R2E180-AT06-18

AC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	**R2E180-AT06-18**
Motor	**M2E068-CF**

Phase		1~	1~	1~
Nominal voltage	VAC	230	230	230
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	UL 1004-3
Speed (rpm)	min^{-1}	2600	2800	2800
Power consumption	W	100	138	145
Current draw	A	0.45	0.61	0.62
Capacitor	µF	2.5	2.5	2.5
Capacitor voltage	VDB	400	400	400
Capacitor standard		S0 (CE)	S0 (CE)	UL
Min. back pressure	Pa	0	0	0
Min. back pressure	in. wg	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	60	60
Starting current	A	0.9	0.9	0.92

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

Weight	1.8 kg
Size	180 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA plastic
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Connector with cable
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 1004-3

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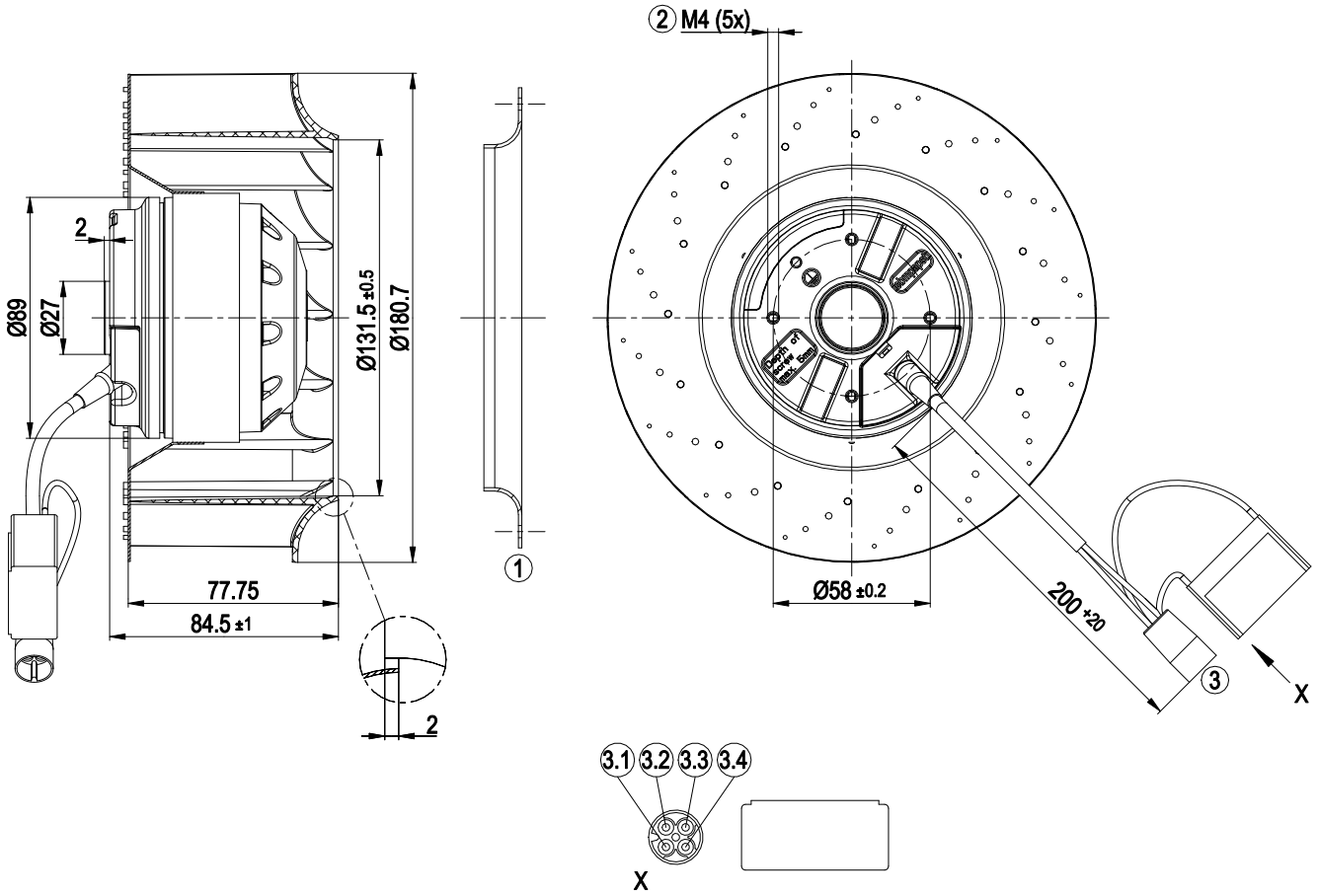
Product drawing



1	Accessory part: Inlet ring 09576-2-4013 (not included in scope of delivery)
2	Max. clearance for screw 5 mm
3	Cable PVC AWG20
	4-pole connector housing TE 925075-7, 2x plug pin TE 163555-6, 2x plug pin TE 163303-8
3.1	Capacitor
	(capacitor wired internally)
3.2	N + capacitor
3.3	L
3.4	PE

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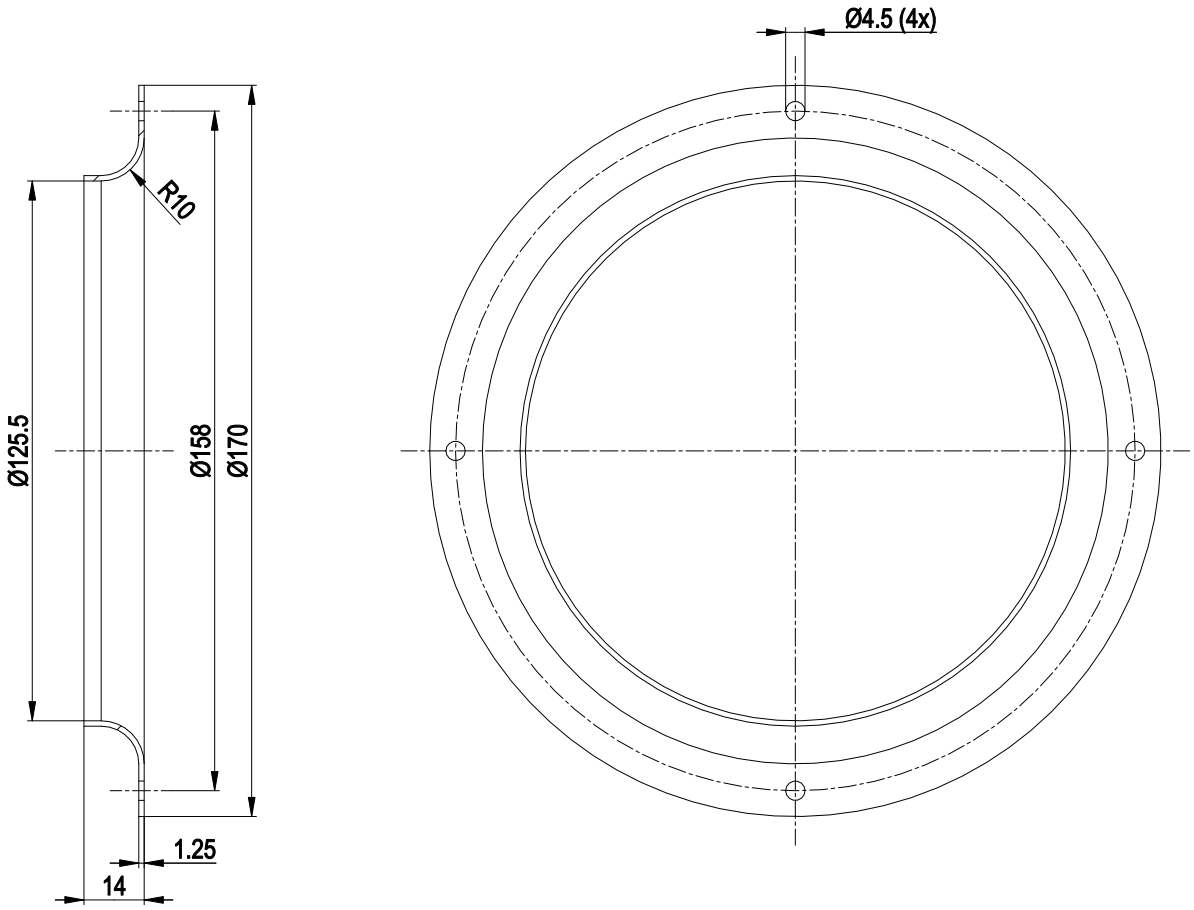
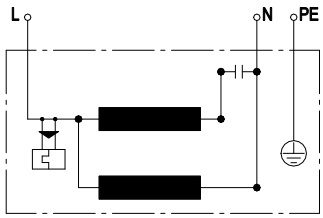
Accessory part



	Inlet ring 09576-2-4013

Connection diagram



L	blue	N	black	PE	green/yellow

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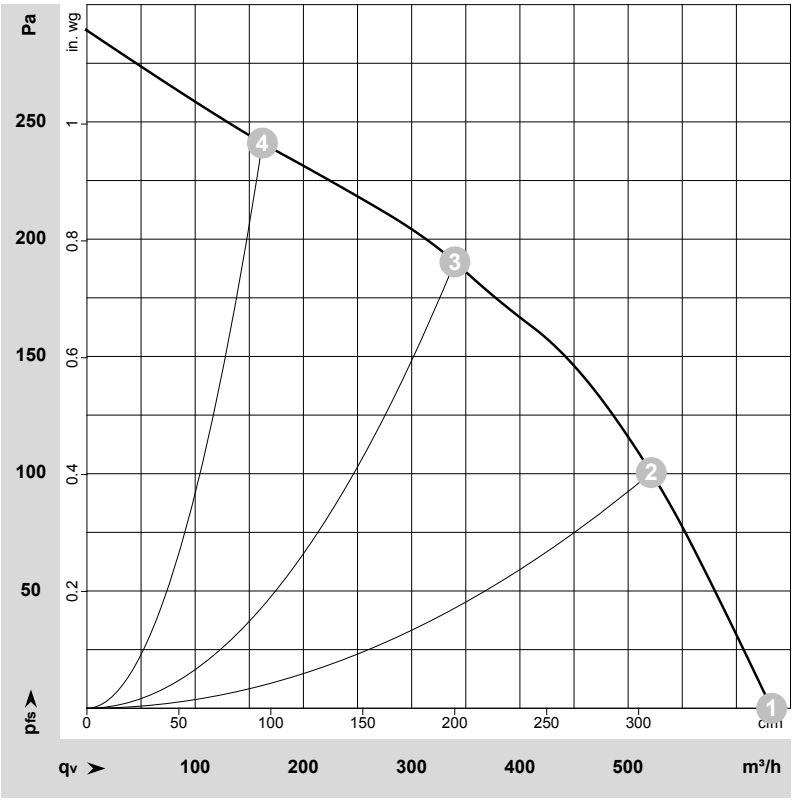
Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-45140-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	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	in. wg
1	1~	230	50	2600	100	0.45	635	0	375	0.00
2	1~	230	50	2615	100	0.45	520	100	305	0.40
3	1~	230	50	2685	90	0.39	340	190	200	0.76
4	1~	230	50	2790	73	0.33	160	240	95	0.96

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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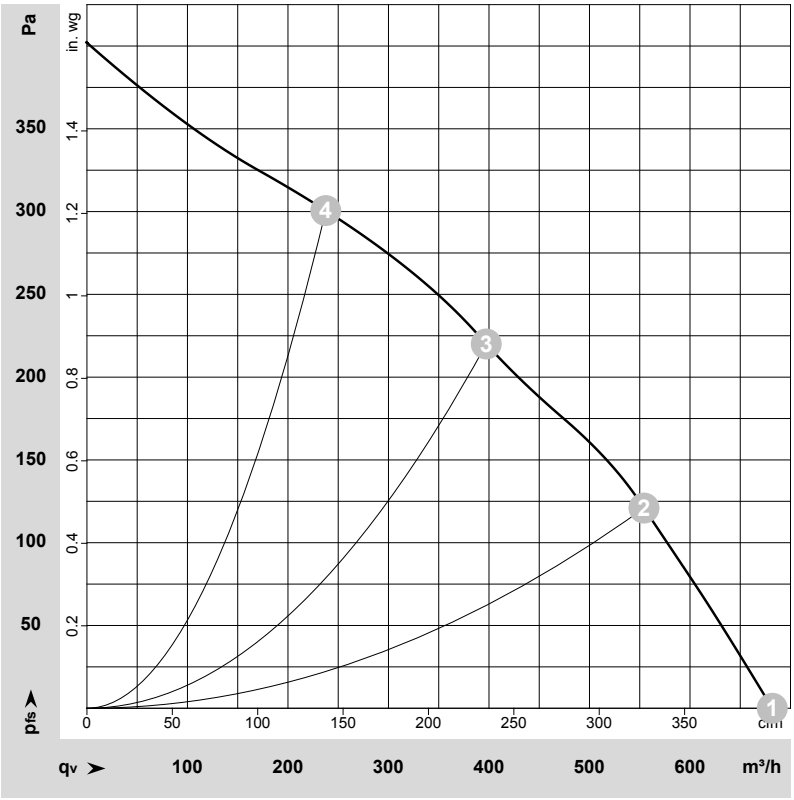
Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-45141-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	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	in. wg
1	1~	230	60	2800	138	0.61	680	0	400	0.00
2	1~	230	60	2800	138	0.61	555	120	325	0.48
3	1~	230	60	2935	128	0.56	395	220	235	0.88
4	1~	230	60	3155	105	0.46	240	300	140	1.20

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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