

# 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

<b>Type</b>	<b>R4E310-AR06-01</b>		
<b>Motor</b>	<b>M4E068-EC</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		fa	fa
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	1410	1650
Power consumption	W	95	125
Current draw	A	0.46	0.56
Capacitor	µF	4	4
Capacitor voltage	VDB	400	400
Capacitor standard		S2 (CE)	S2 (CE)
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	70	65

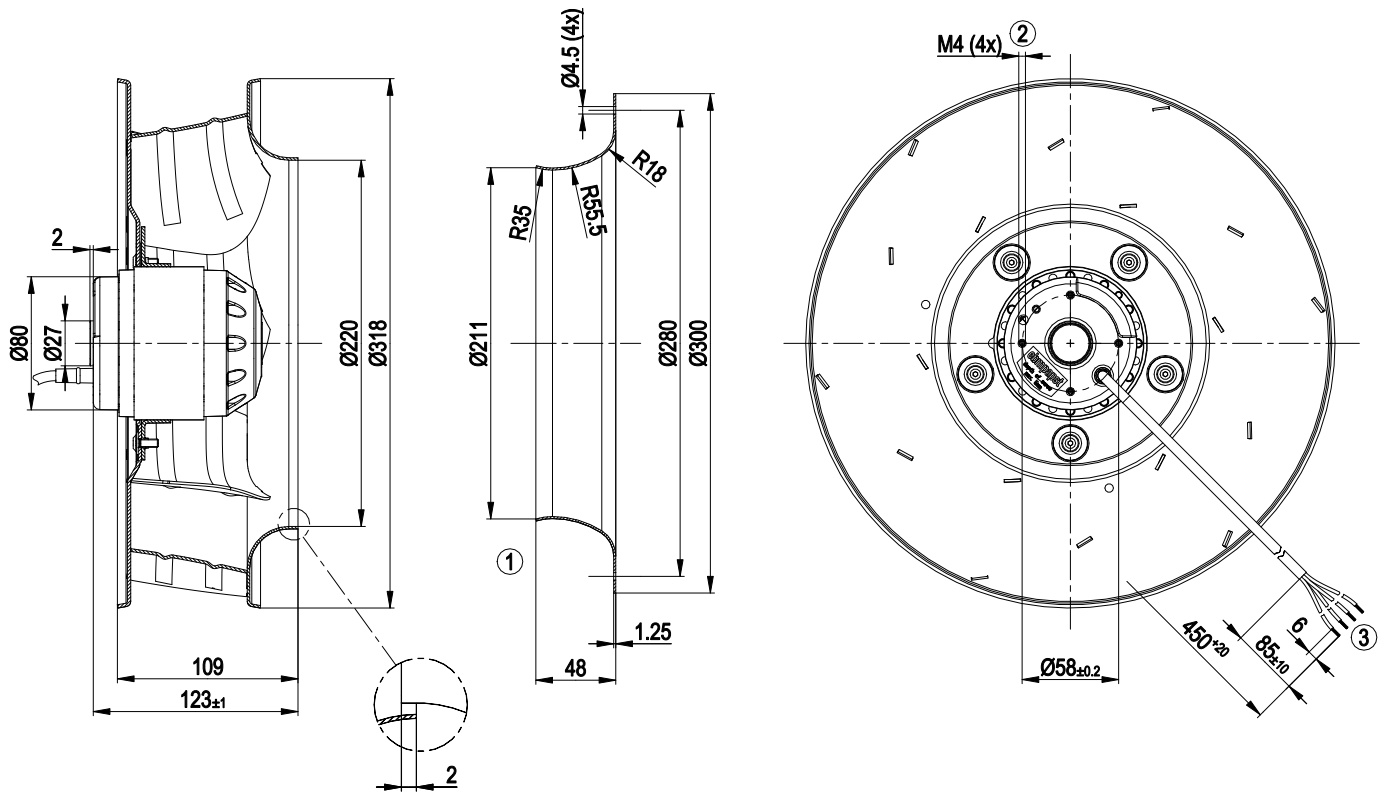
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



### Technical description

Weight	3.5 kg
Fan size	310 mm
Rotor surface	Painted black
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
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)
Conformity with standards	EN 60335-1; CE
Approval	EAC

## Product drawing



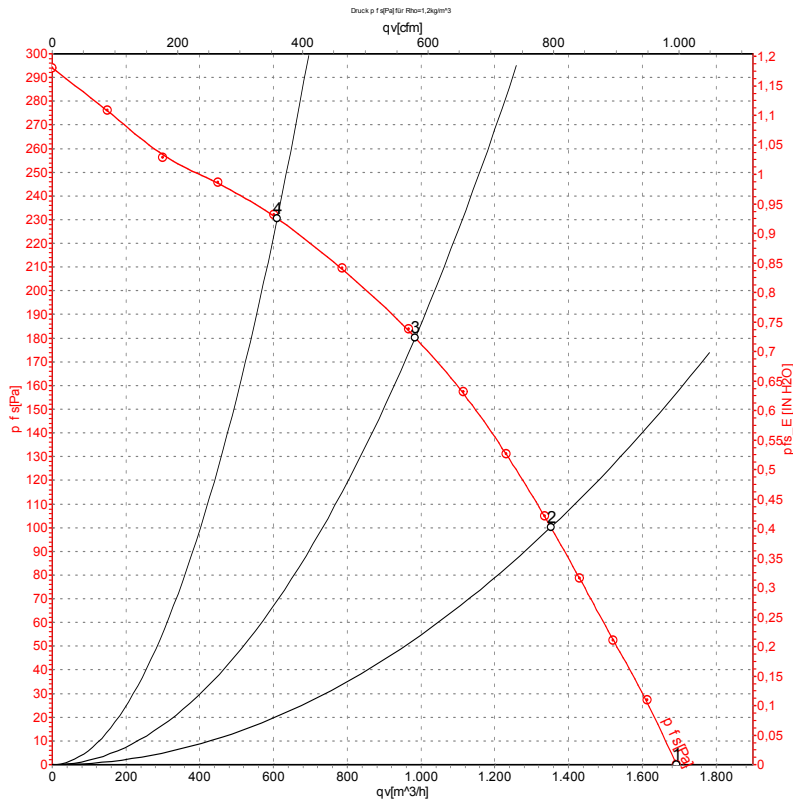
- |   |   |
|---|---|
| 1 | Accessory part: Inlet ring 31050-2-4013 not included in scope of delivery, other inlet rings on request |
| 2 | Max. clearance for screw 5 mm   |
| 3 | Cable PVC 4G 0.5 mm <sup>2</sup> , 4x crimped splices   |

## Connection diagram



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Curves: Air performance 50 Hz



Measurement: LU-60245-1

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.

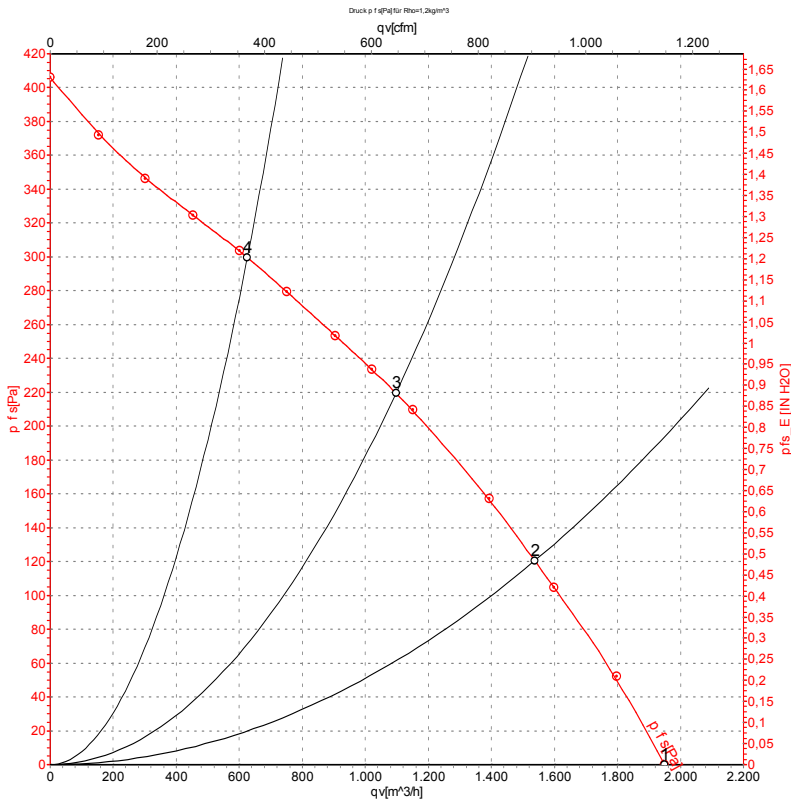
## Measured values

	U	f	n	P <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	50	1410	95	0.46	1695	0	995	0.00
2	230	50	1380	114	0.53	1350	100	795	0.40
3	230	50	1365	120	0.55	985	180	580	0.72
4	230	50	1390	114	0.53	610	230	360	0.92

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



## Curves: Air performance 60 Hz



Measurement: LU-60246-1

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 <sub>e</sub>	I	q <sub>v</sub>	p <sub>fs</sub>	q <sub>v</sub>	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa	cfm	in. wg
1	230	60	1650	125	0.56	1950	0	1150	0.00
2	230	60	1560	152	0.67	1535	120	905	0.48
3	230	60	1515	163	0.71	1095	220	645	0.88
4	230	60	1575	152	0.66	625	300	370	1.20

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Blowers & Centrifugal Fans](#) category:*

*Click to view products by [ebm papst](#) manufacturer:*

Other Similar products are found below :

[MKEL-DRB](#) [R2D140-AB02-14](#) [R2D160-AC02-13](#) [R4D310-AS18-01](#) [R4D400-AD22-06](#) [R4E180-AS11-09](#) [R4S175-AA16-12](#) [AIF60112](#)  
[AIF801724](#) [RLF35-812N2P-103](#) [DOP-EXI014RAE](#) [BR300W400](#) [KFB1724VHT-AF00](#) [KFC1048DS-S45D](#) [AIF641714](#) [CME-COP01](#)  
[R1G220-AB07-09](#) [R2E180CH0312](#) [R2S150-AD08-09](#) [RD20S-4/210660](#) [RH56M-6/204689](#) [D2E146-CD51-09](#) [TP04G-AS2](#) [TP05G-BT2](#)  
[TP-PCC](#) [BR200W250](#) [D4E133-AA01-51](#) [D4E133-DH61-D1](#) [DFD0612H/SPECTRA](#) [DOP-EXI028RAE](#) [55462.19890](#) [K1G200-AA73-02](#)  
[G2D160-AF02-01](#) [G2E150-BA52-07](#) [G2S150-AB56-42](#) [D4E225-BC01-02](#) [R2D225-AV02-14](#) [D2E146-HT67-63](#) [K1G220-AA67-02](#)  
[55462.19140](#) [G2E140-AG02-05](#) [R3G190-AB23-02](#) [55410.91750](#) [55462.19891](#) [G3G160-AC70-01](#) [R1G120-AD17-11](#) [R3G250-AM70-01](#)  
[R2E225-RA02-47](#) [RER225-63/18/2TDMP](#) [R4E310-AO12-14](#)