R2E180-AH21-42

AC hot-air circulation blower

backward curved

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
County court Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
County court Stuttgart · HRB 590142

Nominal data

Type	**R2E180-AH21-42**
Motor	**M2E068-DF**

Phase		1~	1~
Nominal voltage	VAC	115	115
Frequency	Hz	60	60
Type of data definition		fa	fa
Valid for approval / standard		CE	UL 2111
Speed (rpm)	min^{-1}	2650	2650
Power input	W	145	150
Current draw	A	1.27	1.31
Motor capacitor	µF	12	12
Capacitor voltage	VDB	220	220
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	100	100

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

AC hot-air circulation blower

backward curved

Technical features

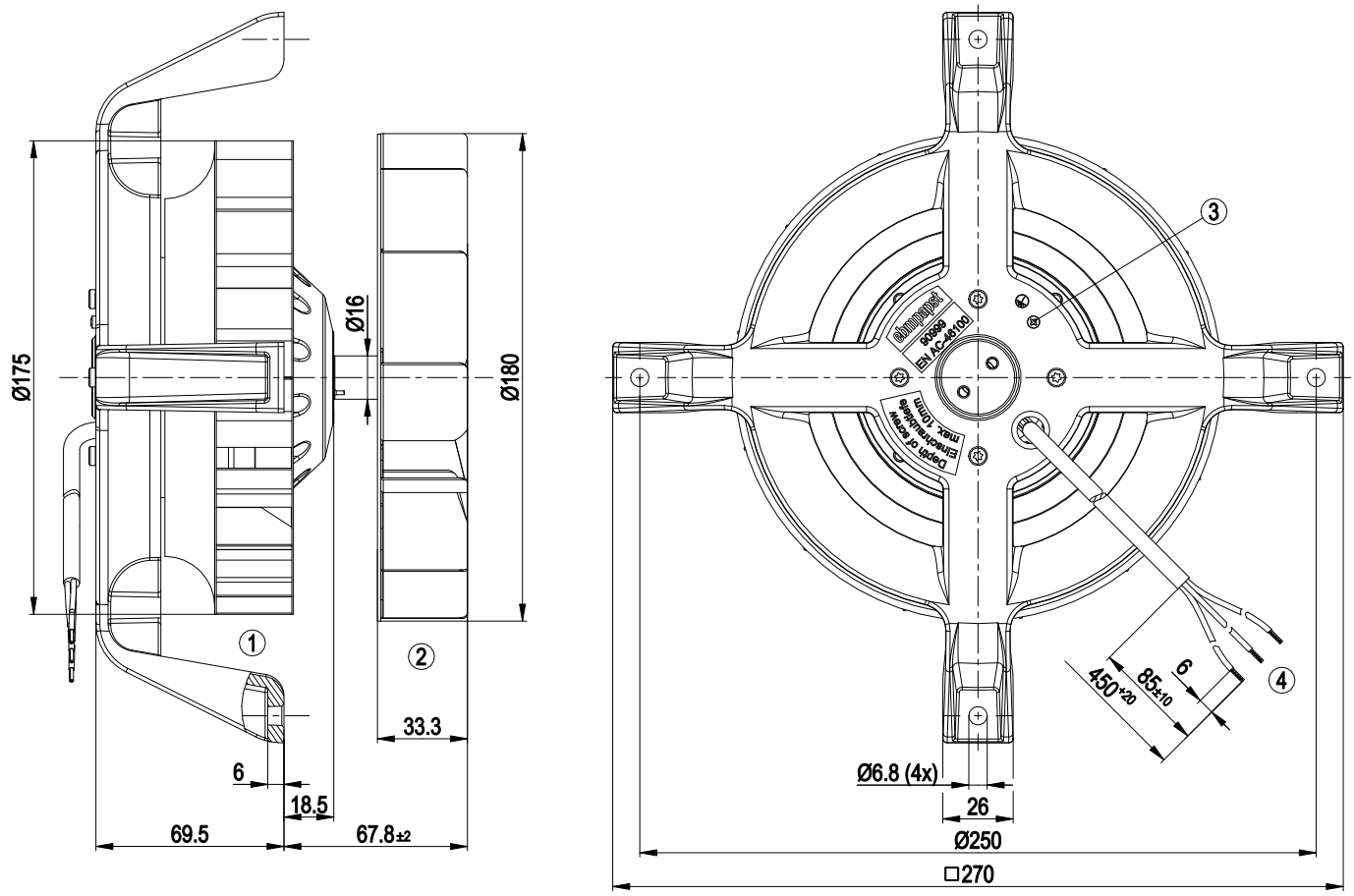
Mass	3.1 kg
Size	180 mm
Surface of rotor	Uncoated
Motor suspension	Motor mounted via brackets on one side
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 20
Insulation class	"F"
Humidity (F)/environmental protection class (H)	H0 - dry environment
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal
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	Axial
Protection class	I (if protective earth is connected by customer at the connection point of the housing)
Product conforming to standard	CE
Approval	UL 2111; CSA C22.2 No.77

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC hot-air circulation blower

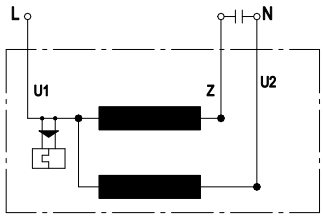
backward curved

Product drawing



1	Centrifugal impeller (sheet steel, galvanised)
2	Centrifugal impeller (sheet steel, rust- and acid-resistant)
3	M4 screw for fastening earth conductor
	Thread reach max. 5 mm
4	Connection line PFA AWG20, 3x lead tips crimped

Connection screen



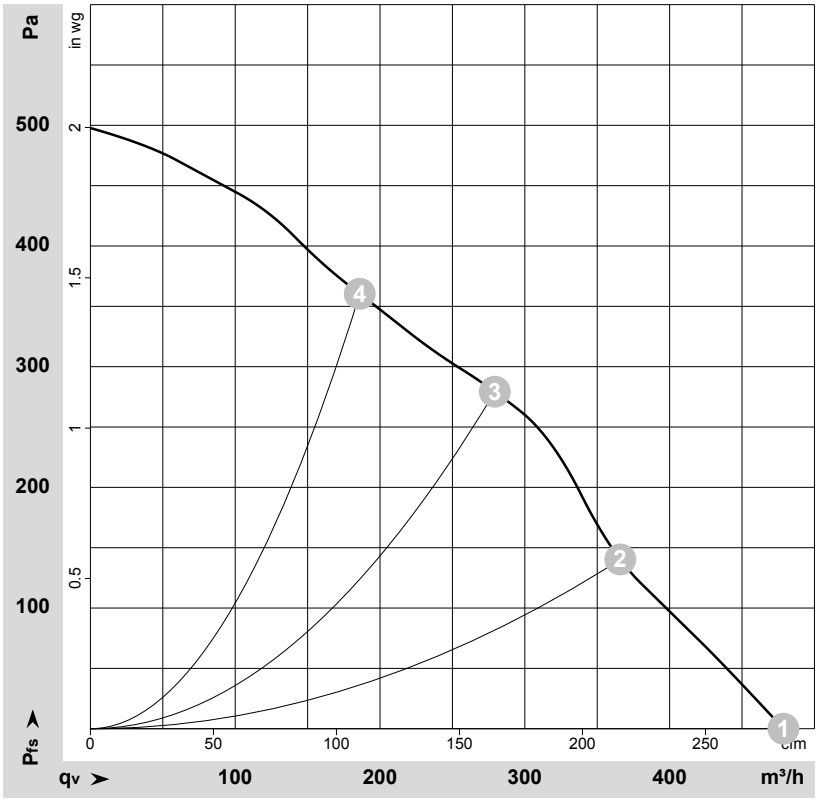
U1	Blue	Z	brown	U2	black

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com

AC hot-air circulation blower

backward curved

Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-169881-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	115	60	2650	145	1.27	480	0	280	0.00
2	115	60	2755	136	1.18	365	140	215	0.56
3	115	60	2825	129	1.13	280	280	165	1.12
4	115	60	2860	127	1.10	185	360	110	1.45

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

ebm-papst Mulfingen GmbH & Co. KG · Bachmühle 2 · D-74673 Mulfingen · Phone +49 (0) 7938 81-0 · Fax +49 (0) 7938 81-110 · info1@de.ebmpapst.com · www.ebmpapst.com