

R2E190-AO84-22

AC centrifugal fan

backward-curved, single-intake

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

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2E190-AO84-22		
Motor	M2E068-BF		
Phase		2~	2~
Nominal voltage	VAC	400	400
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	2500	2750
Power consumption	W	52	62
Current draw	A	0.14	0.16
Capacitor	µF	0.5	0.5
Capacitor voltage	VDB	700	700
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Max. ambient temperature	°C	55	55
Starting current	A	0.25	0.24

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



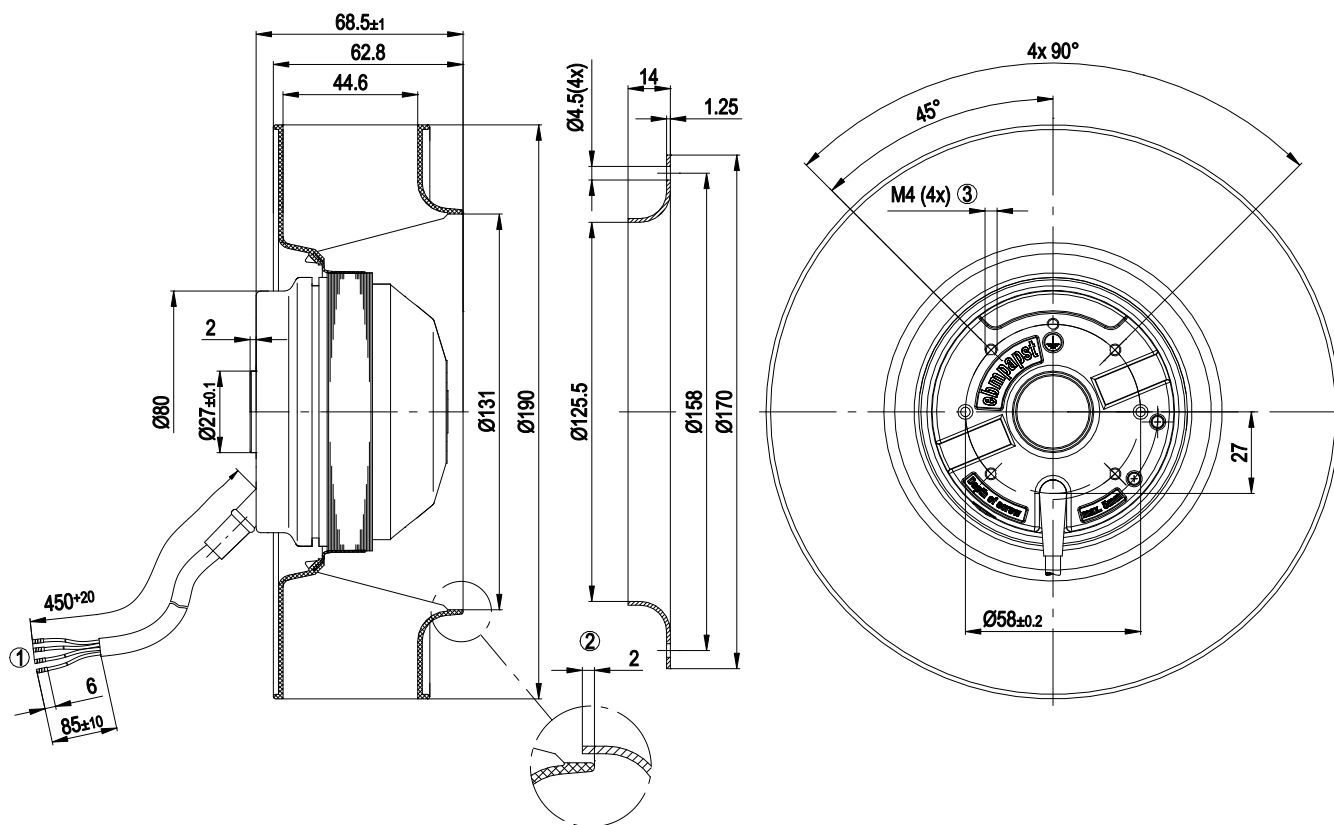
Technical description

Weight	1.23 kg
Size	190 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA6 plastic, glass-fiber reinforced
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
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
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; UKCA
Approval	EAC

AC centrifugal fan

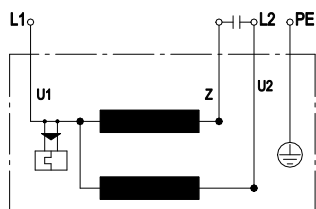
backward-curved, single-intake

Product drawing



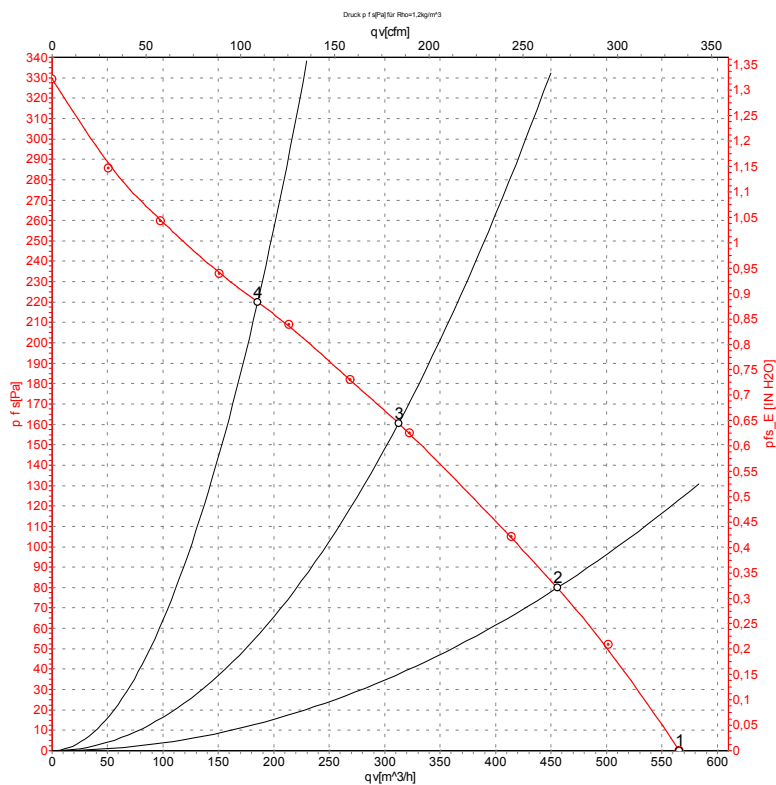
- | | |
|---|--|
| 1 | Cable silicone 4G 0.5 mm ² , 4x crimped splices |
| 2 | Accessory part: inlet ring 09576-2-4013 not included in scope of delivery. |
| 3 | Max. clearance for screw 5 mm |

Connection diagram



U1	blue	Z	brown	U2	black
PE	Green/yellow				

Curves: Air performance 50 Hz



Measurement: LU-50915-1

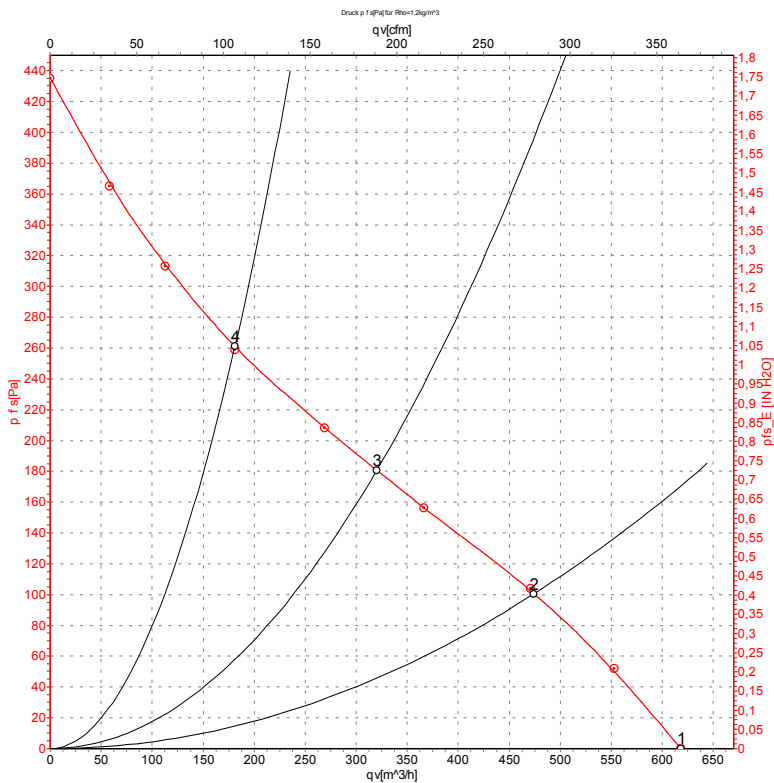
Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the 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 _{ts}	q _v	P _{ts}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	400	50	2500	52	0.14	565	0	335	0.00
2	400	50	2415	55	0.14	455	80	270	0.32
3	400	50	2340	57	0.15	310	160	185	0.64
4	400	50	2420	54	0.14	185	220	110	0.88

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

Curves: Air performance 60 Hz



Measurement: LU-50916-1

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	400	60	2750	62	0.16	620	0	365	0.00
2	400	60	2595	66	0.16	475	100	280	0.40
3	400	60	2475	69	0.17	320	180	190	0.72
4	400	60	2600	65	0.16	180	260	105	1.04

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

