qv = Air flow · p = Pressure increase

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