

R4D310-AR18-01

AC centrifugal fan

backward curved, single inlet



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Nominal data

Type	R4D310-AR18-01		
Motor	M4D068-EC		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Y	Y
Frequency	Hz	50	60
Type of data definition		rfa	rfa
Valid for approval / standard		CE	CE
Speed	min ⁻¹	1430	1650
Power input	W	85	115
Current draw	A	0.3	0.26
Min. back pressure	Pa	0	0
Max. ambient temperature	°C	75	80

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

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Technical features

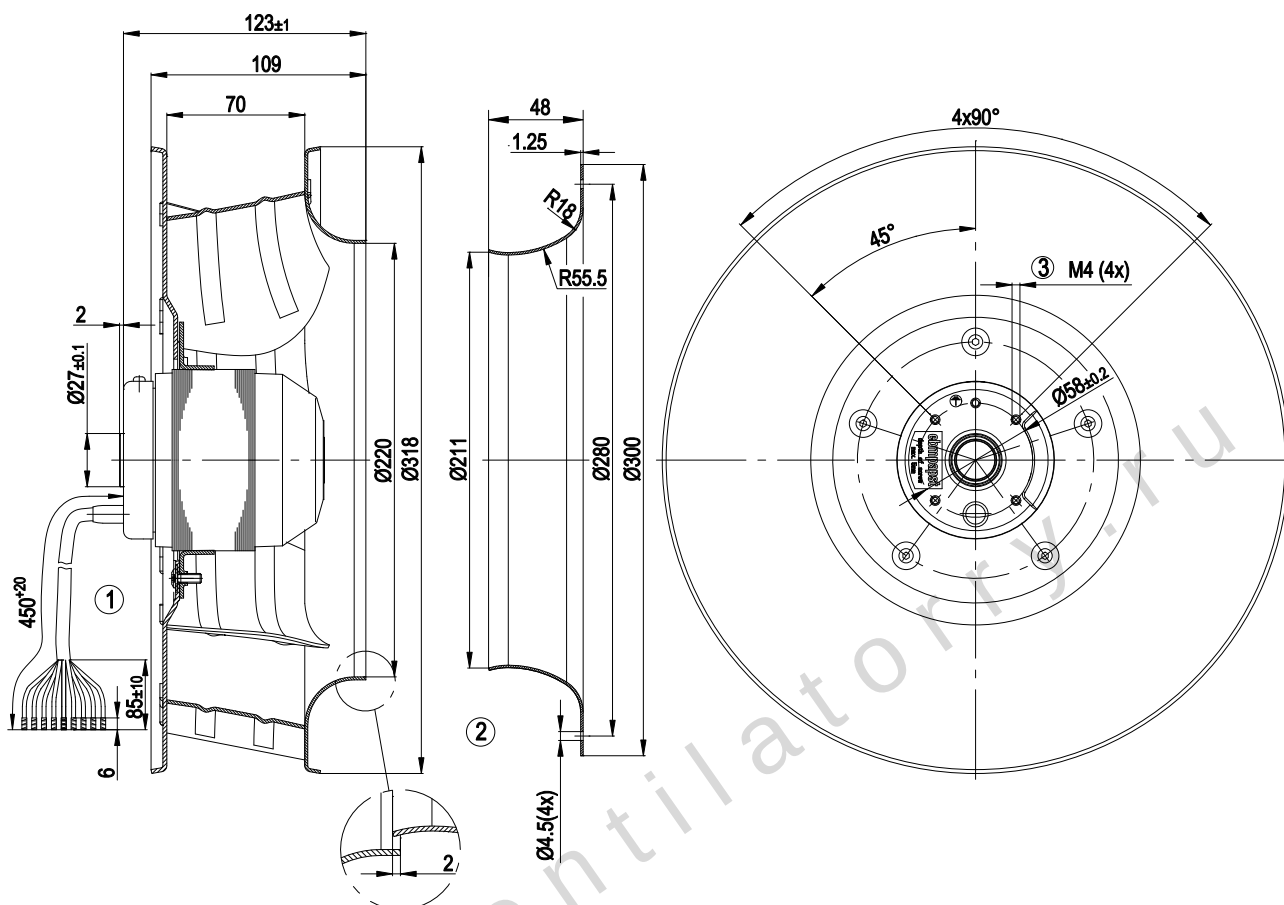
Leakage current	< 0.75 mA
Size	310 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Humidity class	F1-2
Insulation class	"B"
Cable exit	Axial
Condensate discharge holes	Rotor-side
Motor bearing	Ball bearing
Mass	3.6 kg
Material of impeller	Aluminum sheet, laser-welded
Motor protection	Thermal overload protector (TOP) brought out
Product conforming to standard	CE; EN 60335-1
Surface of rotor	Coated in black
Number of blades	6
Type of protection	IP 44; Depending on installation and position as per EN 60034-5
Protection class	I
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	CCC

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Product drawing



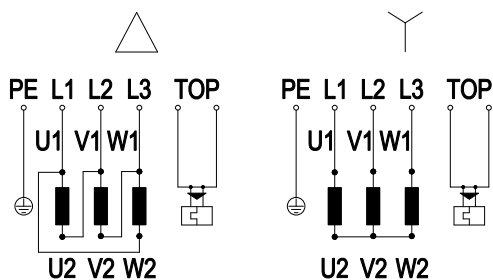
1	Connection line PVC 9G AWG20, 9x brass lead tips crimped
2	Accessory part: Inlet nozzle 31050-2-4013, not included in the standard scope of delivery
3	Depth of screw max. 5 mm

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Connection screen



Note: Direction of rotation changes when two phases are reversed

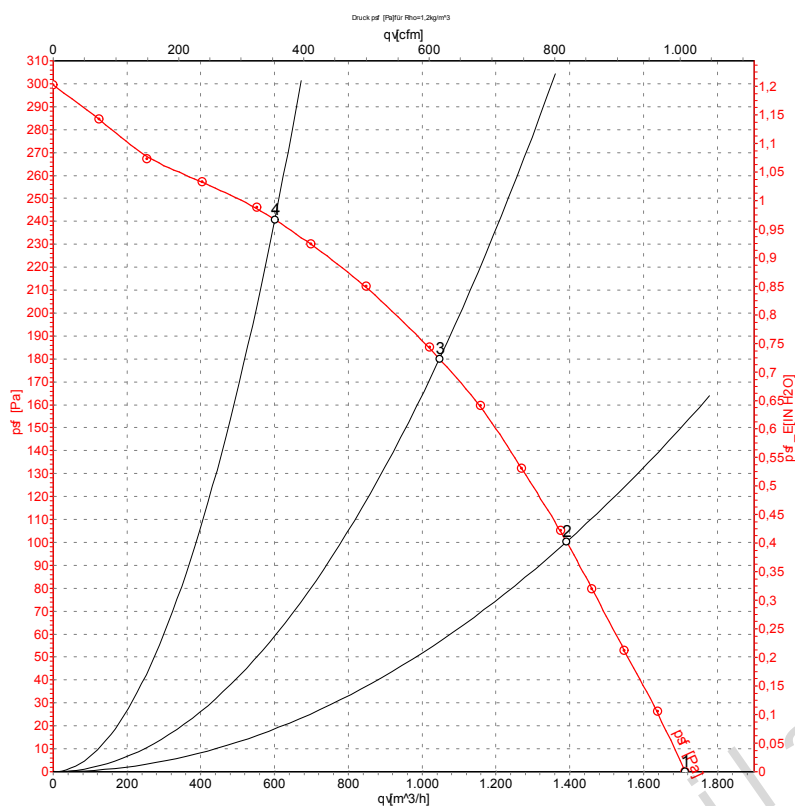
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2xgrey
PE	green/yellow				

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Charts: Air flow 50 Hz



Measurement: LU-60237

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

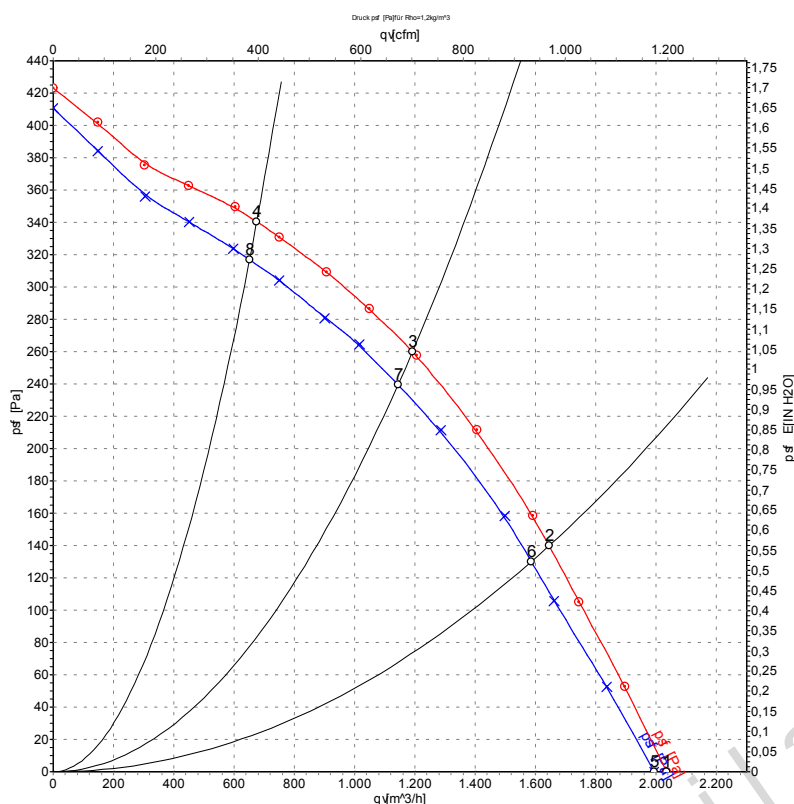
	U	f	n	P _e	I	qv	p _{sf}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	400	50	1430	85	0.30	1715	0
2	400	50	1410	106	0.31	1390	100
3	400	50	1405	114	0.32	1045	180
4	400	50	1415	106	0.31	600	240

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Charts: Air flow 60 Hz



Measurement: LU-60239
Measurement: LU-60238

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	q _v	p _{sf}
	V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	480	60	1700	130	0.32	2035	0
2	480	60	1670	163	0.34	1645	140
3	480	60	1650	177	0.35	1190	260
4	480	60	1665	162	0.34	675	340
5	400	60	1650	115	0.26	1995	0
6	400	60	1610	146	0.30	1585	130
7	400	60	1585	158	0.31	1145	240
8	400	60	1610	145	0.30	650	317