R4E280-CI01-01

AC centrifugal fan

forward curved, single inlet

ebm-papst Mulfingen GmbH & Co. KG
Bachmühle 2 · D-74673 Mulfingen
Phone +49 7938 81-0
Fax +49 7938 81-110
info1@de.ebmpapst.com
www.ebmpapst.com

Limited partnership · Headquarters Mulfingen
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**R4E280-CI01-01**
Motor	**M4E110-IA**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		-	-
Speed (rpm)	min^{-1}	1230	1410
Power input	W	1050	1170
Current draw	A	4.75	5.13
Motor capacitor	µF	16	16
Capacitor voltage	VDB	450	450
Min. back pressure	Pa	100	350
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	50	50

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

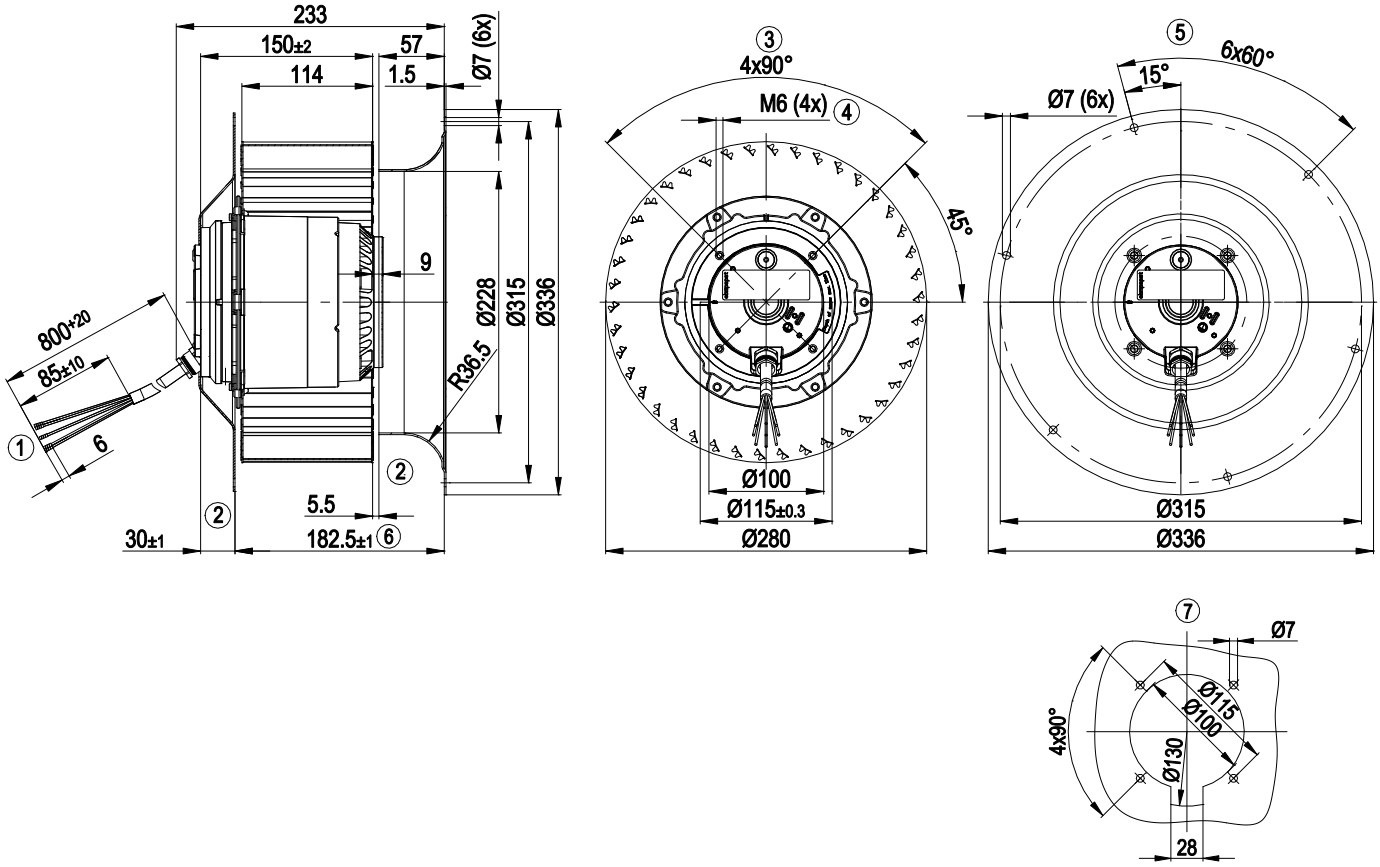
Mass	12 kg
Size	280 mm
Surface of rotor	Cast in aluminium
Material of impeller	Sheet steel, galvanised
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity (F)/environmental protection class (H)	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+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)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 61800-5-1
Approval	CSA C22.2 No.100; UL 1004-1; VDE; EAC

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Product drawing



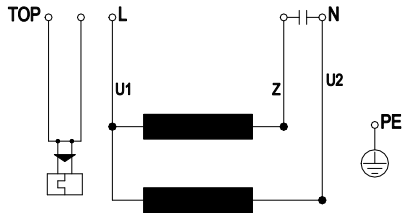
1	Connection line silicone, 6 x brass lead tips crimped
2	Accessory part: Inlet nozzle 28010-2-4013 and flange 10280-2-4017 not included in the standard scope of delivery
3	View without flange
4	Depth of screw max. 12 mm
5	View with flange
6	Housing width
7	Drill pattern for mounting without flange

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Connection screen



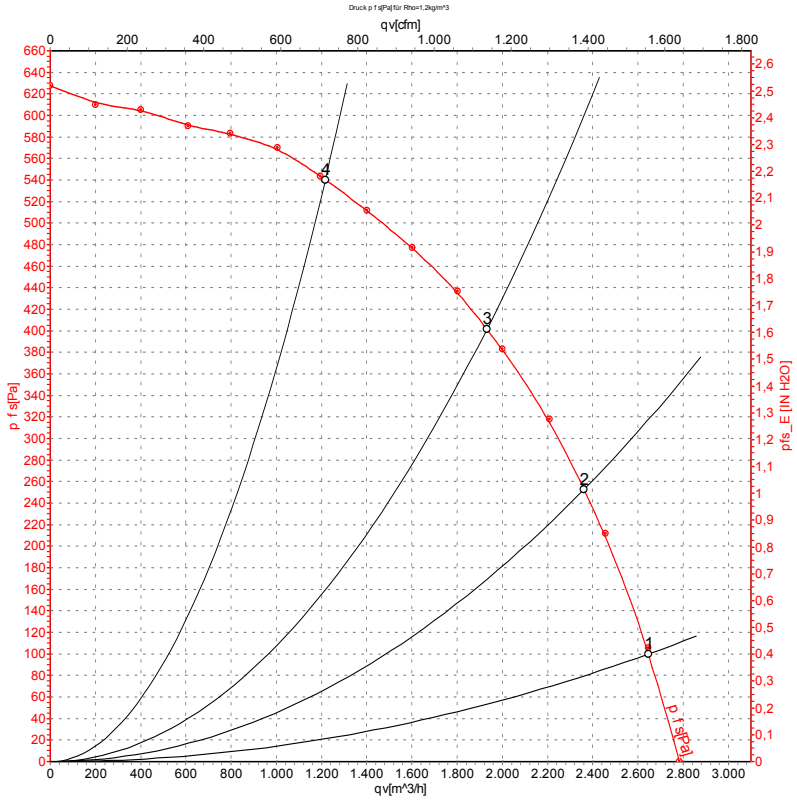
TOP	2 x grey	U1	blue	Z	brown
U2	black	PE	green / yellow		

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Charts: Air flow 50 Hz



Measurement: LU-75447-1

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: 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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	230	50	1230	1050	4.75	2645	100	1555	0.40
2	230	50	1305	911	4.04	2360	250	1390	1.00
3	230	50	1370	735	3.21	1930	400	1135	1.61
4	230	50	1425	538	2.35	1215	540	715	2.17

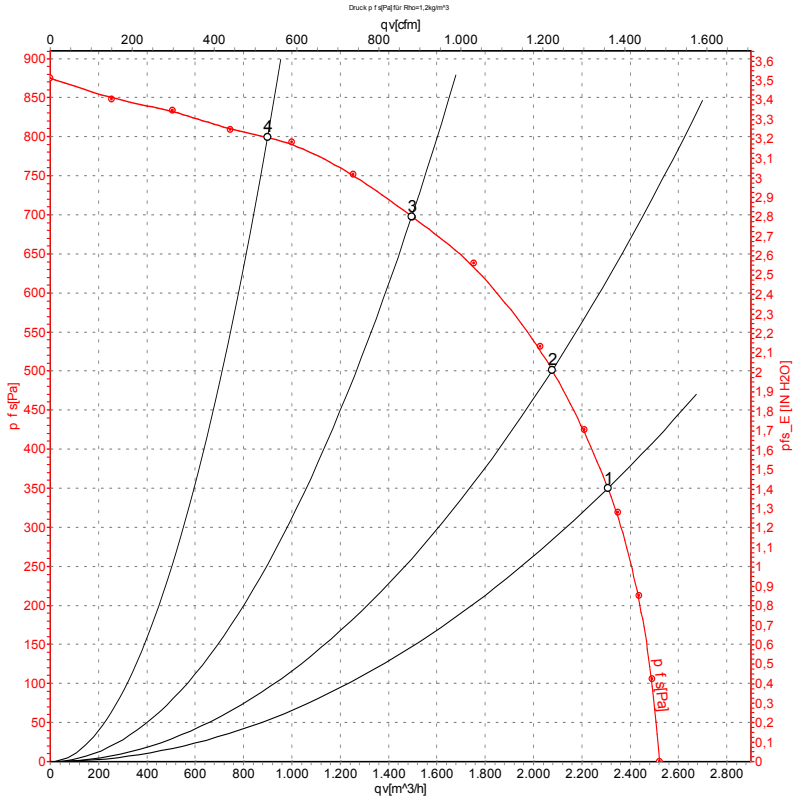
U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-75448-1

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: 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	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	60	1410	1170	5.13	84	2310	350	1360	1.41
2	230	60	1510	1090	4.72	84	2075	500	1220	2.01
3	230	60	1630	920	4.00	83	1495	700	880	2.81
4	230	60	1690	780	3.52	84	900	800	530	3.21

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

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