R6D630-AW03-01

AC centrifugal fan

backward-curved

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Nominal data

Type	**R6D630-AW03-01**
Motor	**M6D138-NA**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	277	400	480
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}	910	1065	910	1065
Power consumption	W	1340	2210	1340	2210
Current draw	A	4.85	6.2	2.8	3.58
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	85	50	85	50

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

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Technical description

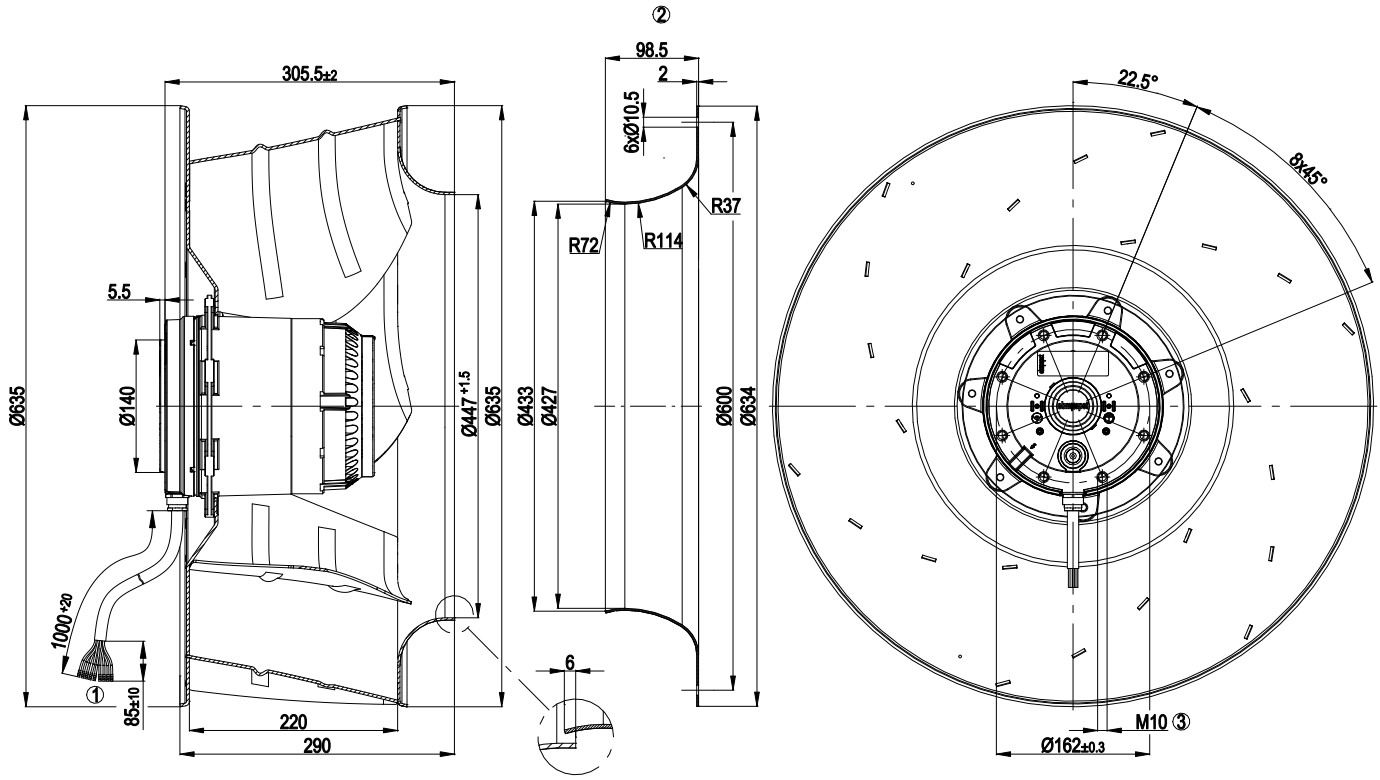
Weight	31.3 kg
Fan size	630 mm
Rotor surface	Cast in aluminum
Impeller material	Sheet aluminum
Number of blades	6
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Ambient temperature note	Occasional 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	CSA C22.2 No. 100; UL 1004-1; EAC

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Product drawing



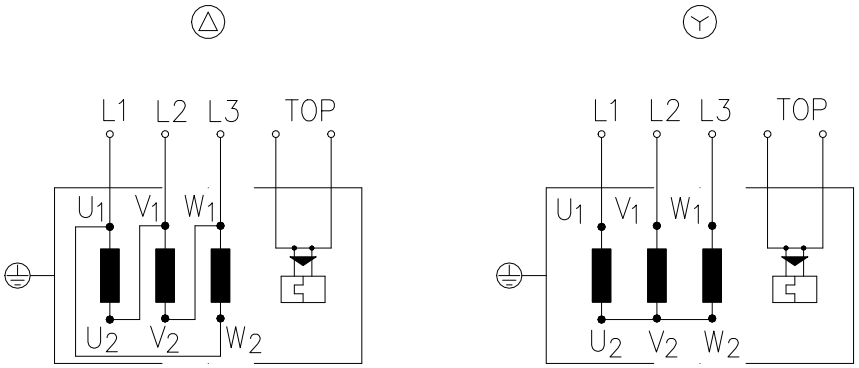
1	Cable silicone 9 x 0.75 mm², 9 x crimped splices
2	Accessory part: Inlet ring 63070-2-4013 not included in scope of delivery. Other inlet ring on request.
3	Max. clearance for screw 18 mm

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Connection diagram



Change of rotation direction by reversing two phases

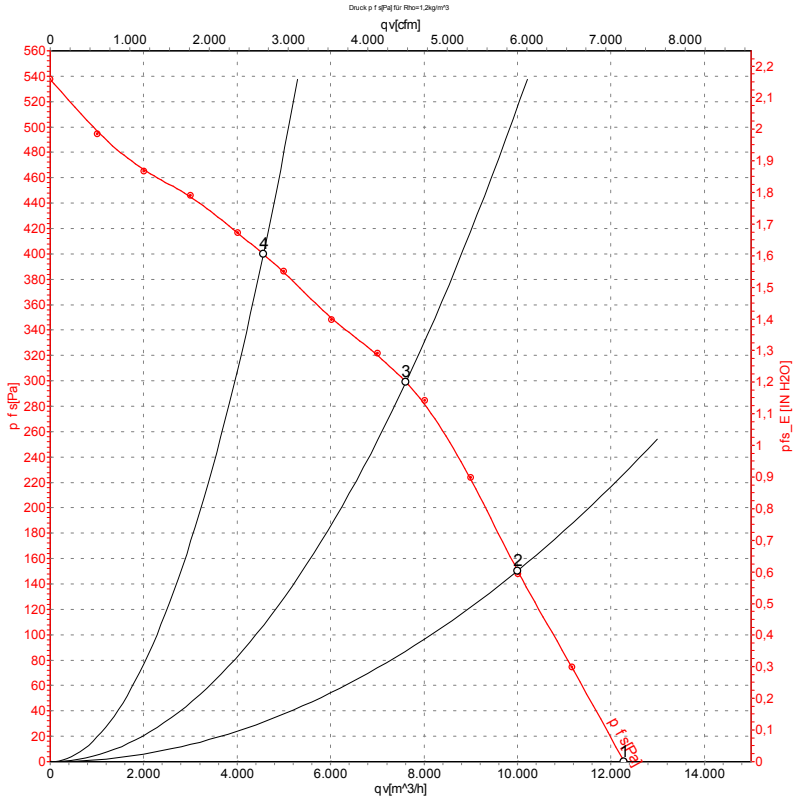
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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Curves: Air performance 50 Hz



Measurement: LU-101475-1

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	400	50	935	1071	2.44	71	79	12280	0	7230	0.00
2	Y	400	50	920	1233	2.64	67	75	10000	149	5885	0.60
3	Y	400	50	910	1340	2.80	65	73	7610	299	4480	1.20
4	Y	400	50	925	1192	2.60	66	74	4565	400	2685	1.61

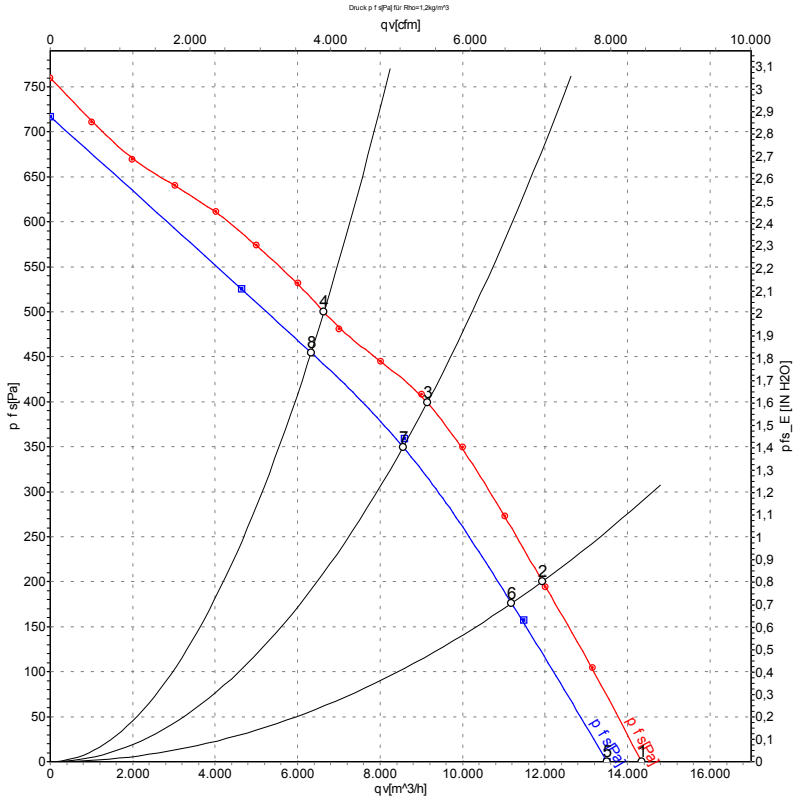
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
q_V = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-101473-1
Measurement: LU-114900-1

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	1105	1773	3.04	76	84	14340	0	8440	0.00
2	Y	480	60	1085	2019	3.35	72	80	11940	200	7030	0.80
3	Y	480	60	1065	2210	3.58	69	77	9140	400	5380	1.61
4	Y	480	60	1075	2087	3.40	70	78	6635	500	3905	2.01
5	Y	400	60	1070	1581		74	81	13500	0	7945	0.00
6	Y	400	60	1040	1793		71	78	11190	178	6585	0.71
7	Y	400	60	1000	2000	3.72	68	75	8555	360	5035	1.45
8	Y	400	60	1035	1822		69	77	6330	454	3725	1.82

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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