R2E180-CQ82-12

AC centrifugal fan

for solid fuel heating systems

R2E180-CQ82-12 ebmpapst Datasheet
sales@fansco.com
www.fansco.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	**R2E180-CQ82-12**	
Motor	**M2E068-CF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50
Type of data definition		fa
Valid for approval / standard		CE
Speed	min^{-1}	2540
Power input	W	68
Current draw	A	0.3
Motor capacitor	µF	2
Capacitor voltage	VDB	400
Min. back pressure	Pa	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	90

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	3.6 kg
Size	180 mm
Surface of rotor	Uncoated
Material of impeller	Sheet steel, rust-resistant
Number of blades	6
Motor suspension	Motor anti-vibration mounted on one side via mounting plate
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position
Insulation class	"F"
Humidity class	F0
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 50216-12; CE

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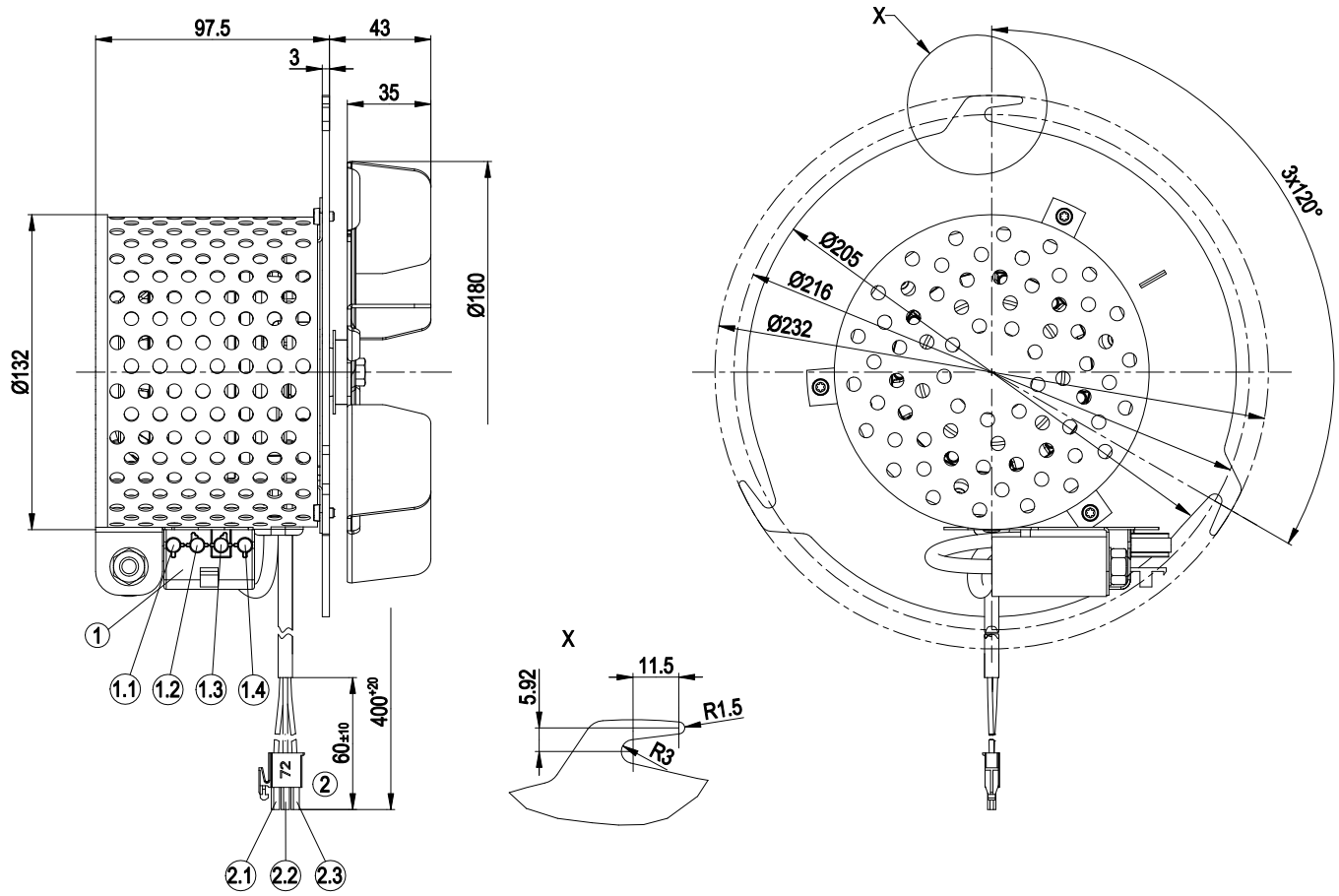
Product drawing



1	Motor connection with connector shell Wieland Art. No. 93.932.4853.0
1.1	brown
1.2	Blue
1.3	green / yellow
1.4	black
2	Hall IC connection with connector housing AMP Art. No. 172166-1 with 3x female terminal 170361-1
2.1	red
2.2	white
2.3	black

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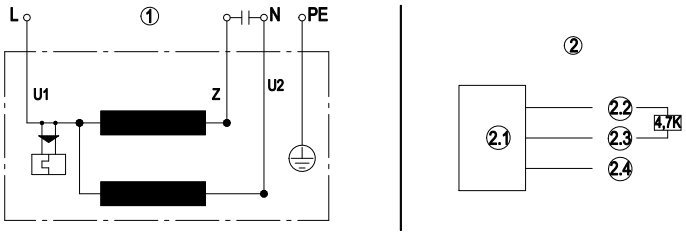
Connection screen



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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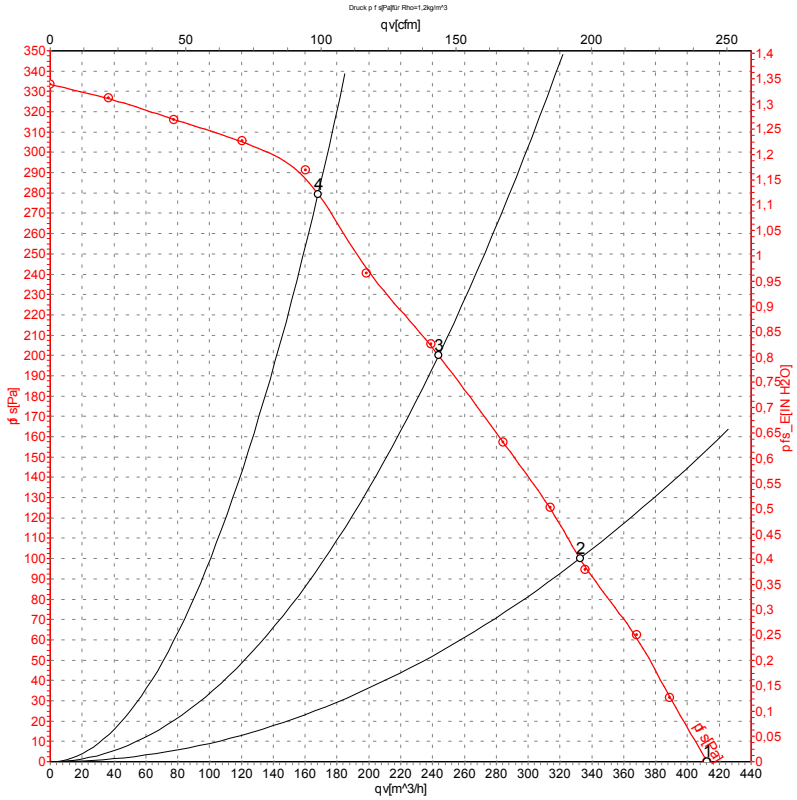
Charts: Air flow 50 Hz



Measurement: LU-115120

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	2540	68	0.30	410	0
2	230	50	2535	68	0.30	330	100
3	230	50	2585	64	0.28	245	200
4	230	50	2680	55	0.25	170	280

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