R4E355-AL02-05

AC centrifugal fan

backward curved, single inlet



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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**R4E355-AL02-05**	
Motor	**M4E074-GA**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	1420
Power input	W	245
Current draw	A	1.12
Motor capacitor	µF	8
Capacitor voltage	VDB	400
Capacitor standard		P0 (CE)
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50
Starting current	A	5.5

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

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

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		43	41.9	45.9
Efficiency grade N		59.1	58	62
Power input P_e	kW	0.29		
Air flow q_v	m^3/h	1840		
Pressure increase p_{fs}	Pa	251		
Speed n	min^{-1}	1390		

Data established at point of optimum efficiency

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Technical features

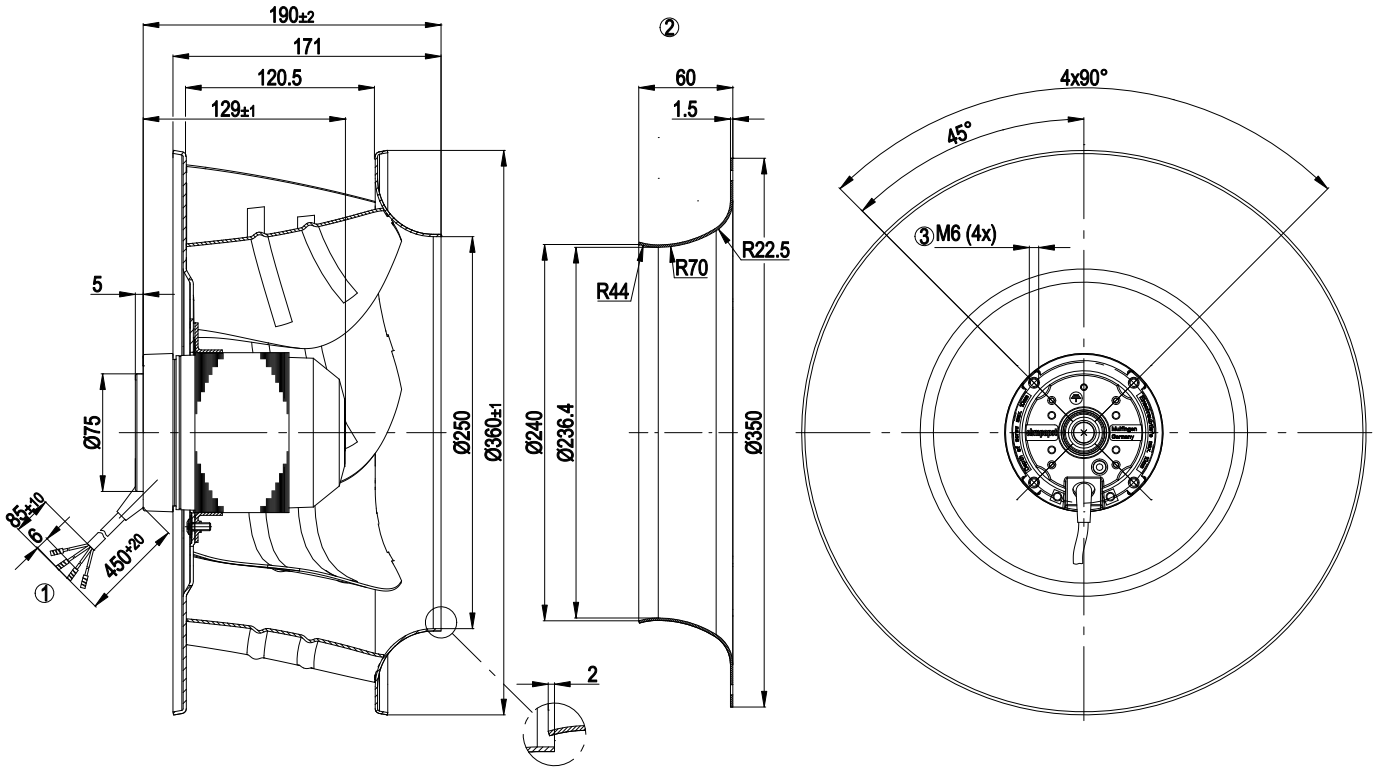
Mass	5.44 kg
Size	355 mm
Surface of rotor	Coated in black
Material of impeller	Aluminum sheet, laser-welded
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F1-2
Max. 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) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC

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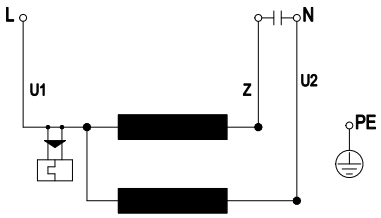
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Product drawing



1	Connection line silicone 4 x 0.5 mm², 4 x brass lead tips crimped
2	Accessory part: Inlet nozzle 35560-2-4013, not included in the standard scope of delivery. Other inlet nozzles on request
3	Depth of screw max. 10 mm

Connection screen



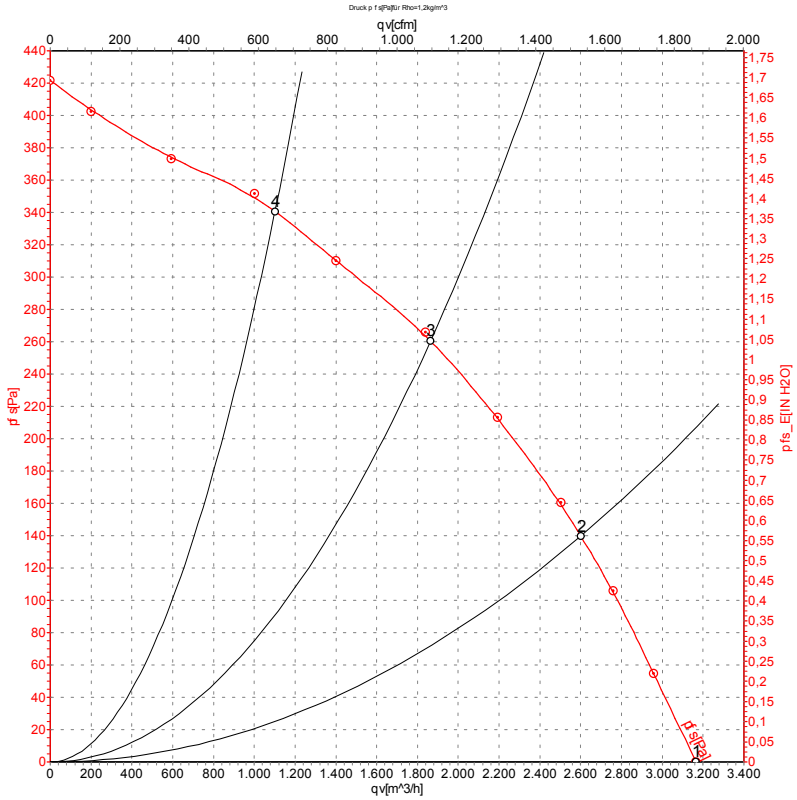
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-106561

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: LwA measured as per ISO 13347 / LpA 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	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	1420	245	1.12	3165	0
2	230	50	1400	288	1.28	2600	140
3	230	50	1390	298	1.32	1865	260
4	230	50	1410	271	1.22	1100	340

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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