

AC centrifugal fan - RadiCal

backward curved, single inlet

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Nominal data

Type	R4E310-RA06-01		
Motor	M4E068-EC		
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 ⁻¹	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 = $1 + p_{fs} / 100\,000\text{ Pa}$

	Actual	Request 2013	Request 2015
Overall efficiency η_{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 ³ /h	1055	
Pressure increase p_{fs}	Pa	184	
Speed n	min ⁻¹	1335	

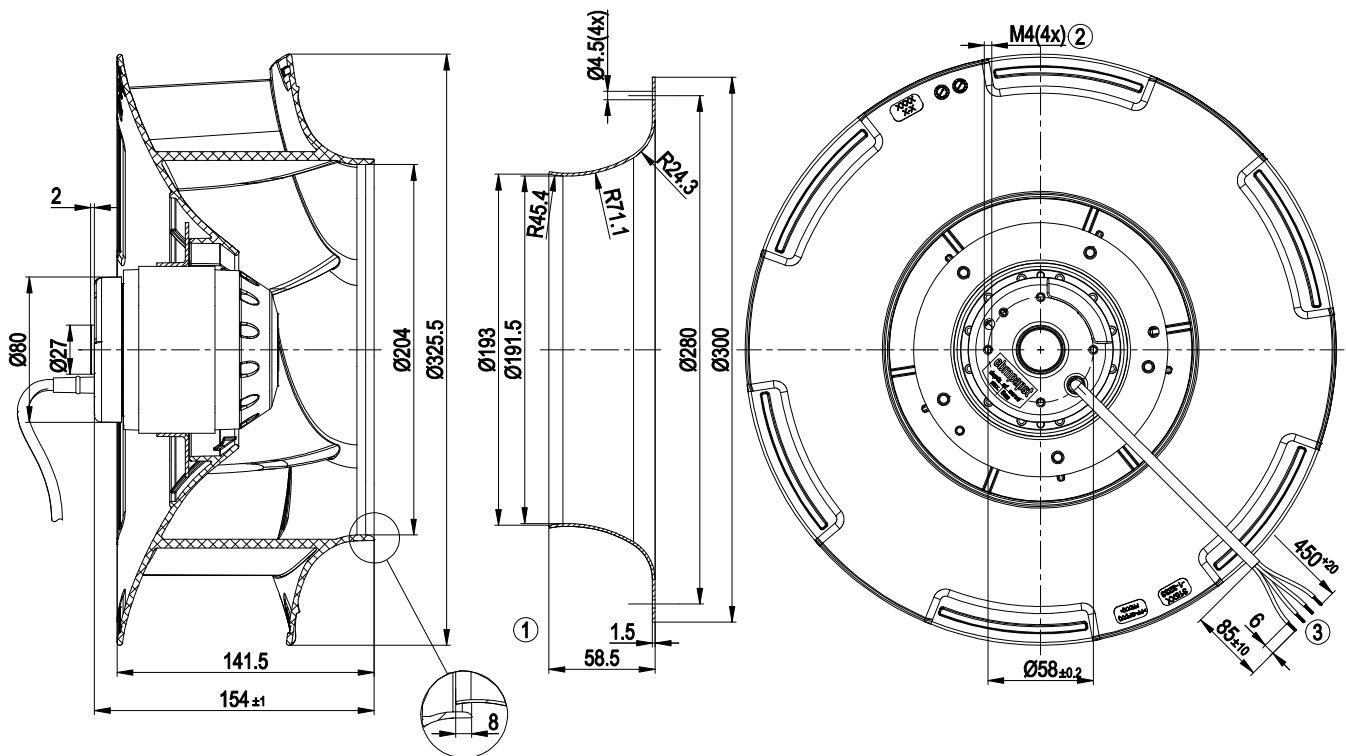
Data established at point of optimum efficiency



Technical features

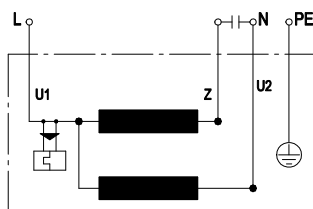
Size	310 mm
Surface of rotor	Coated in black
Material of impeller	PP plastic
Number of blades	6
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Insulation class	"B"
Humidity class	F1-2
Max. permissible ambient motor temp. (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	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 ² 4x brass lead tips crimped |

Connection screen

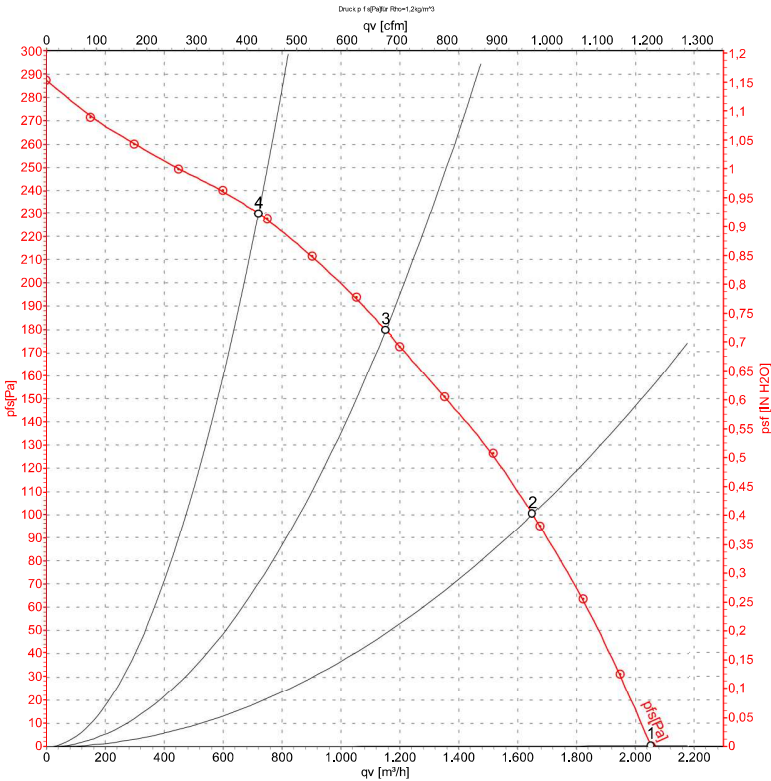


U1	blue	Z	brown	U2	black
PE	green/yellow				

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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: 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

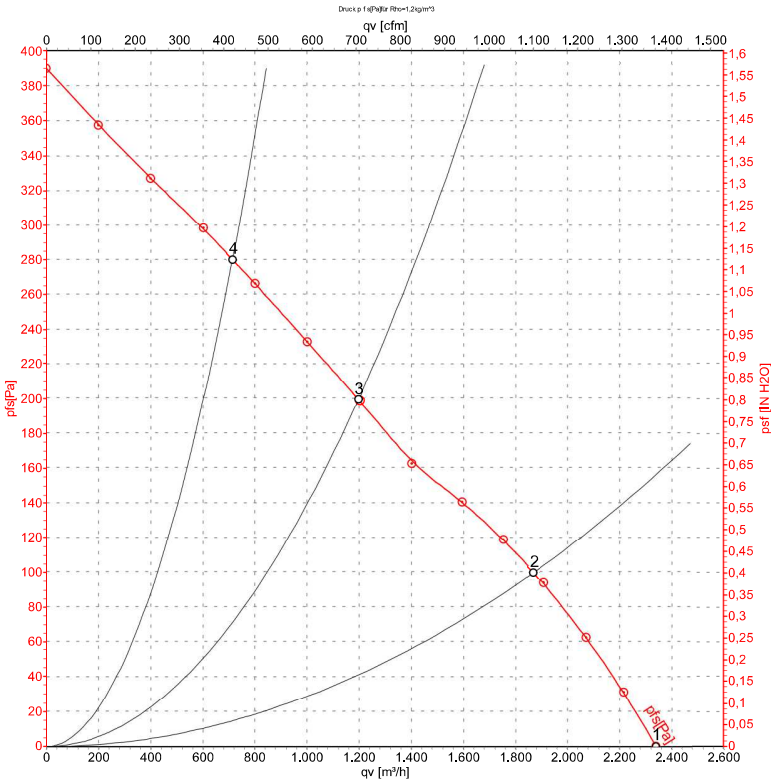
	U	f	n	P _e	I	LpA _{in}	LwA _{in}	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	230	50	1390	109	0.50	58	66	2050	0
2	230	50	1345	129	0.58	53	60	1650	100
3	230	50	1325	137	0.62	49	56	1150	180
4	230	50	1355	125	0.57	51	58	720	230



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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_{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	L _{pA_{in}}	L _{wA_{in}}	qv	P _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m³/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

