

R2D280-AG01-09

AC centrifugal fan

backward-curved

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	R2D280-AG01-09				
Motor	M2D074-DF				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	400	400	400	400
Wiring		Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		-	-	-	-
Speed (rpm)	min ⁻¹	2300	1550	2350	1450
Power consumption	W	170	110	230	115
Current draw	A	0.28	0.16	0.35	0.17
Min. back pressure	Pa	0	0	0	0
Min. back pressure	in. wg	0	0	0	0
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	75	75	40	40
Starting current	A	0.74	0.43	0.78	0.45

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

Subject to change

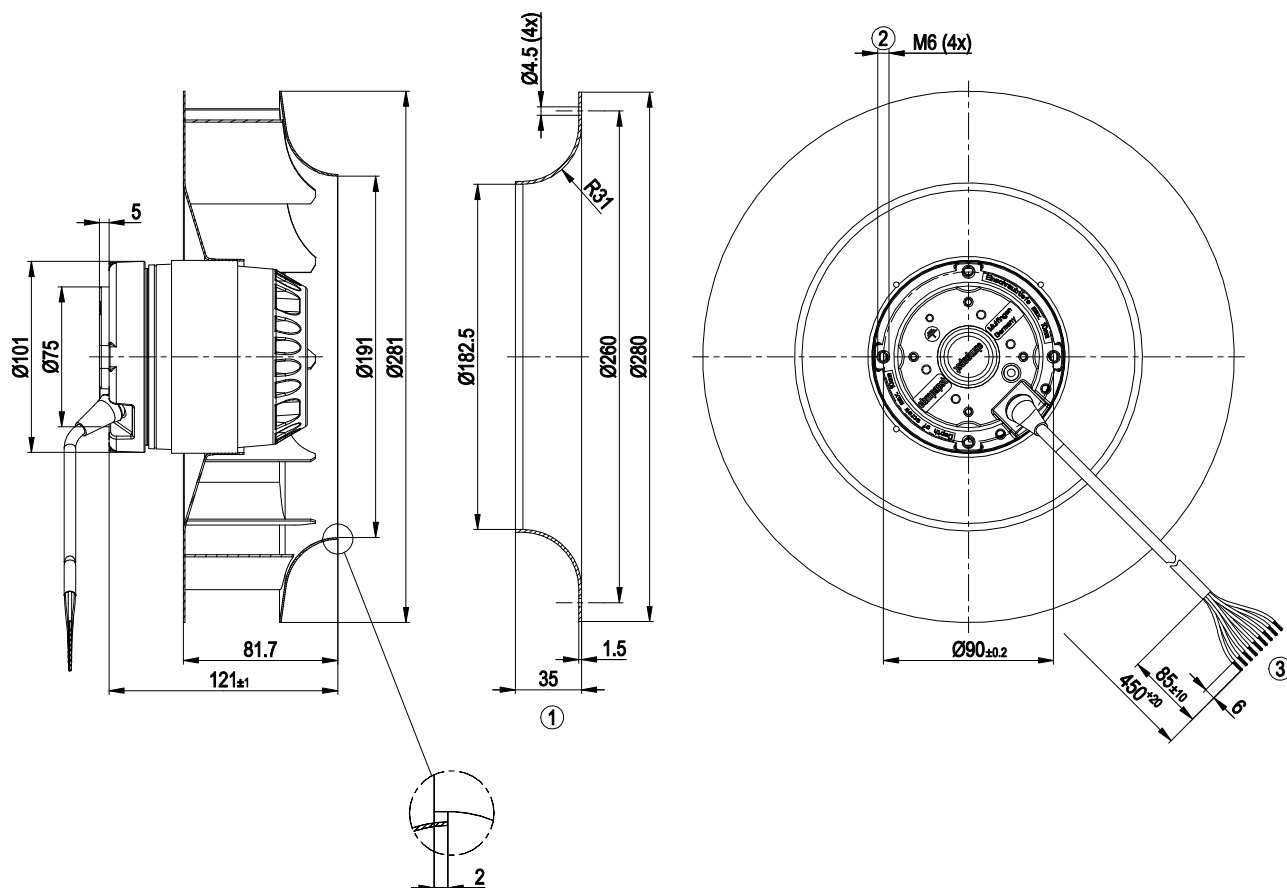


Technical description

Weight	4 kg
Size	280 mm
Motor size	74
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Number of blades	11
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F5; 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 and stator sides
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) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1

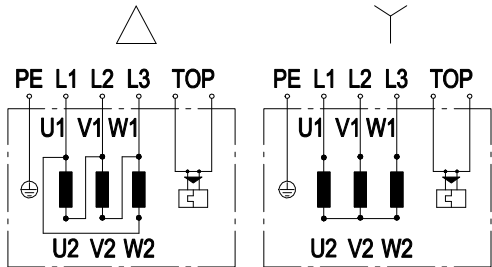


Product drawing



- | | |
|---|---|
| 1 | Accessory part: inlet ring 96360-2-4013 not included in scope of delivery |
| 2 | Max. clearance for screw 10 mm |
| 3 | Cable halogen-silicone-free 9x 0.5 mm ² , 9x crimped splices |

Connection diagram

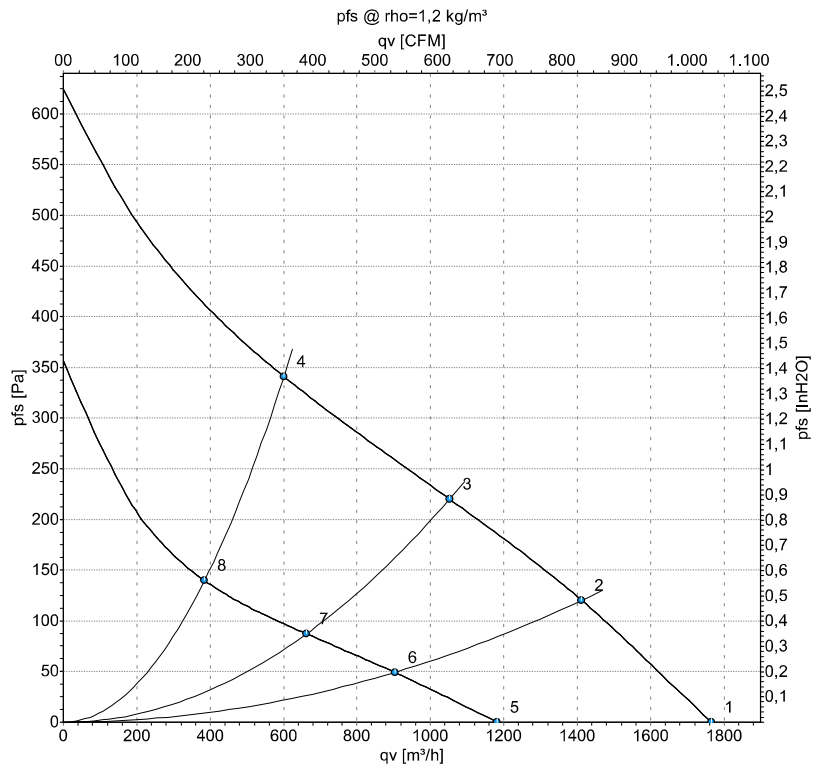


Note: Change of rotation direction by reversing two phases

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	2x gray
PE	green/yellow				



Curves: Air performance 50 Hz Y



Measurement: LU-72145-1
Measurement: LU-72146-1

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.

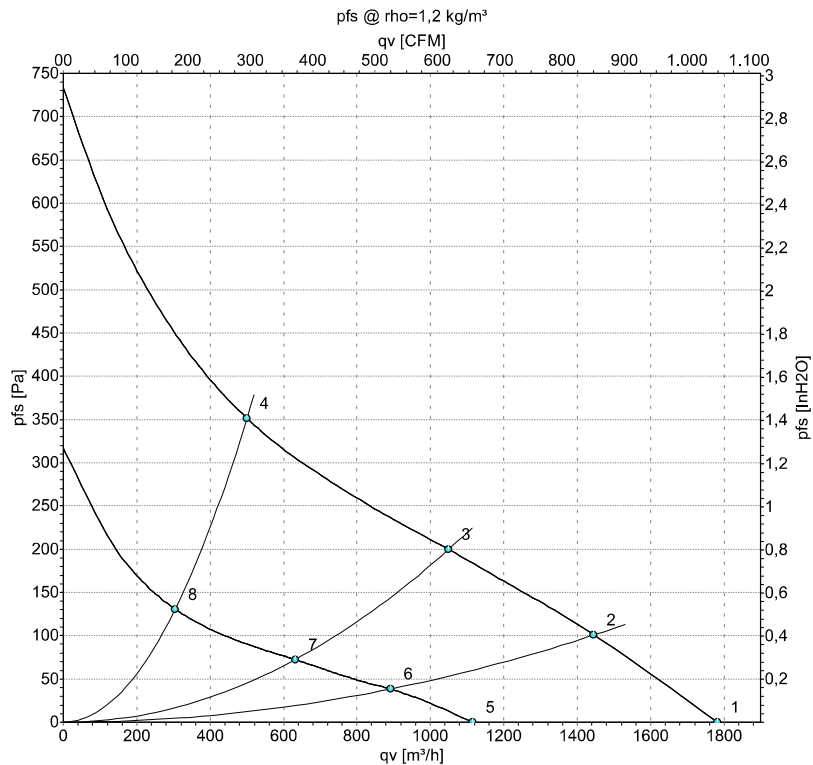
Measured values

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	Δ	400	50	2300	170	0.28	1765	0	1040	0.00
2	Δ	400	50	2120	202	0.32	1410	120	830	0.48
3	Δ	400	50	1985	221	0.35	1050	220	620	0.88
4	Δ	400	50	2010	216	0.34	600	340	355	1.36
5	Y	400	50	1550	95	0.16	1180	0	695	0.00
6	Y	400	50	1390	100	0.16	905	49	530	0.20
7	Y	400	50	1270	104	0.16	665	87	390	0.35
8	Y	400	50	1295	103	0.16	385	140	225	0.56

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



Curves: Air performance 60 Hz Y



Measurement: LU-74718-1
Measurement: LU-74717-1

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

	Wired	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	Δ	400	60	2350	230	0.35	1780	0	1050	0.00
2	Δ	400	60	2150	251	0.40	1445	100	850	0.40
3	Δ	400	60	1950	269	0.43	1050	200	620	0.80
4	Δ	400	60	2005	260	0.41	500	350	295	1.41
5	Y	400	60	1450	115	0.17	1115	0	655	0.00
6	Y	400	60	1315	115	0.19	890	39	525	0.16
7	Y	400	60	1180	116	0.19	630	72	370	0.29
8	Y	400	60	1220	114	0.19	305	129	180	0.52

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

