R2E220-AA40-71

AC centrifugal fan

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	**R2E220-AA40-71**
Motor	**M2E068-BF**

Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		fa	fa
Valid for approval / standard		CE	CE
Speed	min^{-1}	2600	2700
Power input	W	85	90
Current draw	A	0.38	0.40
Motor capacitor	µF	3	2
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	40	40
Starting current	A	0.54	0.52

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

AC centrifugal fan

backward curved

Technical features

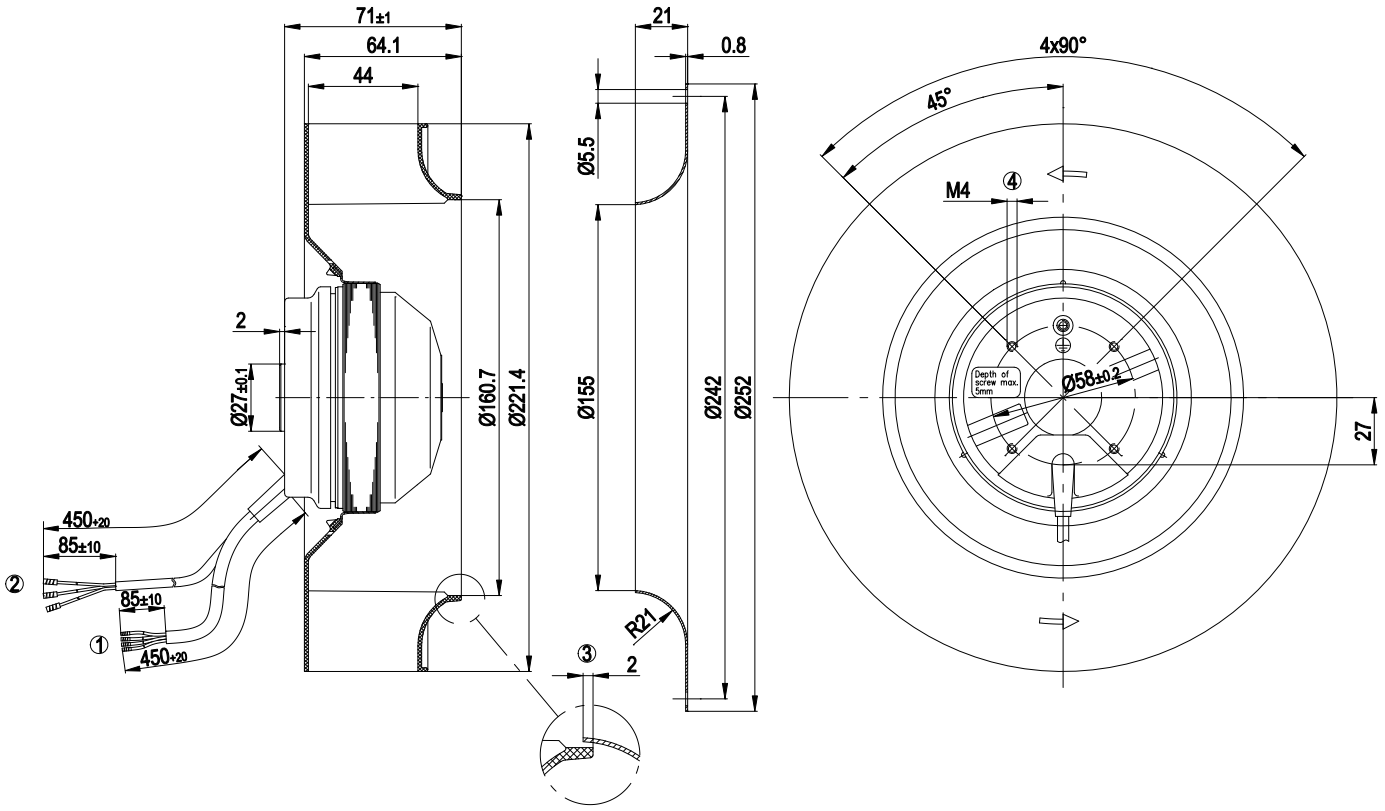
Mass	1.3 kg
Size	220 mm
Surface of rotor	Uncoated
Material of impeller	Plastic PA6, fibreglass-reinforced
Number of blades	11
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
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	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC; CSA C22.2 Nr.113; EAC; UL 507

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 centrifugal fan

backward curved

Product drawing



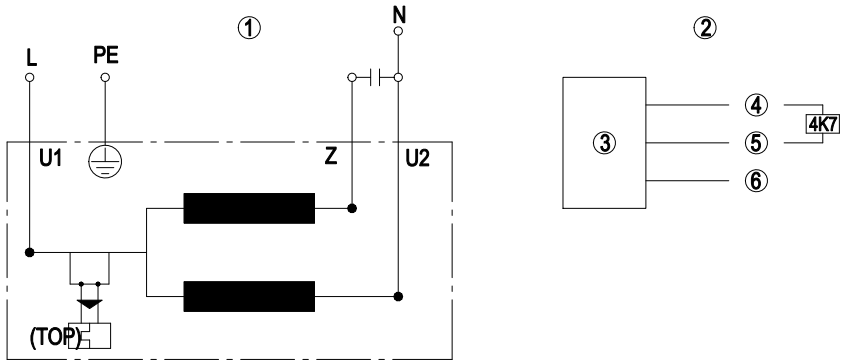
1	Connection line PVC, 4x brass lead tips crimped
2	Connection line, 3x brass lead tips crimped
3	Accessory part: Inlet nozzle 09609-2-4013, not included in the standard scope of delivery
4	Depth of screw max. 5 mm

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 centrifugal fan

backward curved

Connection screen



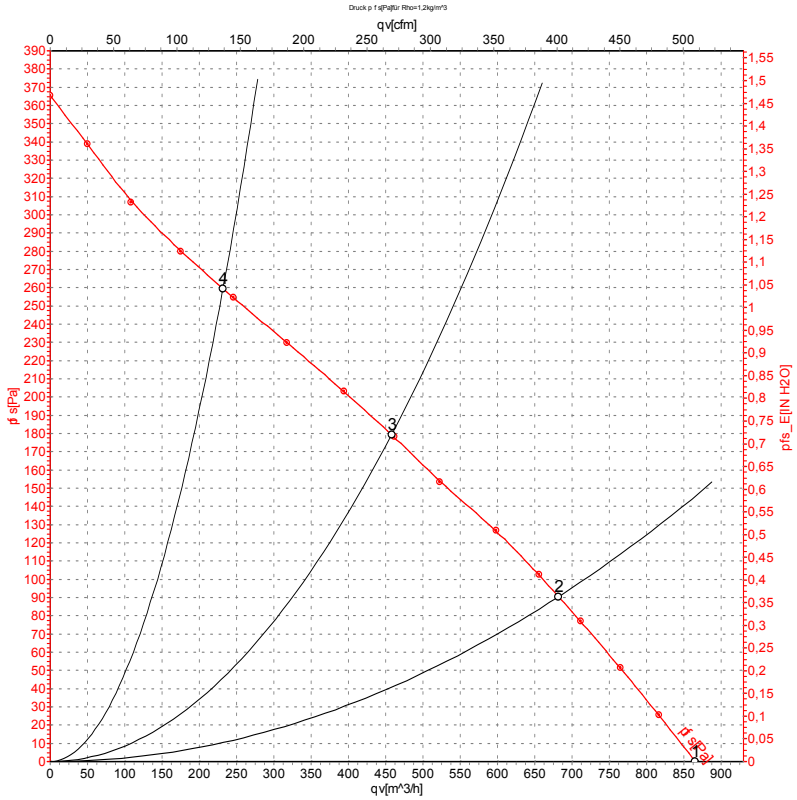
1	Fan connection diagram
TOP	Thermal overload protector
U1	blue
Z	brown
U2	black
PE	green/yellow
2	Hall IC circuit
3	Fan
4	Red (+5V)
5	White (out)
6	Black (0V)

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 centrifugal fan

backward curved

Charts: Air flow 50 Hz



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}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2405	85	0.38	865	0
2	230	50	2260	91	0.39	680	90
3	230	50	2155	94	0.41	460	180
4	230	50	2245	91	0.40	230	260

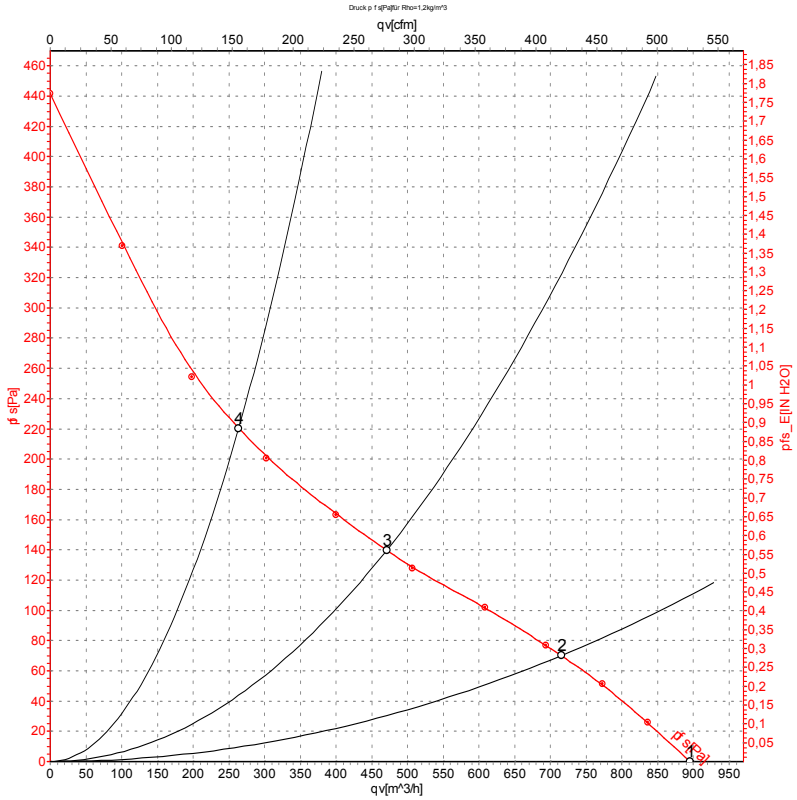
U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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

AC centrifugal fan

backward curved

Charts: Air flow 60 Hz



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}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	60	2490	84	0.37	895	0
2	230	60	2265	90	0.39	715	70
3	230	60	2020	94	0.41	470	140
4	230	60	2100	93	0.40	265	220

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = 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