

AC centrifugal fan - RadiCal

backward curved, single inlet

R4E355-RB10-12 ebmpapst Datasheet
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Nominal data

Type	R4E355-RB10-12	
Motor	M4E074-GA	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		ml
Valid for approval / standard		CE
Speed (rpm)	min ⁻¹	1330
Power input	W	270
Current draw	A	1.18
Motor capacitor	µF	6
Capacitor voltage	VDB	400
Capacitor standard		S0 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60
Starting current	A	2.2

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

Data according to ErP directive

		Actual	Request 2015
01 Overall efficiency η_{es}	%	45.4	45.4
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		62	62
05 Variable speed drive		No	

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

09 Power input P_e	kW	0.26
09 Air flow q_v	m³/h	2110
09 Pressure increase p_{fs}	Pa	201
10 Speed (rpm) n	min ⁻¹	1340
11 Specific ratio*		1.00

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

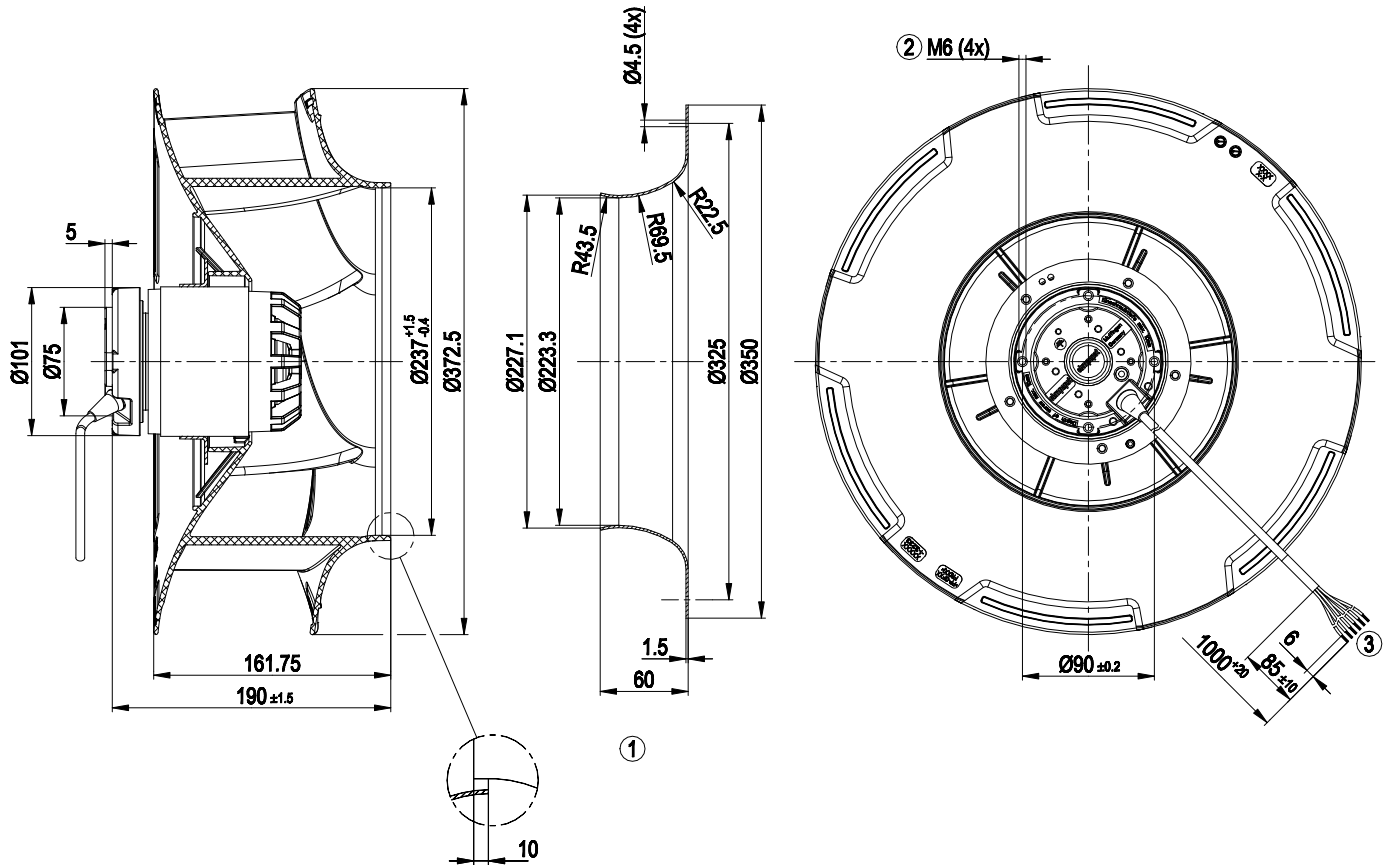
LU-139678



Technical features

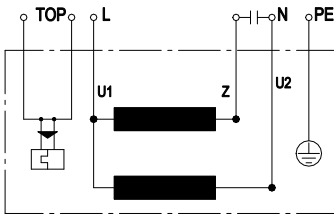
Mass	5.6 kg
Size	355 mm
Surface of rotor	Coated in black
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0+
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

Product drawing



- | | |
|---|---|
| 1 | Accessory part: Inlet nozzle 35500-2-4013 not included in scope of delivery |
| 2 | Thread reach max. 10 mm |
| 3 | Connection line silicone 6G 0.5 mm ² , 6x lead tips crimped |

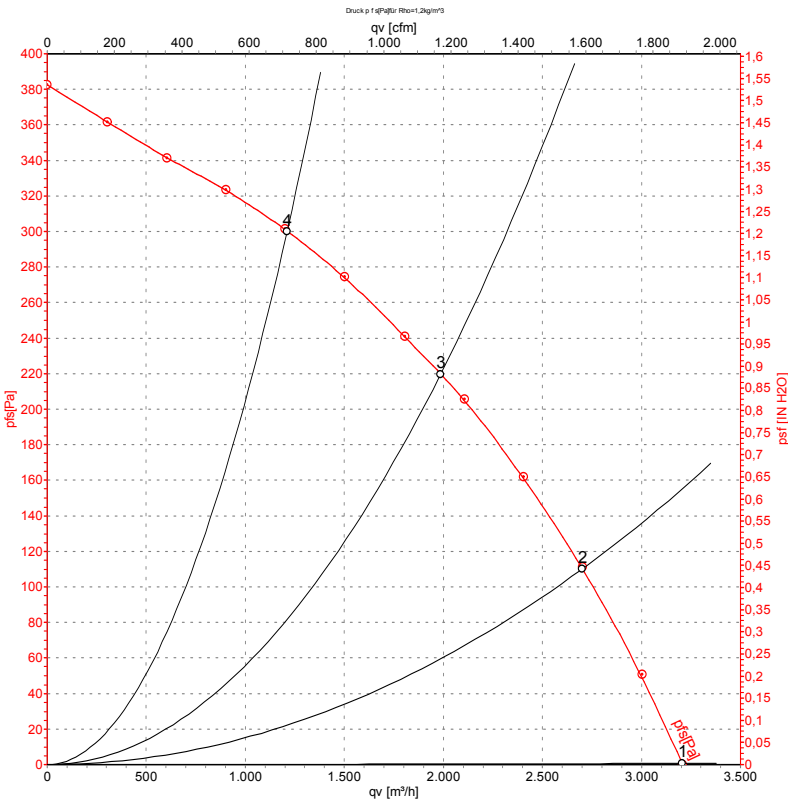
Connection screen



U1	Blue	Z	brown	U2	black
PE	green/yellow	TOP	2 x grey		



Charts: Air flow 50 Hz



Measurement: LU-139678-1

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: L_{wA} measured as per ISO 13347 /
L_{pA} measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	U	f	n	P _e	I	L _{wA_{in}}	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	m ³ /h	Pa	cfm	inH ₂ O
1	230	50	1405	200	0.89	72	3200	0	1885	0.00
2	230	50	1375	230	1.02	66	2700	110	1590	0.44
3	230	50	1330	270	1.18	61	1990	220	1170	0.88
4	230	50	1360	245	1.07	63	1210	300	710	1.20

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · L_{wA_{in}} = Sound power level inlet side · q_v = Air flow · p_{fs} = Pressure increase

