R2E270-AA01-05

AC diagonal fan

backward curved, single inlet

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**R2E270-AA01-05**
Motor	**M2E074-GA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min^{-1}	2750	3100
Power input	W	280	430
Current draw	A	1.23	1.88
Motor capacitor	µF	10	10
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	60	50
Starting current	A	3.0	3.0

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}		36.1	31.7	34.7
Efficiency grade N		51.4	47	50
Power input P_e	kW	0.35		
Air flow q_v	m^3/h	1335		
Pressure increase p_{fs}	Pa	350		
Speed n	min^{-1}	2640		

Data established at point of optimum efficiency

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Technical features

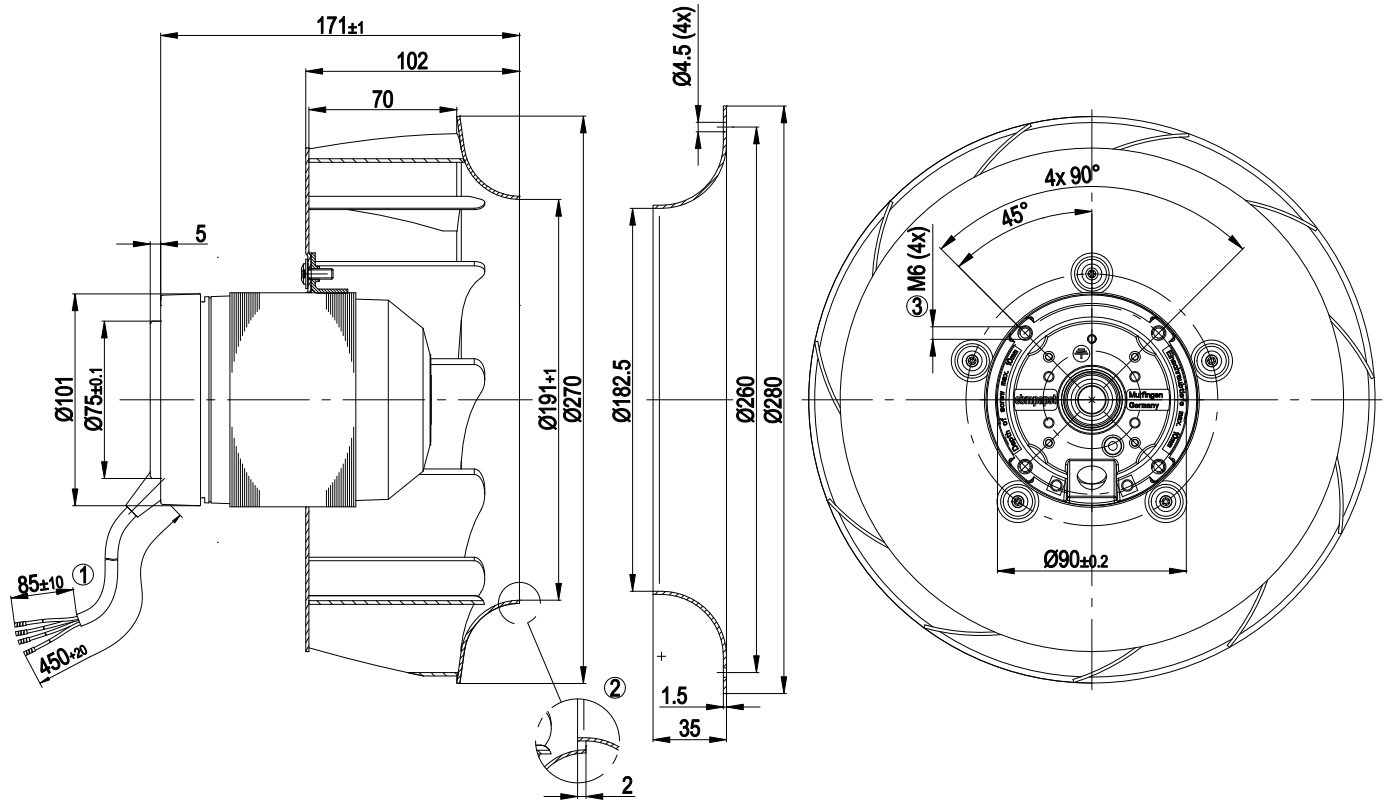
Mass	4.7 kg
Size	270 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"F"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible 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	CE
Approval	CCC

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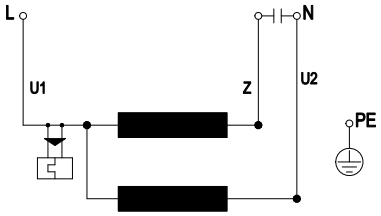
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Product drawing



1	Connection line silicone 4G 0.5 mm², 4 x brass lead tips crimped
2	Accessory part: Inlet nozzle 96360-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 10 mm

Connection screen



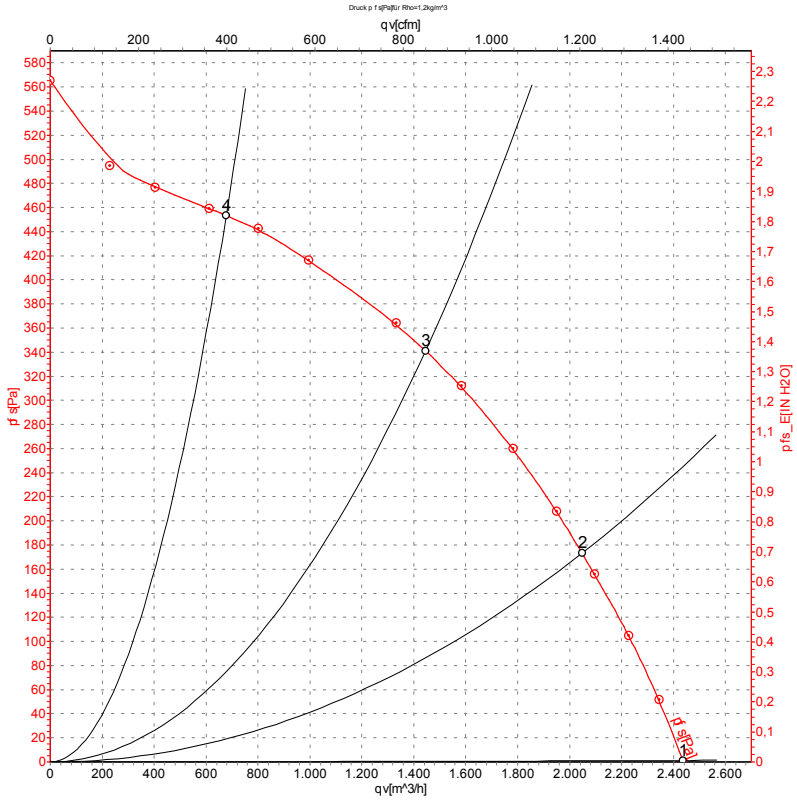
U1	blue	Z	brown	U2	black
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-50466

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	2750	280	1.23	2435	0
2	230	50	2680	337	1.46	2050	175
3	230	50	2635	363	1.58	1445	340
4	230	50	2730	305	1.33	680	450

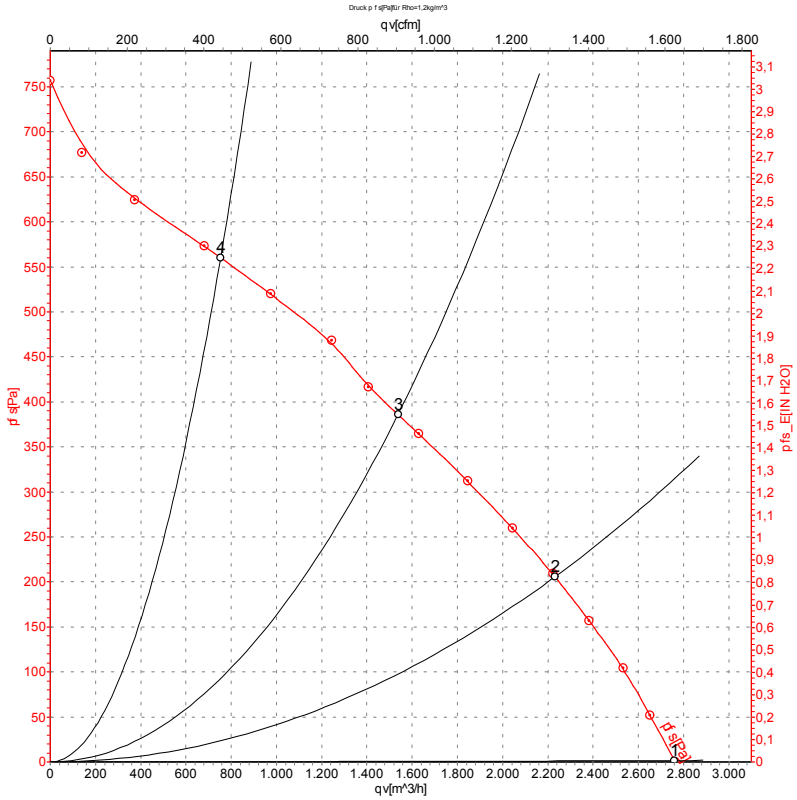
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-50467

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	60	3100	430	1.88	2760	0
2	230	60	2920	494	2.16	2230	200
3	230	60	2800	520	2.26	1540	390
4	230	60	3035	457	2.02	755	560

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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