

**ebm-papst Muldingen GmbH & Co. KG**

Bachmühle 2 · D-74673 Muldingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Muldingen  
County court Stuttgart · HRA 590344General partner: Elektrobau Muldingen GmbH · Headquarters Muldingen  
County court Stuttgart · HRB 590142**Nominal data**

<b>Type</b>	<b>R4E310-RA06-01</b>		
<b>Motor</b>	<b>M4E068-EC</b>		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	1325	1380
Power input	W	137	185
Current draw	A	0.62	0.82
Motor capacitor	µF	4	4
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	60	40

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 =  $1 + p_g / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	42,2	38,2	42,2
Efficiency grade N	62	58	62
Power input $P_e$	kW	0,13	
Air flow $q_v$	m <sup>3</sup> /h	1055	
Pressure increase $p_{fs}$	Pa	184	
Speed n	min <sup>-1</sup>	1335	

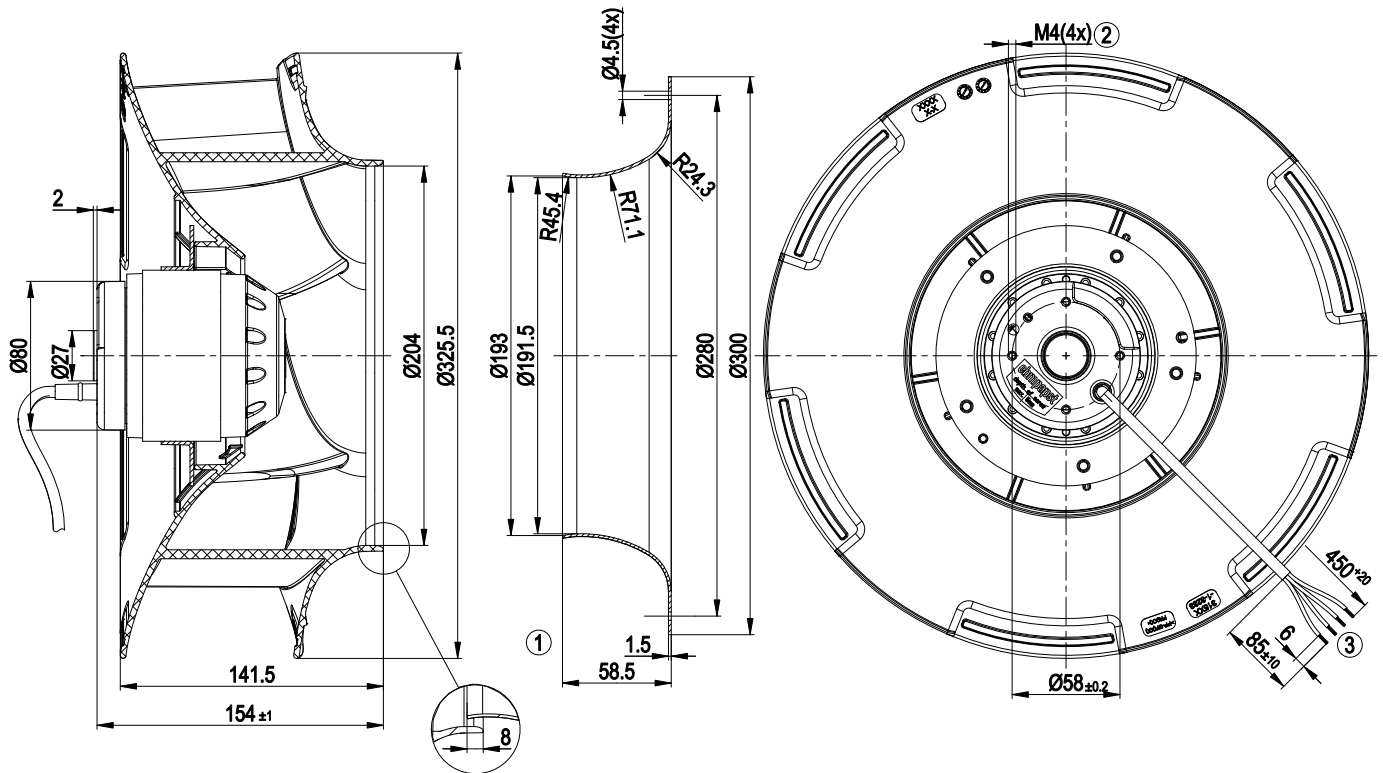
Data established at point of optimum efficiency



### Technical features

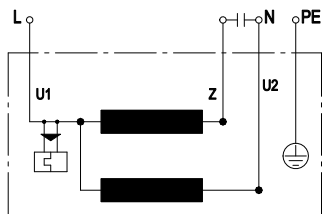
<b>Size</b>	310 mm
<b>Surface of rotor</b>	Coated in black
<b>Material of impeller</b>	PP plastic
<b>Number of blades</b>	6
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 44; Depending on installation and position as per EN 60034-5
<b>Insulation class</b>	"B"
<b>Humidity class</b>	F1-2
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Shaft horizontal or rotor on bottom; rotor on top on request
<b>Condensate discharge holes</b>	Rotor-side
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Leakage current</b>	< 0.75 mA
<b>Motor protection</b>	Thermal overload protector (TOP) wired internally
<b>Cable exit</b>	Axial
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 60335-1; CE

## Product drawing



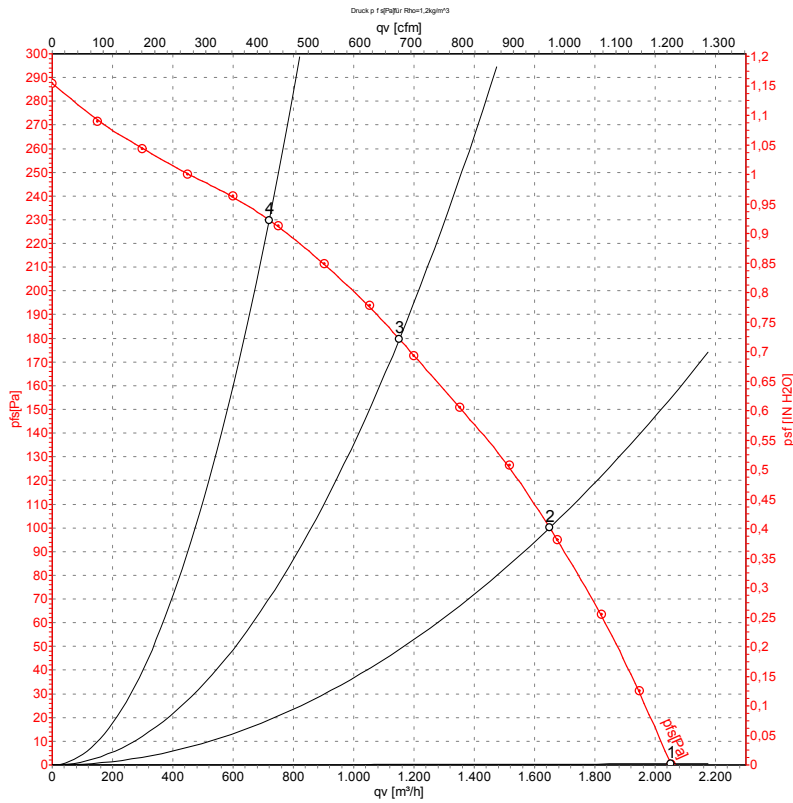
- 1 Accessory part: Inlet nozzle 31000-2-4013, not included in the standard scope of delivery.
- 2 Depth of screw max. 5 mm
- 3 Connection line PVC 4G 0.5mm<sup>2</sup> 4x brass lead tips crimped

## Connection screen



U1	blue	Z	brown	U2	black
PE	green/yellow				

## Charts: Air flow 50 Hz



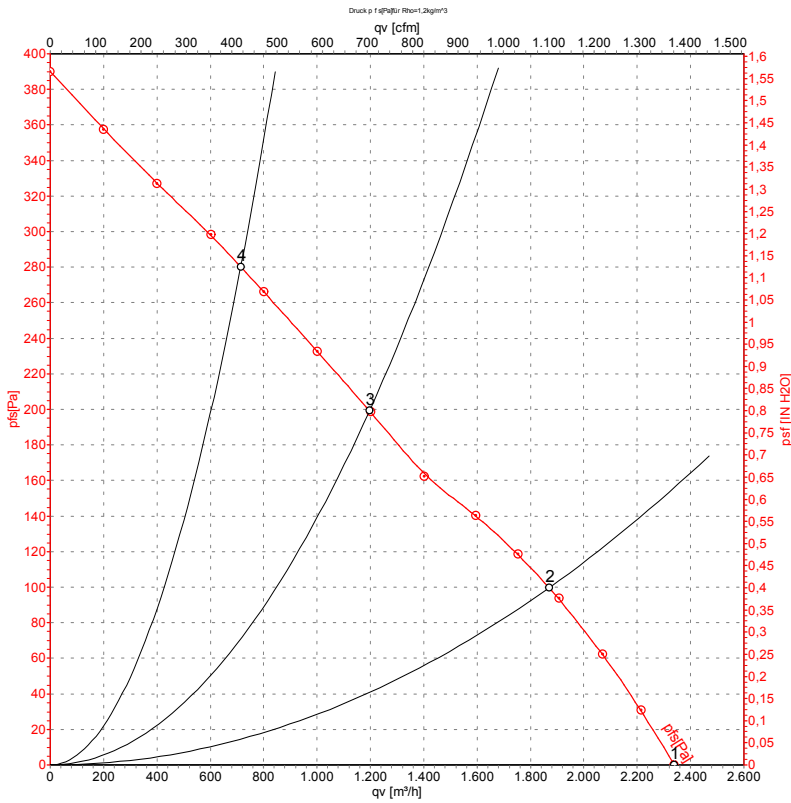
Measurement: LU-136581

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<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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 <sub>e</sub>	I	L <sub>pA<sub>in</sub></sub>	L <sub>wA<sub>in</sub></sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	50	1390	109	0.50	58	66	2050	0
2	230	50	1345	129	0.58	53	60	1650	100
3	230	50	1325	137	0.62	49	56	1150	180
4	230	50	1355	125	0.57	51	58	720	230

## Charts: Air flow 60 Hz



Measurement: LU-136587

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<sub>wA</sub> measured as per ISO 13347 / L<sub>pA</sub> 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 <sub>e</sub>	I	L <sub>pA<sub>in</sub></sub>	L <sub>wA<sub>in</sub></sub>	qv	p <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	230	60	1580	148	0.64	62	69	2340	0
2	230	60	1470	174	0.76	56	64	1870	100
3	230	60	1380	185	0.82	52	61	1195	200
4	230	60	1490	168	0.73	55	63	715	280

