R4E400-AR05-06

AC centrifugal fan

backward curved, single inlet



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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**R4E400-AR05-06**
Motor	**M4E094-FA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min^{-1}	1355	1480
Power input	W	375	540
Current draw	A	1.75	2.4
Motor capacitor	µF	8	8
Capacitor voltage	VDB	400	400
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	50

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 integrated	No
Specific ratio*	1,00

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		43	43	47
Efficiency grade N		58	58	62
Power input P_e	kW	0,37		
Air flow q_v	m^3/h	1870		
Pressure increase p_{fs}	Pa	300		
Speed n	min^{-1}	1355		

Data established at point of optimum efficiency

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Technical features

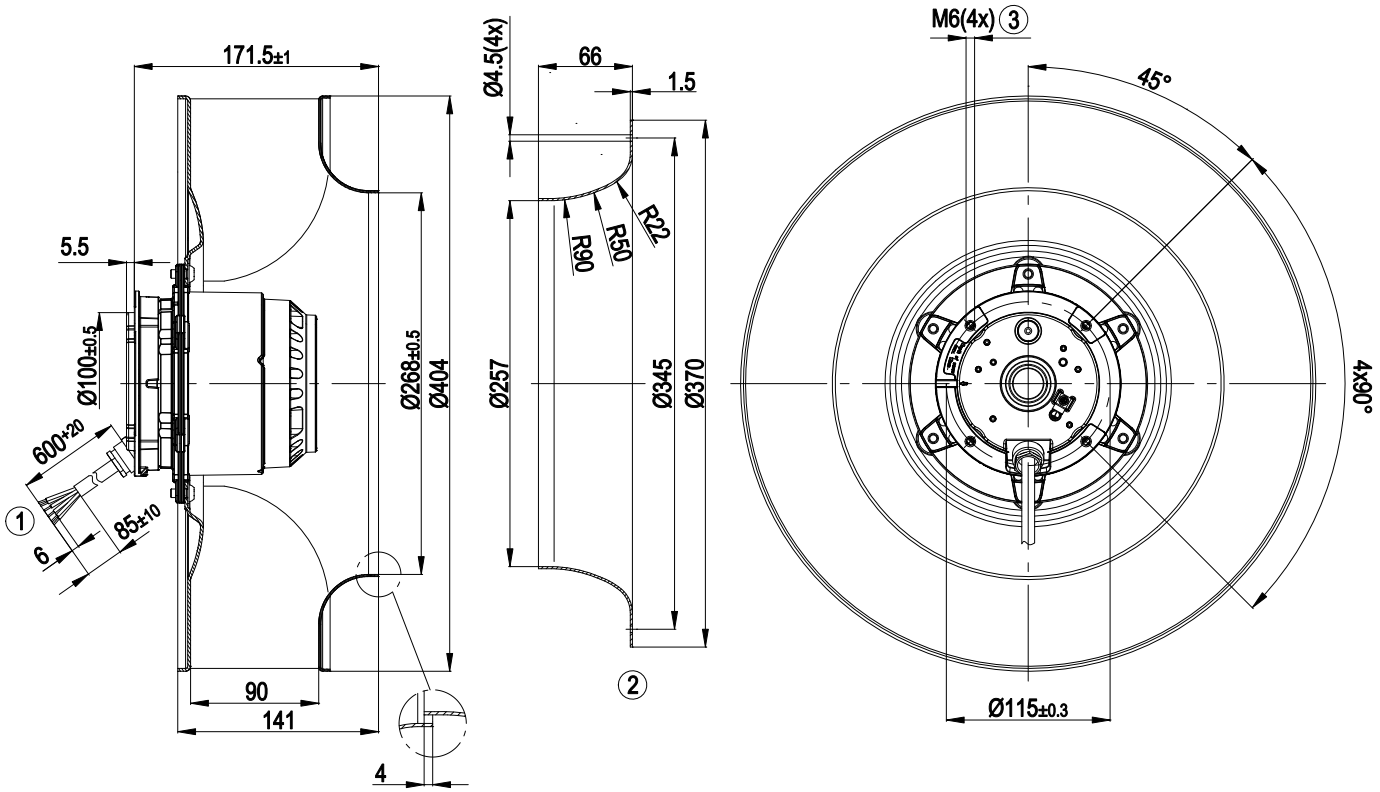
Mass	7 kg
Size	400 mm
Surface of rotor	Coated in black
Material of impeller	Aluminium sheet
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Leakage current	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2004); CE
Approval	CCC

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Product drawing



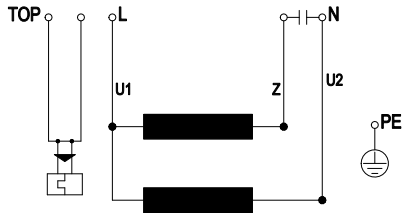
1	Connection line silicone 6G 0.5 mm², 6 x brass lead tips crimped
2	Accessory part: inlet nozzle 54476-2-4013 not included in the standard scope of delivery; other inlet nozzles on request
3	Depth of screw max. 12 mm

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Connection screen



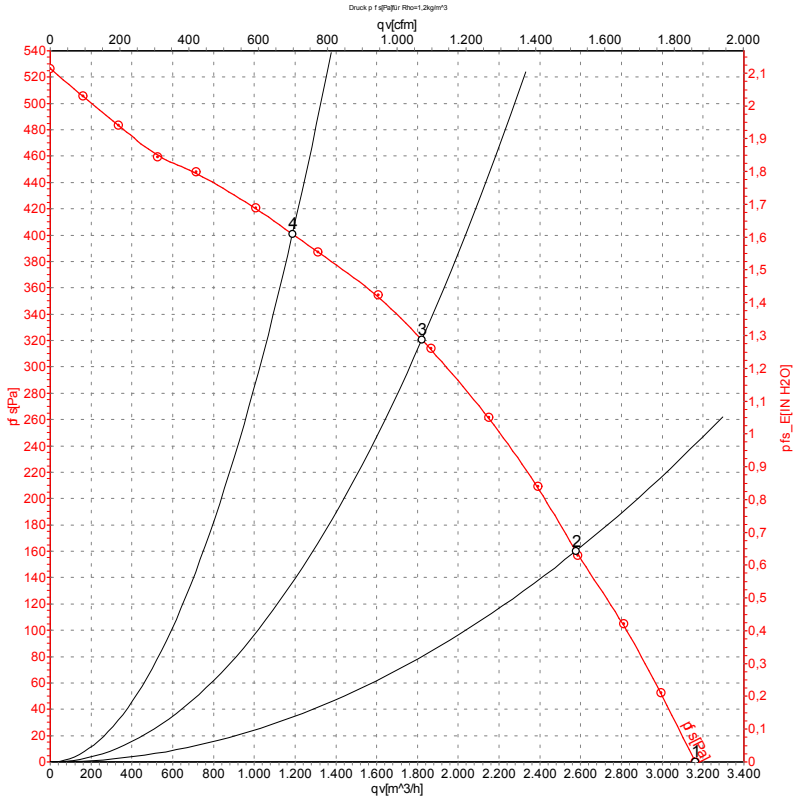
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		

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Charts: Air flow 50 Hz



Measurement: LU-57482

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

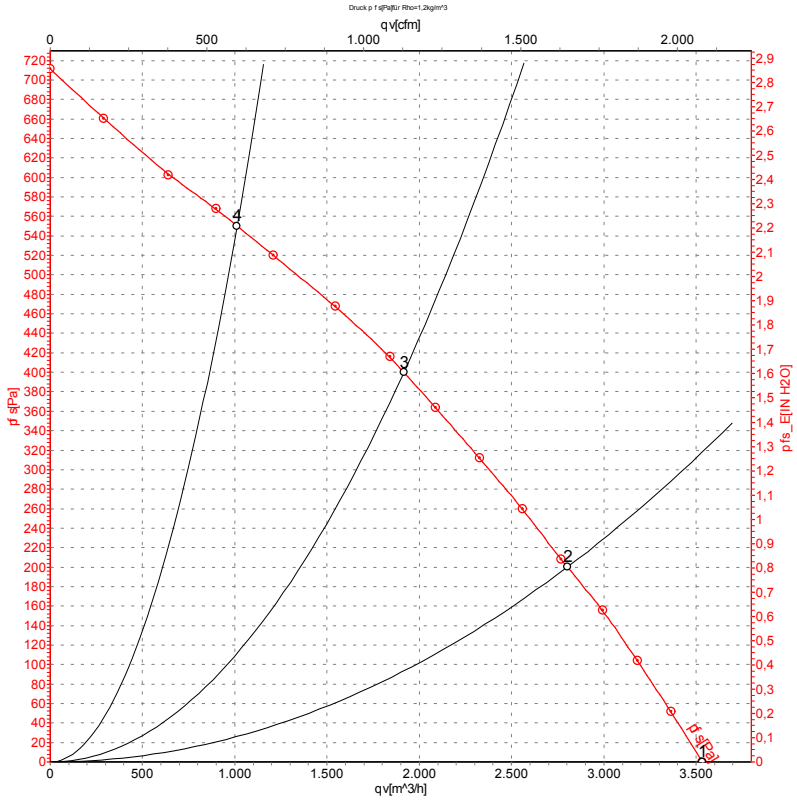
	U	f	n	P_e	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	1380	326	1.58	3165	0
2	230	50	1360	362	1.72	2575	160
3	230	50	1355	375	1.75	1820	320
4	230	50	1375	341	1.62	1185	400

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Charts: Air flow 60 Hz



Measurement: LU-57483

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	1565	483	2.11	3535	0
2	230	60	1480	540	2.40	2805	200
3	230	60	1495	533	2.35	1915	400
4	230	60	1575	471	2.05	1010	550

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