

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	R2E250-AQ05-12		
Motor	M2E068-DF		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	2550	2750
Power consumption	W	130	180
Current draw	A	0.57	0.80
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		S0 (CE)	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	55	50

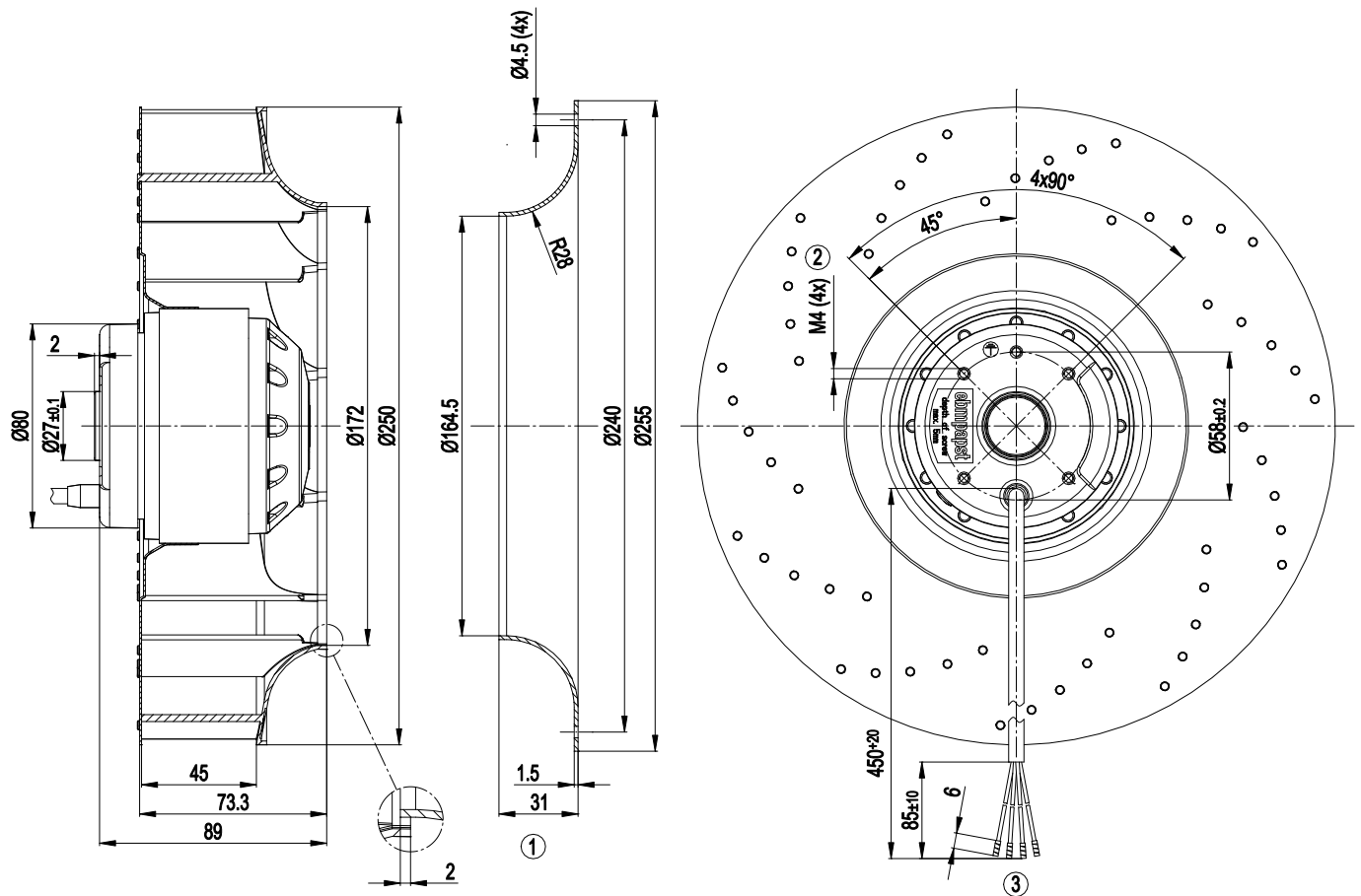
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



Technical description

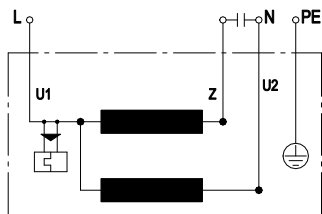
Weight	2.4 kg
Size	250 mm
Motor size	68
Rotor surface	Painted black
Impeller material	PA plastic, glass-fiber reinforced
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1
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	Axial
Protection class	I (with customer connection of protective earth)
Approval	EAC; CCC

Product drawing



- | | |
|---|--|
| 1 | Accessory part: inlet ring 96359-2-4013, not included in scope of delivery |
| 2 | Max. clearance for screw 5 mm |
| 3 | Cable silicone 4G 0.5 mm ² , 4x crimped splices |

Connection diagram

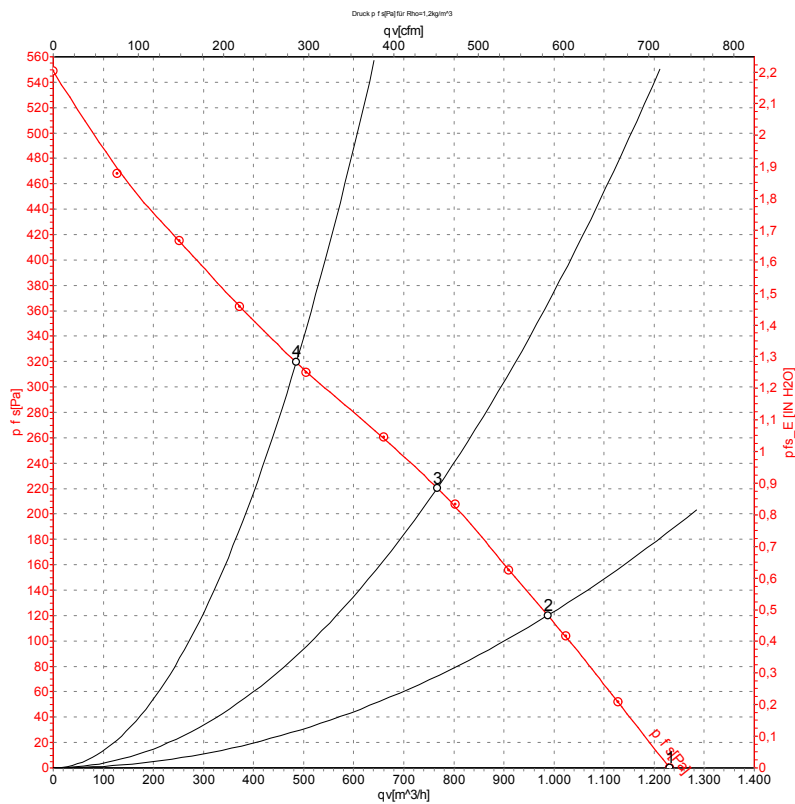


U1	blue	Z	brown	U2	black
PE	green/yellow				

AC centrifugal fan

backward-curved, single-intake

Curves: Air performance 50 Hz



Measurement: LU-49342-1

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.

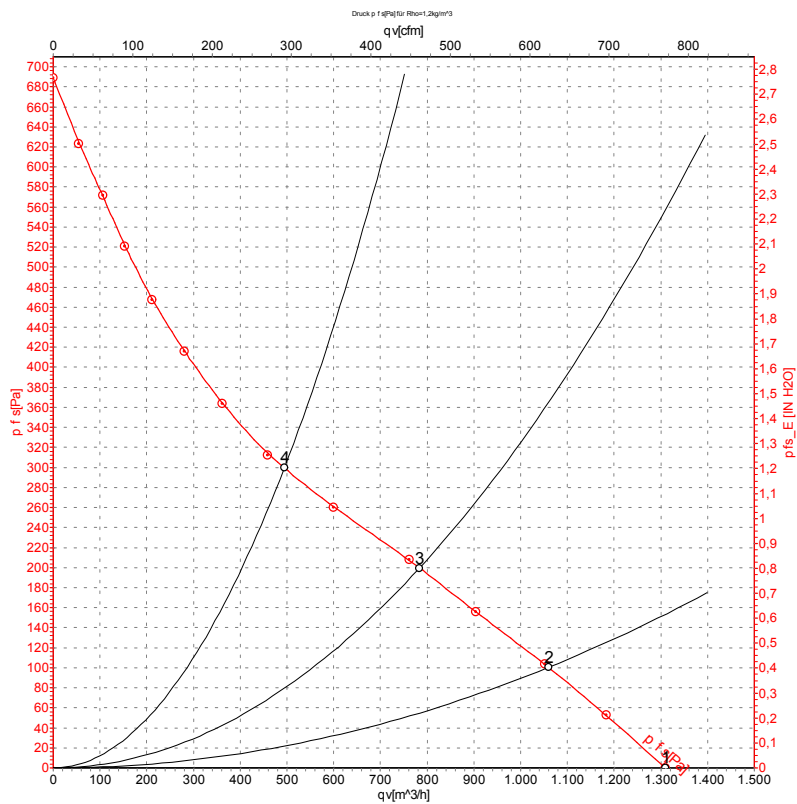
Measured values

	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	230	50	2550	130	0.57	1230	0	725	0.00
2	230	50	2380	151	0.66	990	120	580	0.48
3	230	50	2290	161	0.70	765	220	450	0.88
4	230	50	2265	163	0.71	485	320	285	1.28

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-49346-1

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	230	60	2750	180	0.80	1310	0	770	0.00
2	230	60	2465	195	0.85	1060	100	625	0.40
3	230	60	2270	206	0.90	785	200	460	0.80
4	230	60	2220	208	0.90	495	300	290	1.20

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