R2E270-AA01-13

AC centrifugal fan

backward curved, single inlet

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Nominal data

Type	**R2E270-AA01-13**
Motor	**M2E074-GA**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Type of data definition		fa	fa	fa
Valid for approval / standard		-	-	UL
Speed	min^{-1}	2750	3100	3100
Power input	W	280	430	450
Current draw	A	1.23	1.88	
Motor capacitor	µF	10	10	10
Capacitor voltage	VDB	400	400	400
Capacitor standard				UL
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	50	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

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Technical features

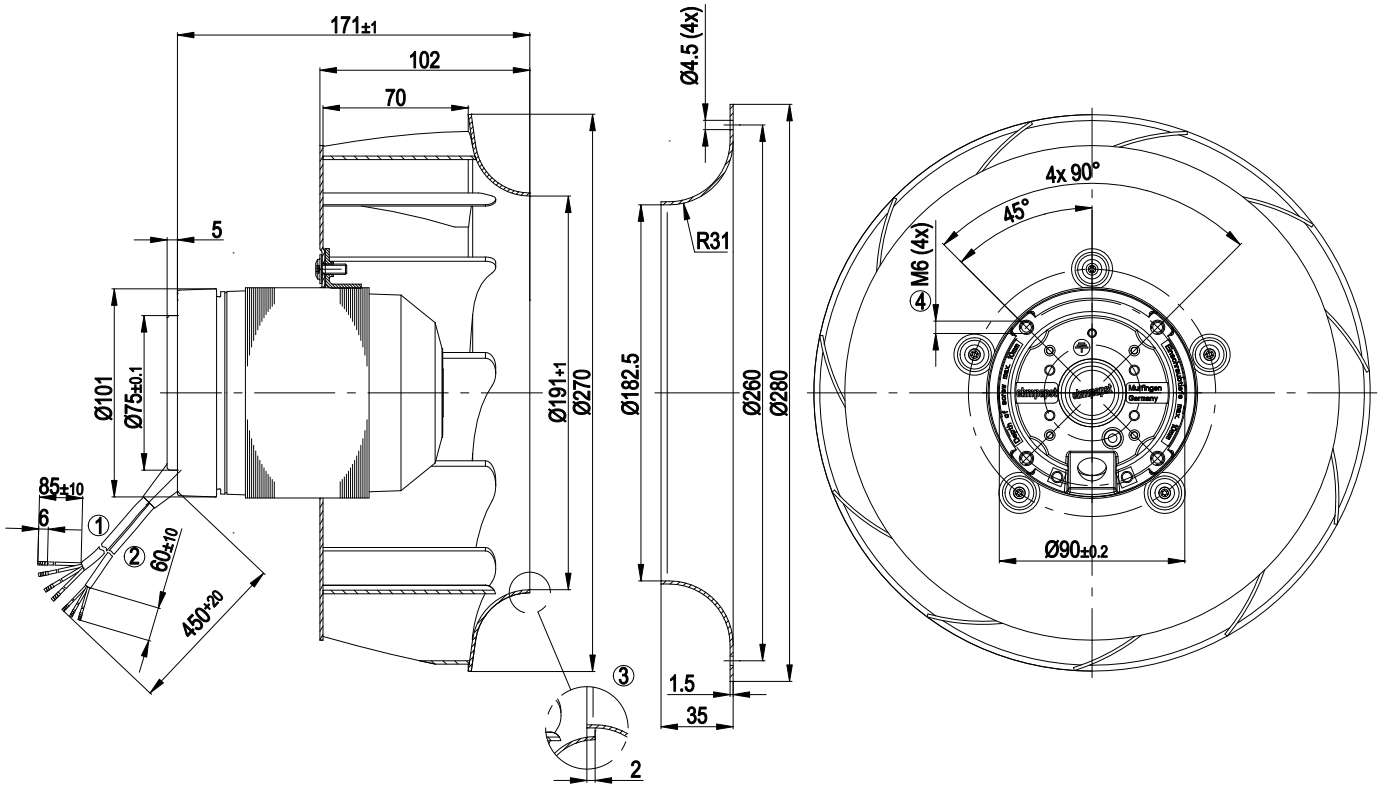
Mass	4.7 kg
Size	270 mm
Surface of rotor	Coated in black
Material of impeller	Aluminium sheet
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None
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
Approval	UL 1004-1; CSA C22.2 Nr.100

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Product drawing



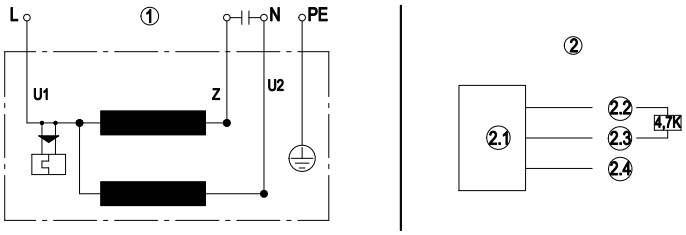
1	Connection line PFA 4G AWG20, 4x brass lead tips crimped
2	Connection line for Hall IC 3X AWG26, 3 x brass lead tips crimped
3	Accessory part: Inlet nozzle 96360-2-4013, not included in the standard scope of delivery
4	Depth of screw max. 10 mm

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Connection screen



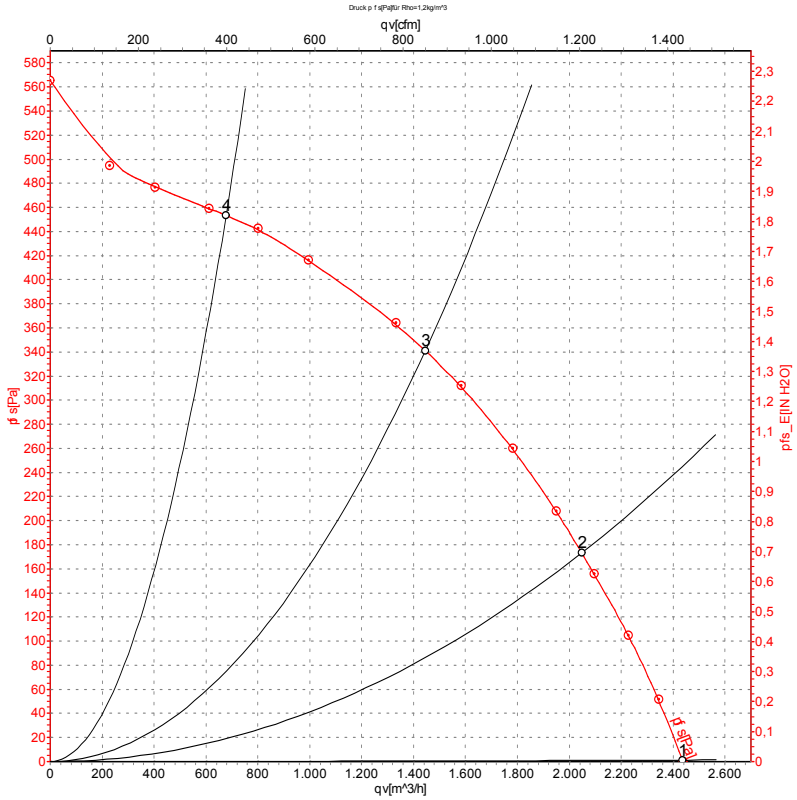
1	Fan connection diagram
U1	Blue
Z	brown
U2	black
PE	green/yellow
2	Hall IC circuit
2.1	Hall IC
2.2	Red (+5V)
2.3	White (out)
2.4	Black (0V)

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Charts: Air flow 50 Hz



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

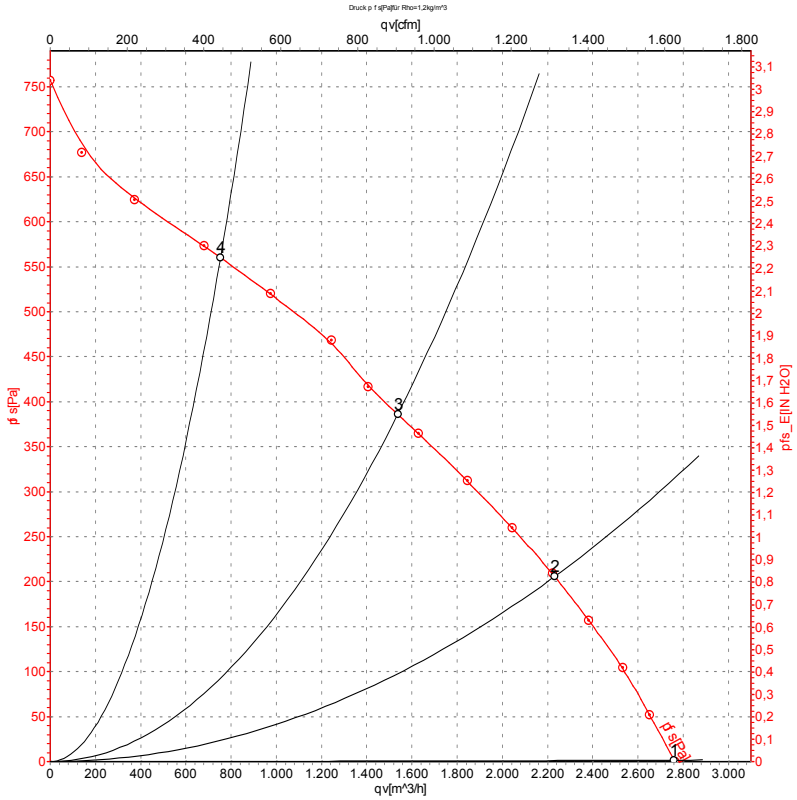
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



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

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