

AC centrifugal fan

forward curved, single inlet

R4D310-CK03-01 ebmpapst Datasheet
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Nominal data

Type	R4D310-CK03-01						
Motor	M4D138-HF						
Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	[V]	230	230	277	400	400	480
Connection		D	D	D	Y	Y	Y
Frequency	[Hz]	50	60	60	50	60	60
Type of data definition		ml	ml	ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE	CE	CE
Speed	[min ⁻¹]	1310	1490	1590	1310	1490	1590
Power input	[W]	2180	2490	2750	2180	2490	2750
Current draw	[A]	6.75	7.31	6.88	3.9	4.23	3.98
Min. back pressure	[Pa]	0	350	400	0	350	400
Max. ambient temperature	[°C]	55	40	40	55	40	40

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

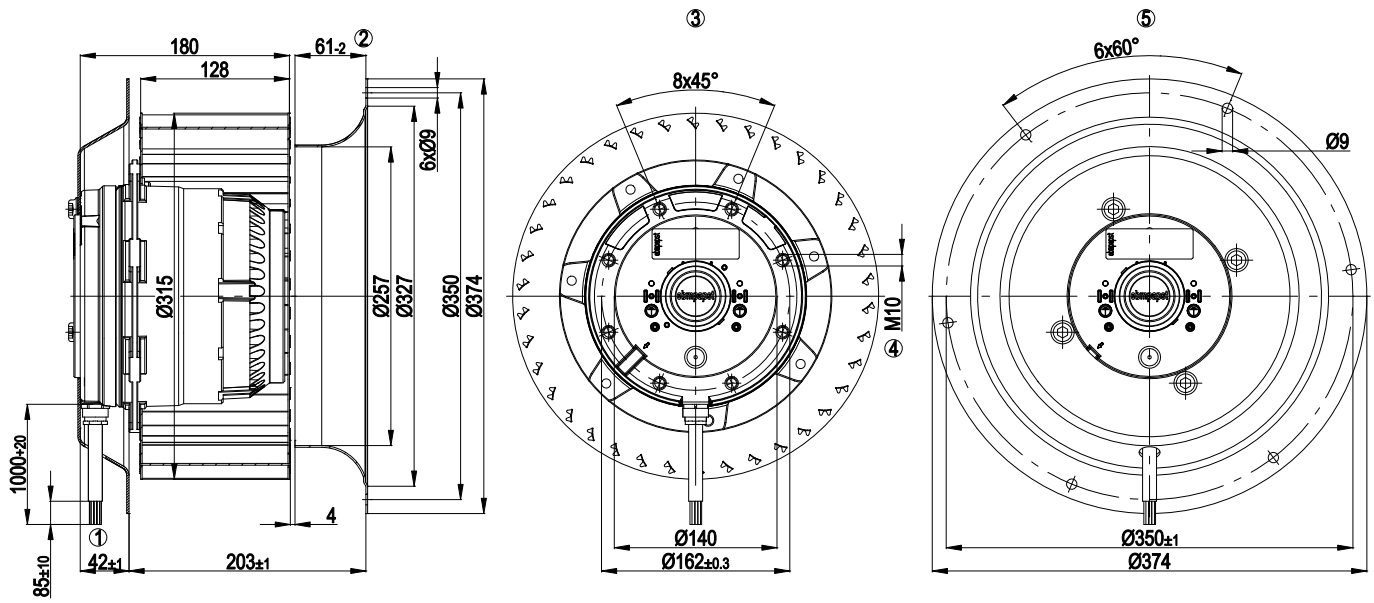
Technical features

Leakage current	<= 3,5 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	F3-1
Insulation class	"F"
Cable exit	Lateral
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	19.15 kg
Material of impeller	Sheet steel, hot-galvanised
Motor protection	Thermal overload protector (TOP) brought out
Product conforming to standard	CE; EN 61800-5-1
Surface of rotor	Cast in aluminum
Type of protection	IP 54
Protection class	I
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	VDE

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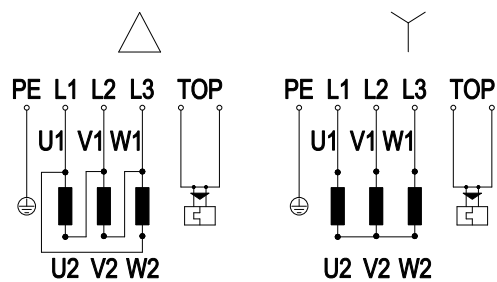
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Product drawing



1	Connection line halogen-free, 9 x 0.75 mm ² , 9 x brass lead tips crimped
2	Accessory part: Inlet nozzle 31010-2-4013 and flange 38310-2-4017 not included in the standard scope of delivery
3	View without flange
5	Depth of screw max. 18 mm
6	View with flange

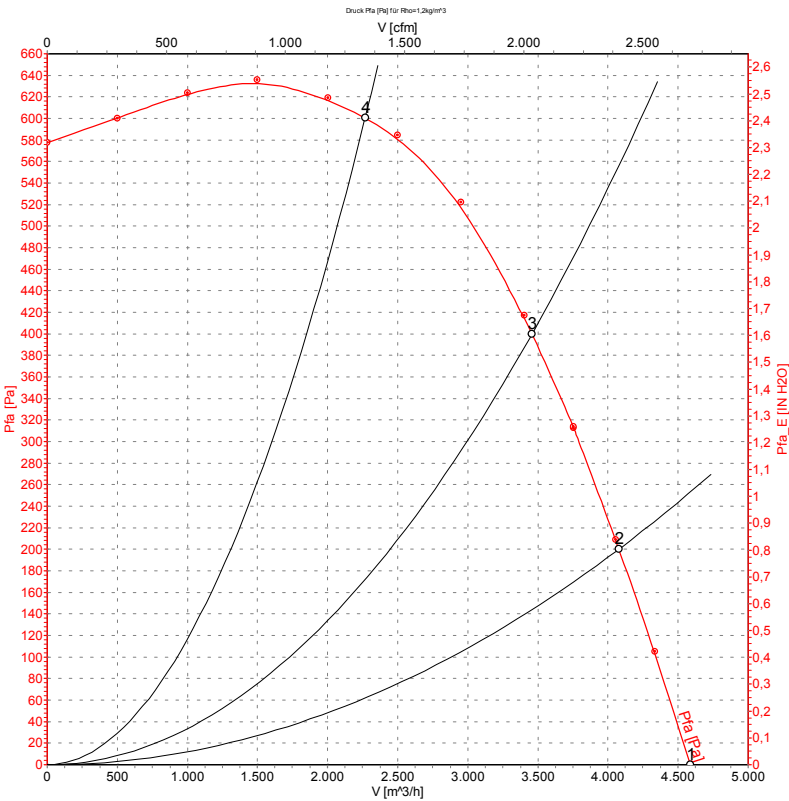
Connection screen



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				

Charts: Air flow 50 Hz Y

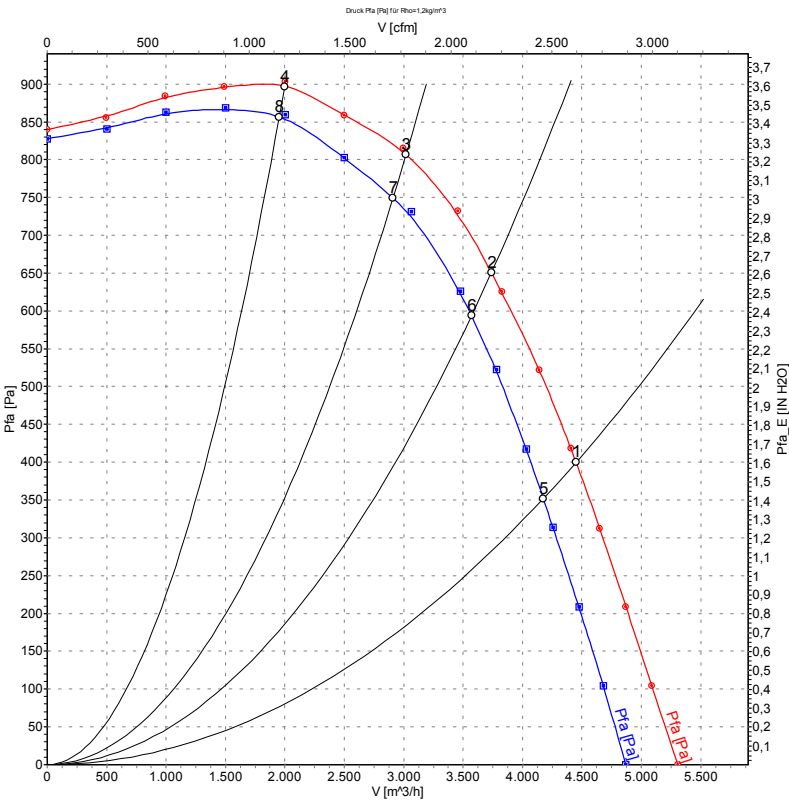


Measurement: LU-111165

Measured values

	Conn.	U	f	n	P_1	I	LpA_{ss}	LwA_{ss}	$\hat{V}$	p_{fa}
		[V]	[Hz]	[min ⁻¹]	[W]	[A]	[dB(A)]	[dB(A)]	[m³/h]	[Pa]
1	Y	400	50	1310	2180	3.90	86	91	4585	0
2	Y	400	50	1340	1857	3.41	84	89	4075	200
3	Y	400	50	1375	1504	2.92	81	87	3455	400
4	Y	400	50	1425	978	2.27	76	82	2270	600

Charts: Air flow 60 Hz Y



Measurement: LU-111168
Measurement: LU-111166

Measured values

	Conn.	U	f	n	P ₁	I	LpA _{ss}	LwA _{ss}	$\dot{V}$	p _{fa}
		[V]	[Hz]	[min ⁻¹]	[W]	[A]	[dB(A)]	[dB(A)]	[m³/h]	[Pa]
1	Y	480	60	1590	2750	3.98	86	92	4450	400
2	Y	480	60	1630	2249	3.33	84	90	3740	650
3	Y	480	60	1675	1781	2.77	82	88	3020	815
4	Y	480	60	1715	1237	2.18	80	86	2000	900
5	Y	400	60	1490	2490	4.23	84	91	4175	350
6	Y	400	60	1560	2083	3.51	83	89	3570	595
7	Y	400	60	1615	1673	2.88	80	86	2910	752
8	Y	400	60	1680	1162	2.14	78	84	1955	862