R6D560-AT03-01

AC centrifugal fan

backward-curved, single-intake

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Nominal data

Type	**R6D560-AT03-01**
Motor	**M6D138-HF**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400
Wiring		Δ	Δ	Y	Y
Frequency	Hz	50	60	50	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		-	-	-	-
Speed (rpm)	min^{-1}	930	1050	930	1050
Power consumption	W	810	1220	810	1220
Current draw	A	3.72	4.15	2.15	2.4
Min. back pressure	Pa	0	0	0	0
Min. back pressure	in. wg	0	0	0	0
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	95	70	95	70
Starting current	A	15	13	9	7.5

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

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Technical description

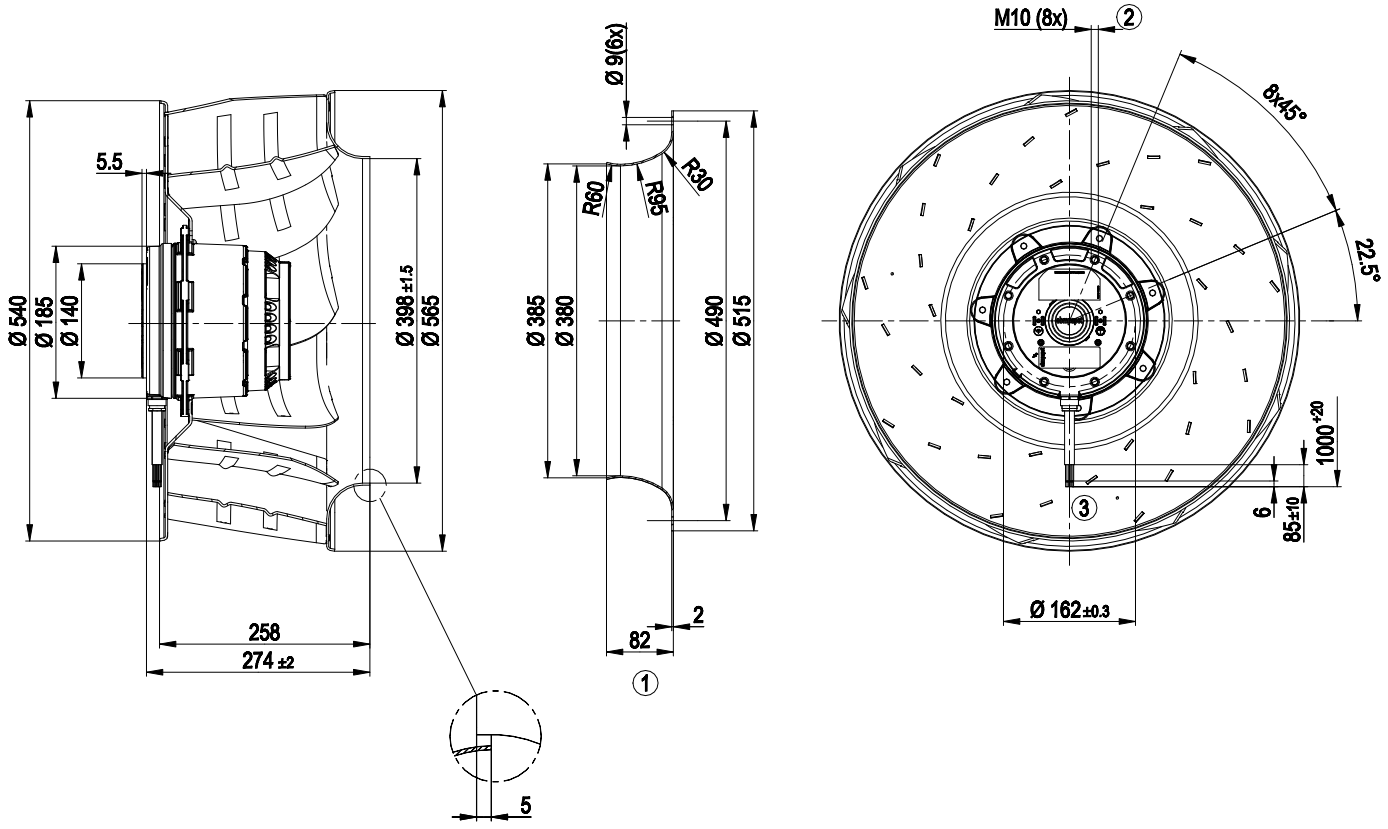
Weight	23.5 kg
Fan size	560 mm
Rotor surface	Cast in aluminum
Impeller material	Sheet aluminum
Number of blades	9
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Ambient temperature note	Occasional 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 60034-1 (2010); EN 61800-5-1
Approval	CCC; CSA C22.2 No. 100; UL 1004-1; EAC

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Product drawing



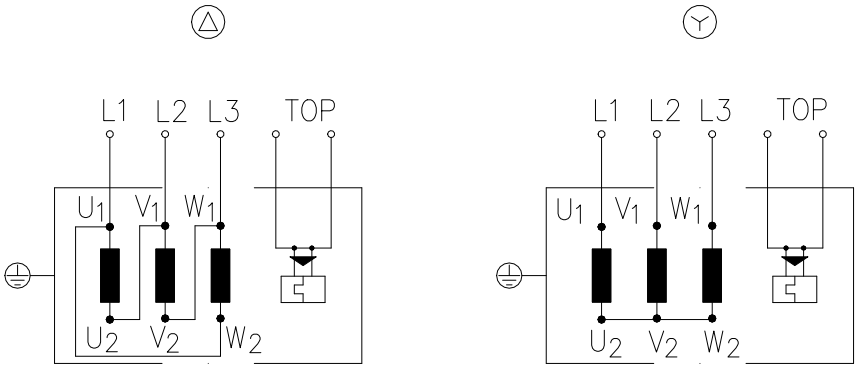
1	Accessory part: inlet ring 63071-2-4013 not included in scope of delivery
2	Max. clearance for screw 18 mm
3	Cable silicone 9 x 0.75 mm², 9 x crimped splices

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Connection diagram



Change of rotation direction by reversing two phases

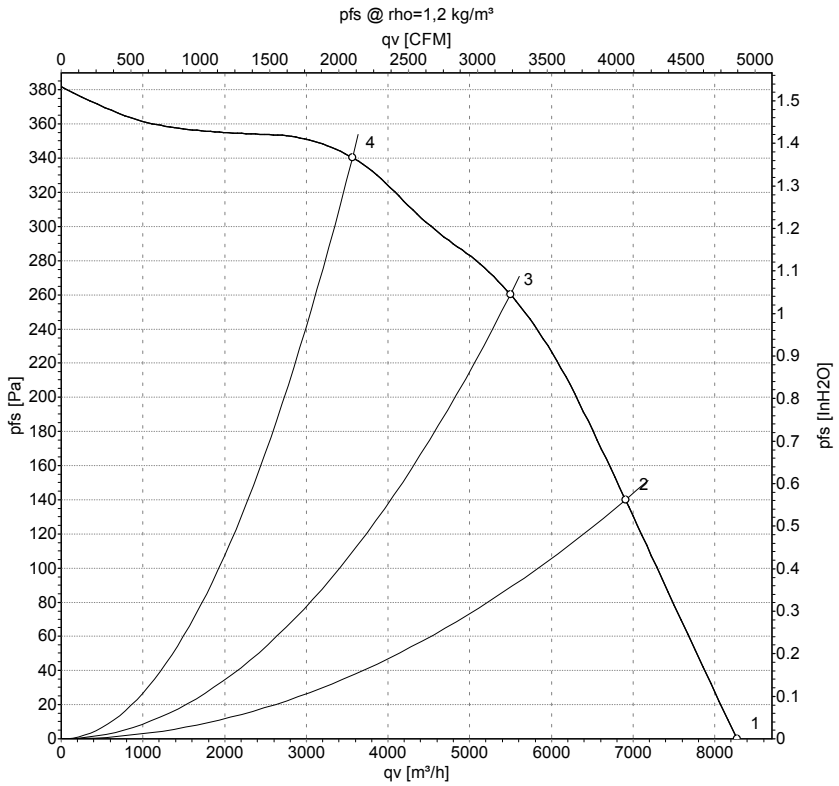
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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Curves: Air performance 50 Hz



Measurement: LU-103315-1

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}	LwA_{out}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Y	400	50	955	599	1.90	69	76	81	8270	0	4870	0.00
2	Y	400	50	940	729	1.98	65	72	78	6905	140	4065	0.56
3	Y	400	50	930	810	2.15	63	70	77	5500	260	3235	1.04
4	Y	400	50	940	742	1.98	63	71	77	3565	340	2095	1.36

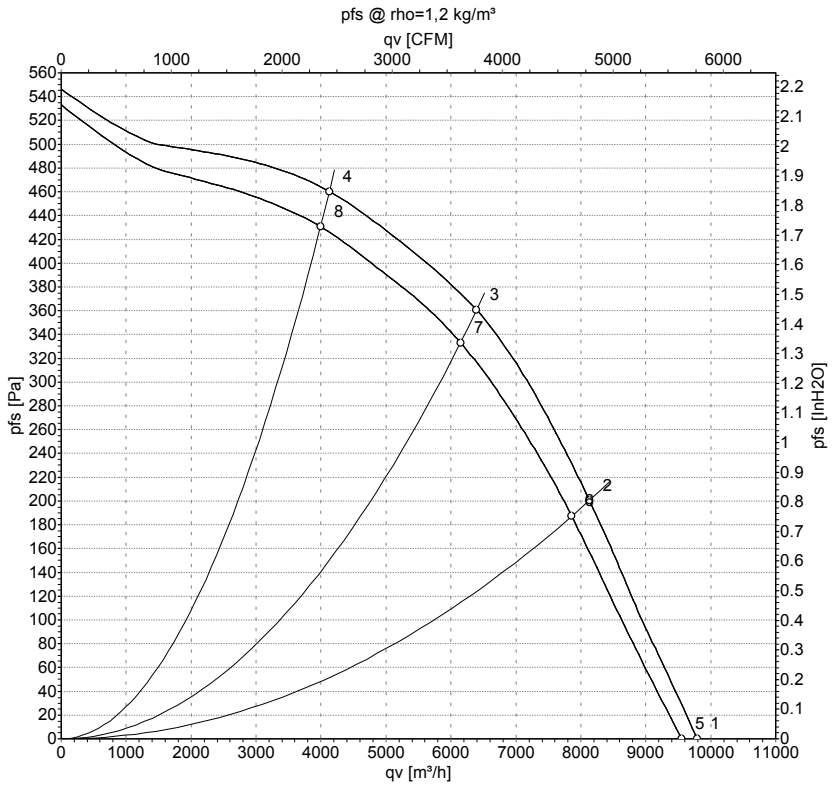
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side LwA_{out} = Sound power level outlet side · q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-101156-1
Measurement: LU-101157-1

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	Y	480	60	1135	951	2.12	71	78	9790	0	5765	0.00
2	Y	480	60	1115	1204	2.33	68	76	8135	200	4785	0.80
3	Y	480	60	1100	1330	2.55	69	76	6395	360	3765	1.45
4	Y	480	60	1115	1187	2.30	67	75	4125	460	2430	1.85
5	Y	400	60	1105	871	1.88	70	77	9550	0	5620	0.00
6	Y	400	60	1075	1103	2.21	68	75	7860	187	4625	0.75
7	Y	400	60	1050	1220	2.40	68	75	6145	333	3620	1.34
8	Y	400	60	1075	1096	2.20	66	74	3990	433	2350	1.74

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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