

R2E190-AO50-43

AC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	R2E190-AO50-43		
Motor	M2E068-BF		
Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	2500	2700
Power consumption	W	50	60
Current draw	A	0.45	0.53
Capacitor	µF	6	6
Capacitor voltage	VDB	220	220
Capacitor standard		S0 (CE)	
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	70
Starting current	A	0.70	0.71

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



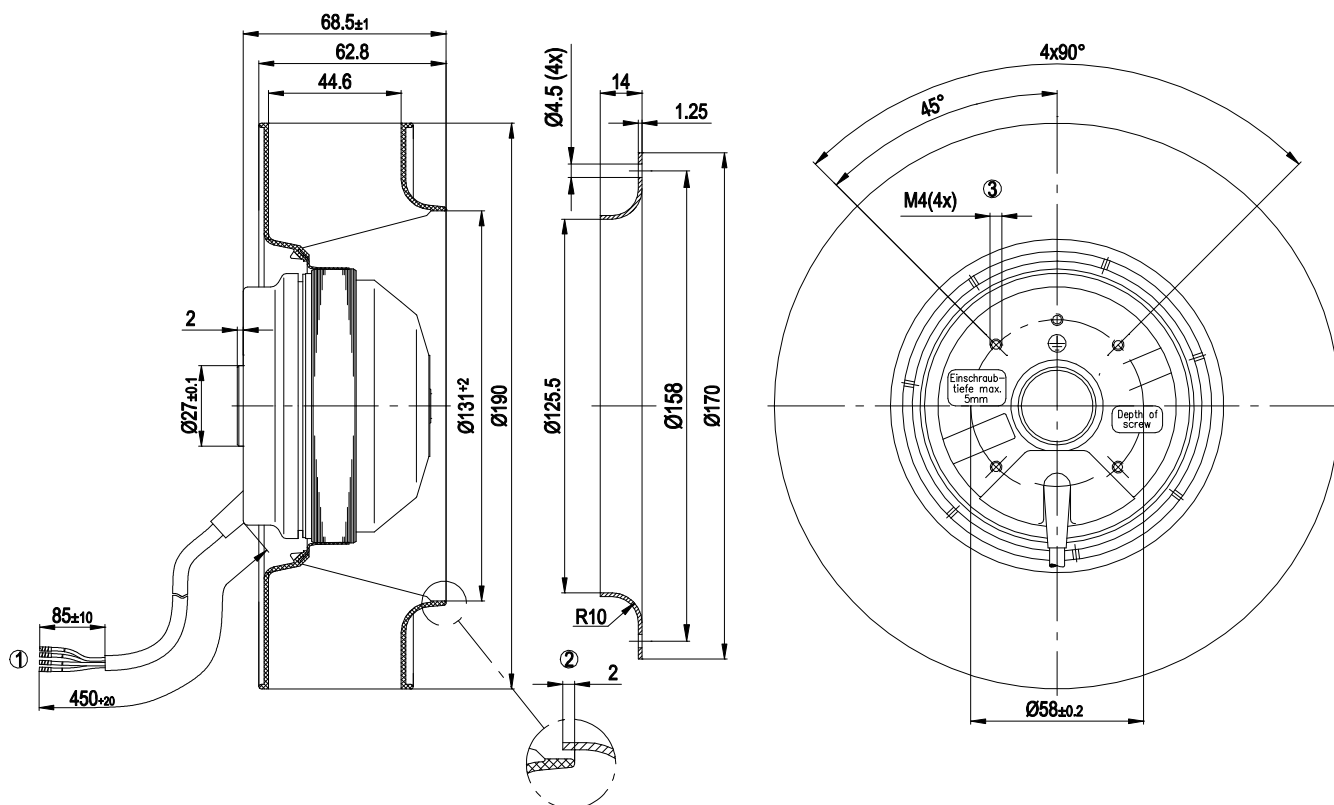
Technical description

Weight	1.202 kg
Size	190 mm
Motor size	68
Rotor surface	Unpainted
Impeller material	PA6 plastic, glass-fiber reinforced
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

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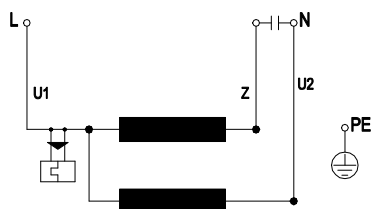
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Product drawing



- | | |
|---|--|
| 1 | Cable PVC, 4x connected splices |
| 2 | Accessory part: Inlet ring 09576-2-4013, not included in scope of delivery |
| 3 | Max. clearance for screw 5 mm |

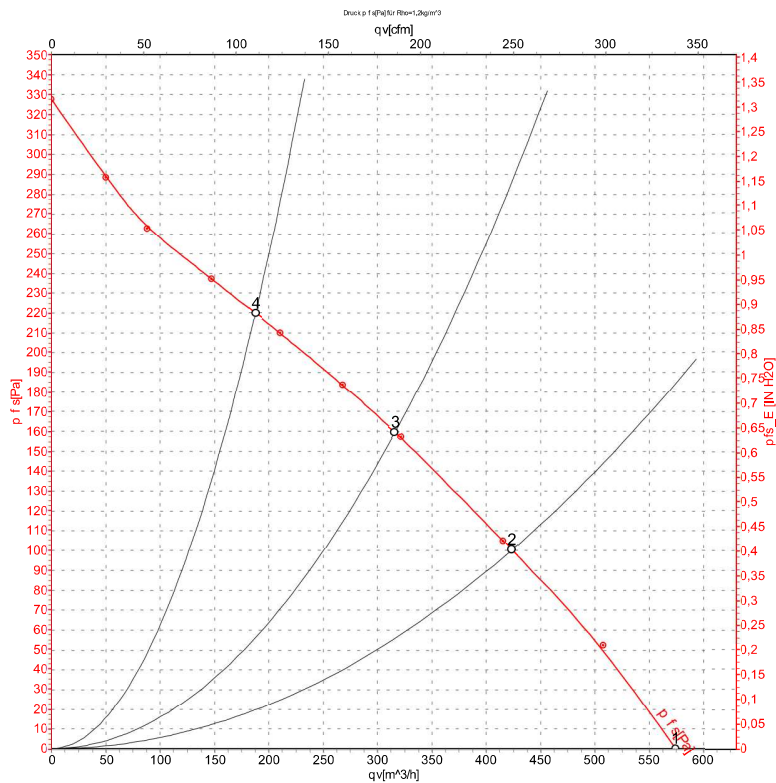
Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				



Curves: Air performance 50 Hz



Measurement: LU-49767-1

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.

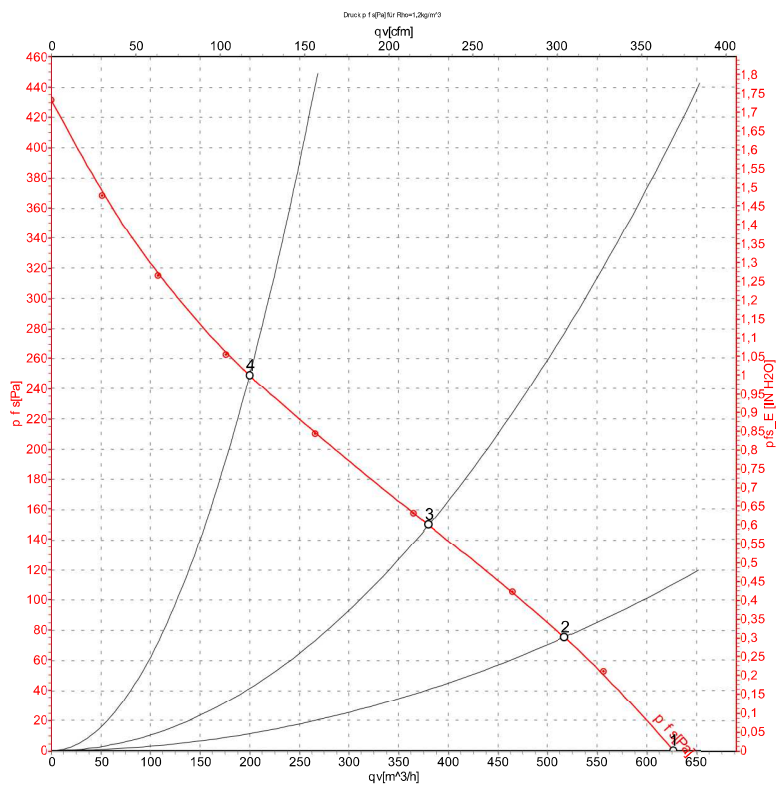
Measured values

	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	115	50	2500	50	0.45	575	0	340	0.00
2	115	50	2390	52	0.45	425	100	250	0.40
3	115	50	2340	53	0.47	315	160	185	0.64
4	115	50	2405	51	0.45	190	220	110	0.88

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



Curves: Air performance 60 Hz



Measurement: LU-49768-1

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

	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	115	60	2700	60	0.53	625	0	370	0.00
2	115	60	2605	63	0.55	515	75	305	0.30
3	115	60	2475	66	0.58	380	150	225	0.60
4	115	60	2570	64	0.56	200	250	120	1.00

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

