

R4E310-AS06-01

AC centrifugal fan

backward curved, single inlet



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	R4E310-AS06-01		
Motor	M4E068-EC		
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	1370	1530
Power input	W	120	160
Current draw	A	0.54	0.71
Motor capacitor	μF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		P0 (CE)	P0 (CE)
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	85	50

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive integrated	No
Specific ratio*	1,00

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency η_{es}	38,7	38,5	42,5
Efficiency grade N	58,2	58	62
Power input P_e	kW	0,14	
Air flow q_v	m ³ /h	1330	
Pressure increase p_{fs}	Pa	150	
Speed n	min ⁻¹	1315	

Data established at point of optimum efficiency



R4E310-AS06-01

AC centrifugal fan

backward curved, single inlet

Technical features

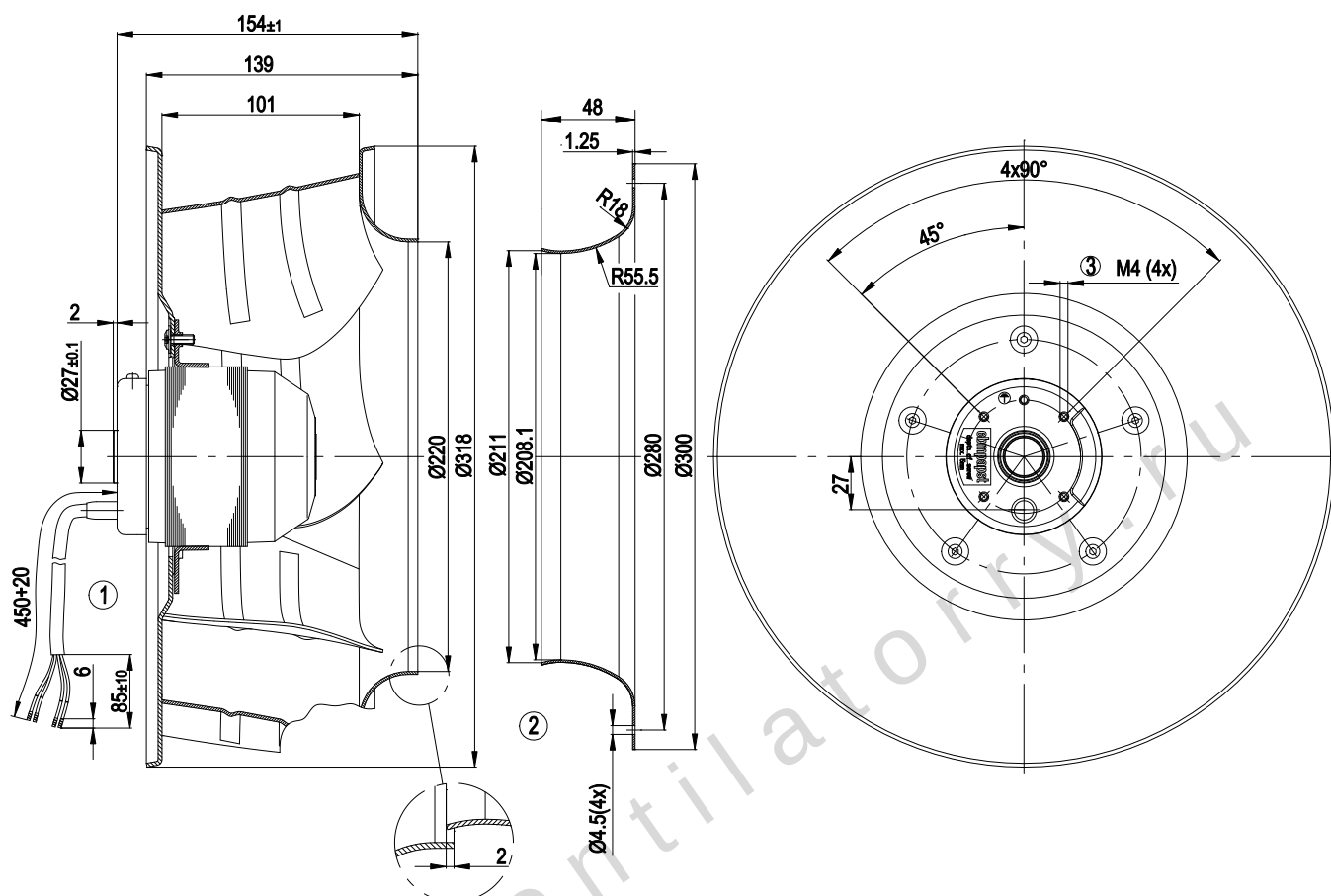
Mass	3.4 kg
Size	310 mm
Surface of rotor	Coated in black
Material of impeller	Aluminum sheet, laser-welded
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity class	F1-2
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Leakage current	< 0.75 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	CE
Approval	CCC

R4E310-AS06-01

AC centrifugal fan

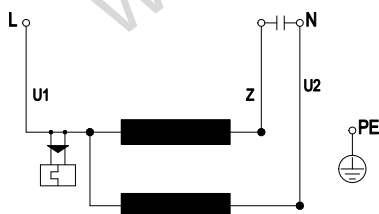
backward curved, single inlet

Product drawing



1	Connection line silicone 4G 0.5mm ² , 4x brass lead tips
2	Accessory part: Inlet nozzle 31050-2-4013, not included in the standard scope of delivery.
3	Depth of screw max. 5 mm

Connection screen



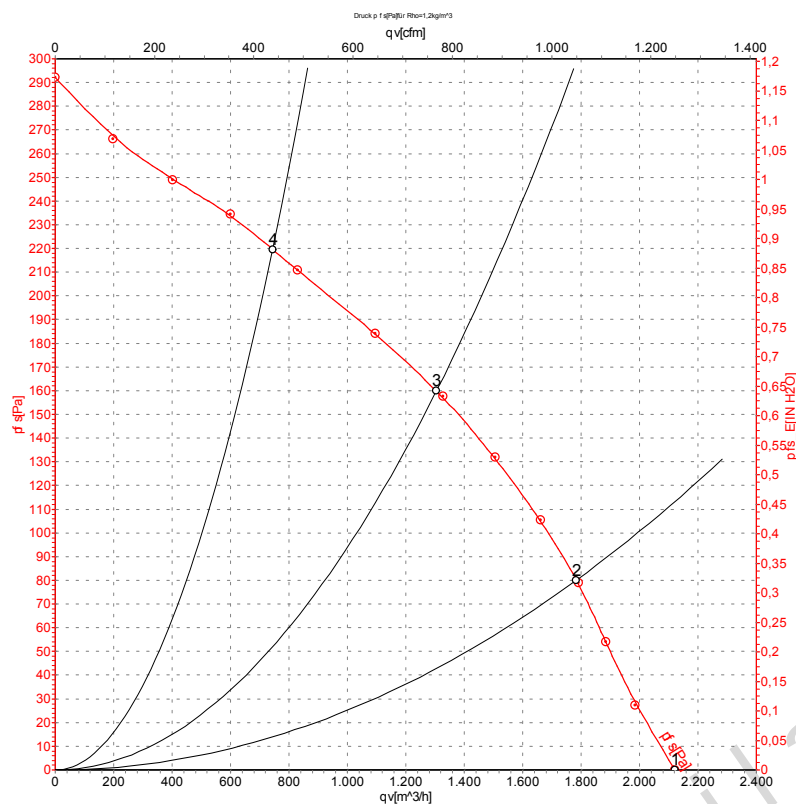
U1	blue	Z	brown	U2	black
PE	green/yellow				

R4E310-AS06-01

AC centrifugal fan

backward curved, single inlet

Charts: Air flow 50 Hz



Measurement: LU-106606

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

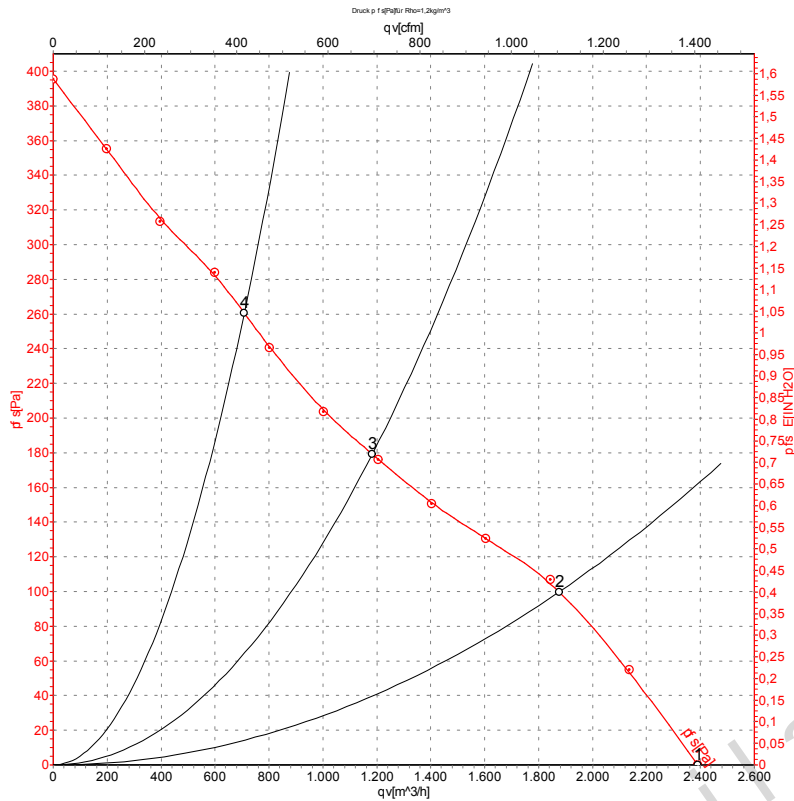
	U	f	n	P _e	I	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa
1	230	50	1370	120	0.54	2120	0
2	230	50	1355	127	0.58	1785	80
3	230	50	1315	142	0.65	1305	160
4	230	50	1340	132	0.60	745	220

R4E310-AS06-01

AC centrifugal fan

backward curved, single inlet

Charts: Air flow 60 Hz



Measurement: LU-106607

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: L_{WA} measured as per ISO 13347 /
L_{pA} 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	m³/h	Pa
1	230	60	1530	160	0.71	2390	0
2	230	60	1440	177	0.78	1875	100
3	230	60	1325	192	0.85	1185	180
4	230	60	1440	176	0.77	710	260