R4D560-AQ01-05

AC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	**R4D560-AQ01-05**
Motor	**M4D138-LA**

Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min^{-1}	1350	1070
Power consumption	W	2410	1640
Current draw	A	4.7	2.84
Min. back pressure	Pa	0	0
Min. back pressure	in. wg	0	0
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	65	65
Starting current	A	19	6.5

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

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Technical description

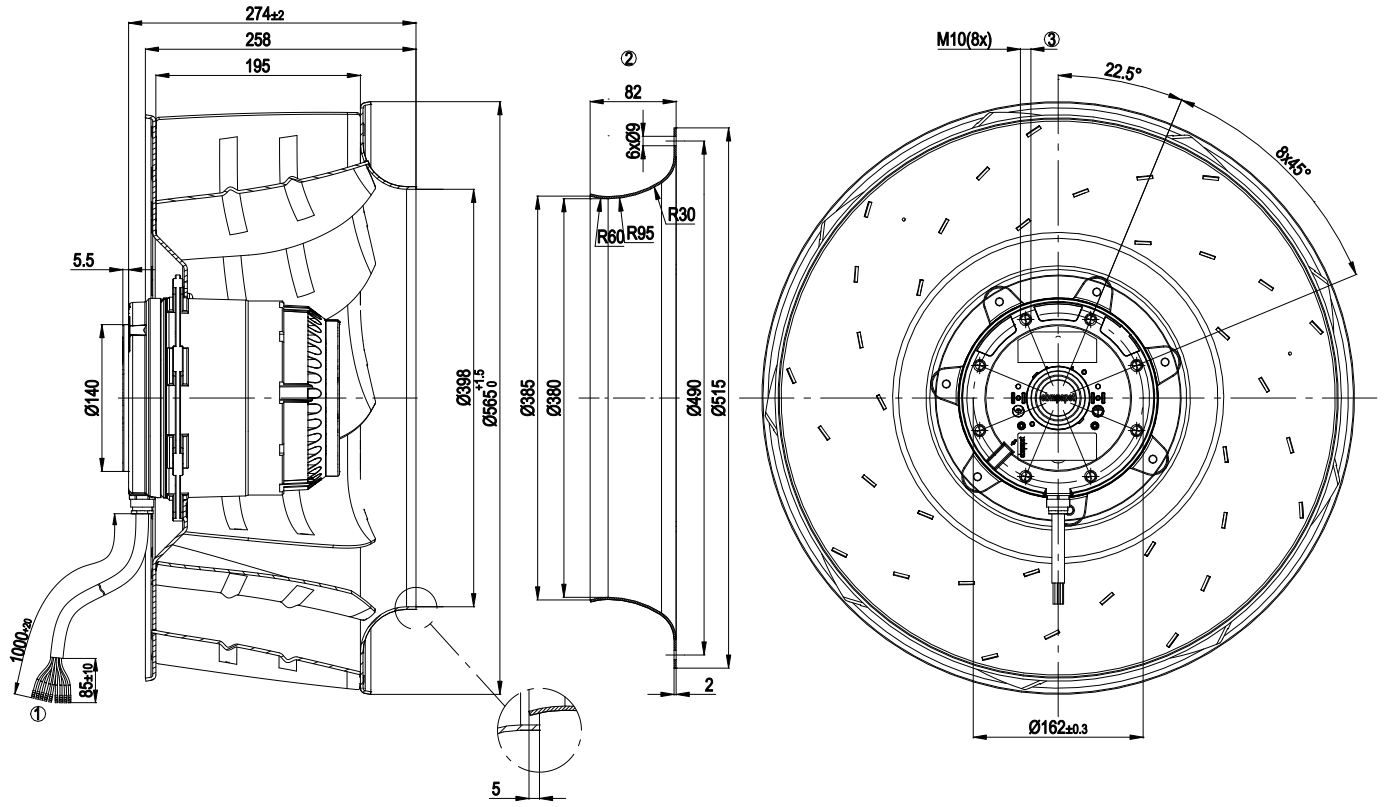
Weight	27 kg
Fan size	560 mm
Rotor surface	Cast in aluminum
Impeller material	Sheet aluminum
Number of blades	9
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Ambient temperature note	Occasional start-up between -40°C and -25°C is permissible. For continuous operation at temperatures below -25°C (e.g. refrigeration applications) we recommend our fan design with special low-temperature bearings.
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
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)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Lateral
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 61800-5-1; EN 60034
Approval	VDE; EAC

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Product drawing



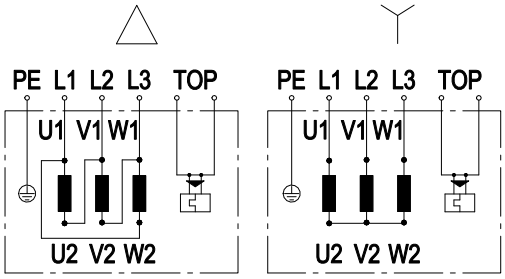
1	Cable halogen-free 9 x 0.75 mm², 9 x crimped splices
2	Accessory part: Inlet ring 63071-2-4013 not included in scope of delivery.
3	Max. clearance for screw 18 mm

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Connection diagram



Note: Change of rotation direction by reversing two phases

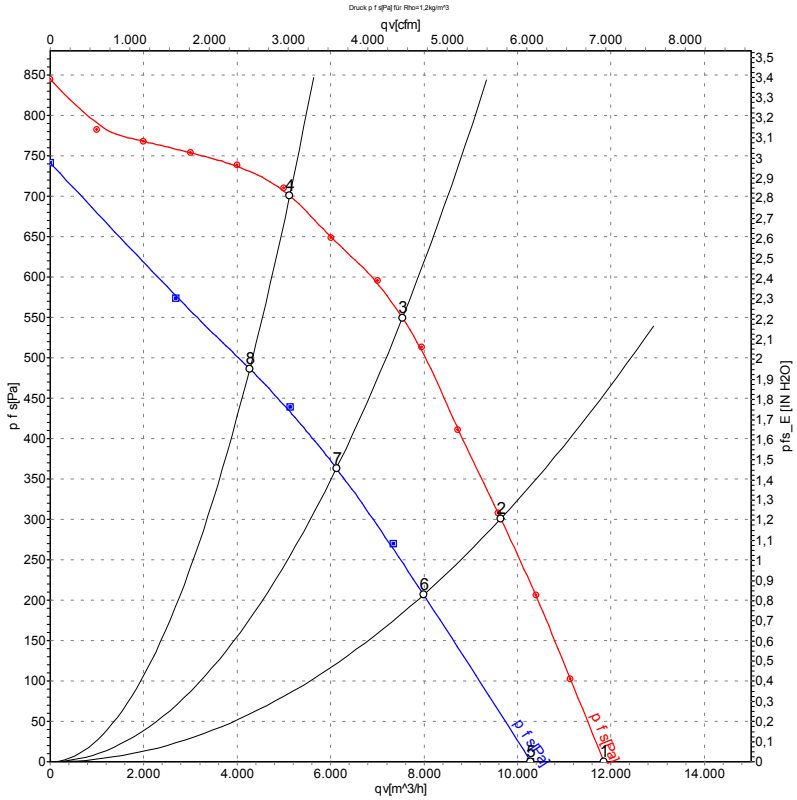
Δ	Delta connection	Y	Star connection	L1	black
L2	blue	L3	brown	U1	black
V1	blue	W1	brown	U2	green
V2	white	W2	yellow	TOP	2x gray
PE	green/yellow				

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Curves: Air performance 50 Hz



Measurement: LU-102189-1
Measurement: LU-123360-1

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	LpA_{in}	LwA_{in}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Δ	400	50	1400	1796	3.74	78	86	11850	0	6975	0.00
2	Δ	400	50	1365	2233	4.27	75	82	9640	300	5675	1.20
3	Δ	400	50	1350	2410	4.70	72	80	7535	550	4435	2.21
4	Δ	400	50	1360	2230	4.26	73	80	5125	700	3015	2.81
5	Y	400	50	1195	1334	2.27	74	81	10280	0	6050	0.00
6	Y	400	50	1120	1531	2.62	69	77	7990	210	4705	0.84
7	Y	400	50	1095	1595	2.74	67	75	6125	363	3605	1.46
8	Y	400	50	1130	1519	2.61	68	76	4270	487	2515	1.96

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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