R2E190-AO50-15

AC centrifugal fan

backward curved

R2E190-AO50-15 ebmpapst Datasheet
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Nominal data

Type	**R2E190-AO50-15**
Motor	**M2E068-BF**

Phase		1~	1~	1~
Nominal voltage	VAC	115	115	115
Frequency	Hz	50	60	60
Type of data definition		fa	fa	fa
Valid for approval / standard		CE	CE	UL
Speed (rpm)	min^{-1}	2500	2700	2700
Power input	W	57	75	81
Current draw	A	0.50	0.66	0.70
Motor capacitor	µF	8	8	8
Capacitor voltage	VDB	220	220	220
Min. back pressure	Pa	0	0	0
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	60	60
Starting current	A	0.75	0.79	

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	1.2 kg
Size	190 mm
Surface of rotor	Coated in black
Material of impeller	PA plastic 6, fibreglass-reinforced
Number of blades	7
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H0+
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)	< 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; CE
Approval	CSA C22.2 No.77; UL 2111

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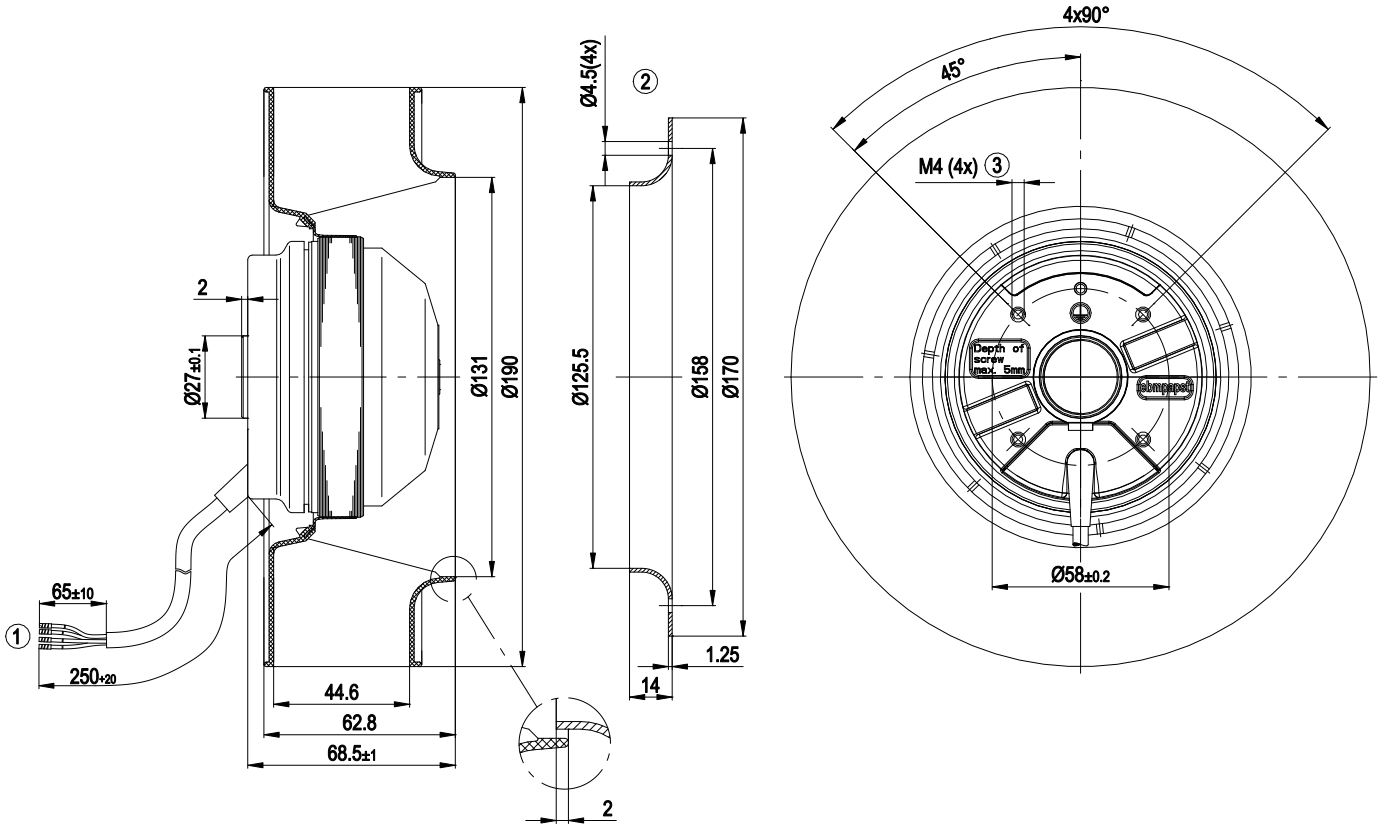
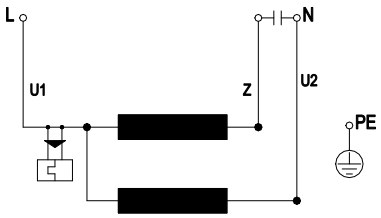
Product drawing



1	Connection line PFA AWG 18, 4 x brass lead tips crimped
2	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 5 mm

Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

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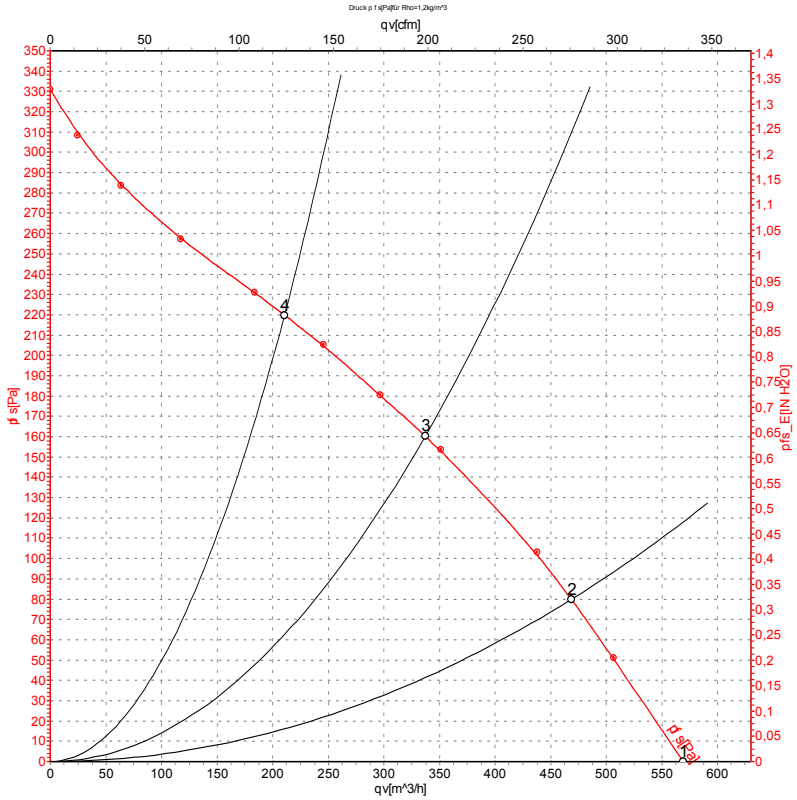
Charts: Air flow 50 Hz



Measurement: LU-50308-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	115	50	2500	57	0.50	570	0	335	0.00
2	115	50	2470	58	0.50	470	80	275	0.32
3	115	50	2415	60	0.52	335	160	200	0.64
4	115	50	2460	58	0.50	210	220	125	0.88

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

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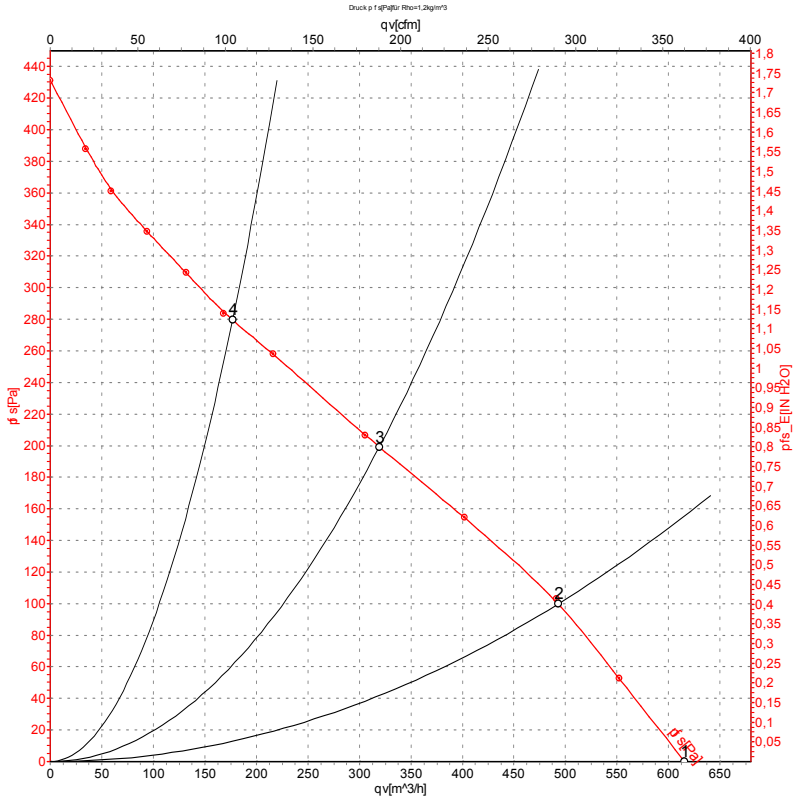
Charts: Air flow 60 Hz



Measurement: LU-50309-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	115	60	2700	75	0.66	615	0	365	0.00
2	115	60	2680	75	0.67	495	100	290	0.40
3	115	60	2560	78	0.69	320	200	190	0.80
4	115	60	2705	75	0.66	175	280	105	1.12

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