S4D630-CB03-03

AC axial fan

sickle-shaped blades (S series)

with guard grille for full nozzle

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Nominal data

Type	**S4D630-CB03-03**
Motor	**M4D138-NA**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	230	277	400	480
Wiring		Δ	Δ	Y	Y
Frequency	Hz	60	60	60	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min^{-1}	1520	1610	1520	1610
Power consumption	W	2960	3300	2960	3300
Current draw	A	9.5	9.48	5.49	5.48
Max. back pressure	Pa	225	250	225	250
Max. back pressure	in. wg	0.9	1	0.9	1
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	60	60	60	60
Starting current	A	33	42	19	24

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	32.0 kg
Fan size	630 mm
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum insert, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	-5°
Airflow direction	"V"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
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
Electrical hookup	Via terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010); EN 61800-5-1; CE
Approval	EAC; UL 1004-1; CSA C22.2 No. 100

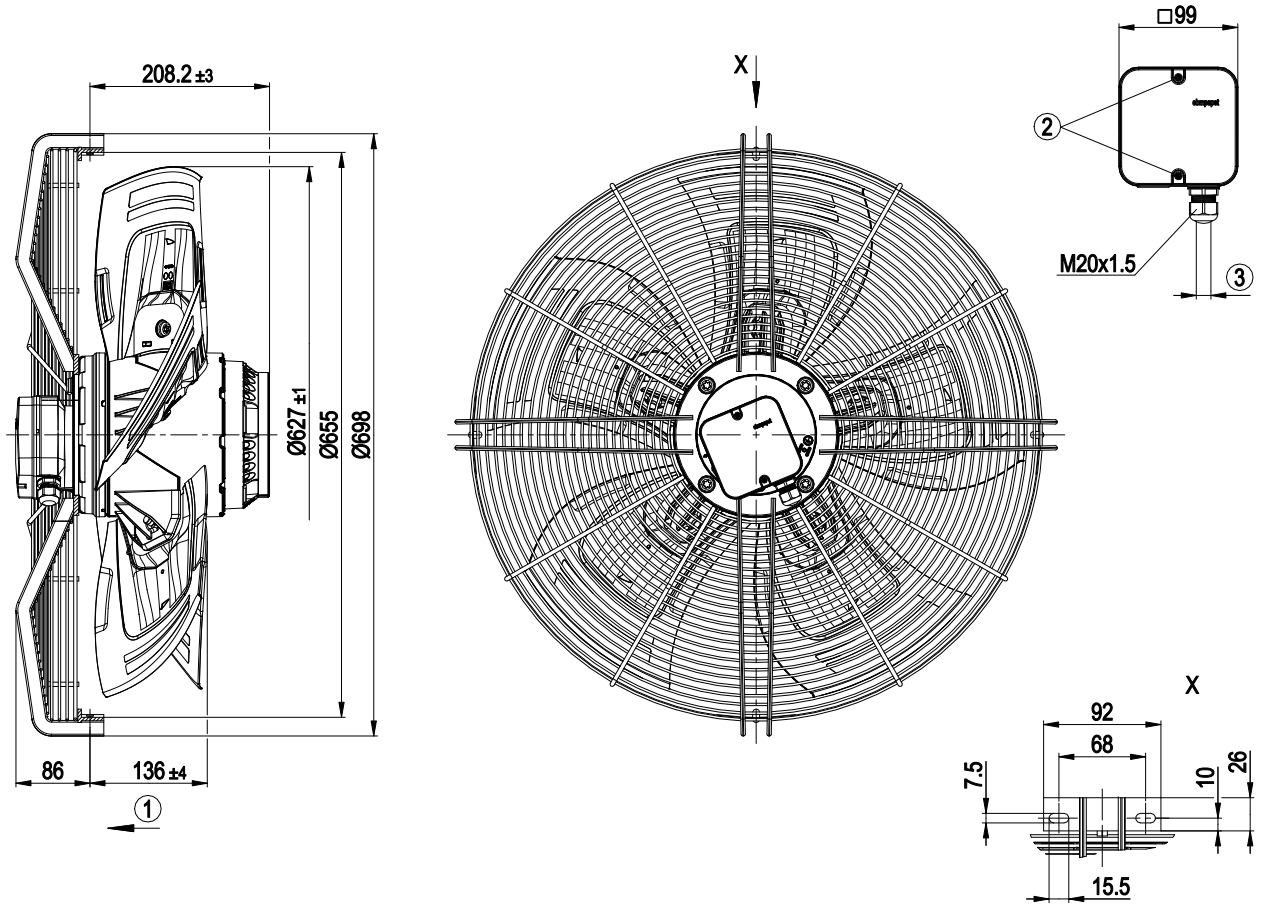
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Product drawing



1	Airflow direction "V"
2	Tightening torque 1.5±0.2 Nm
3	Cable diameter min. 7 mm, max. 14 mm, tightening torque 2 ± 0.3 Nm

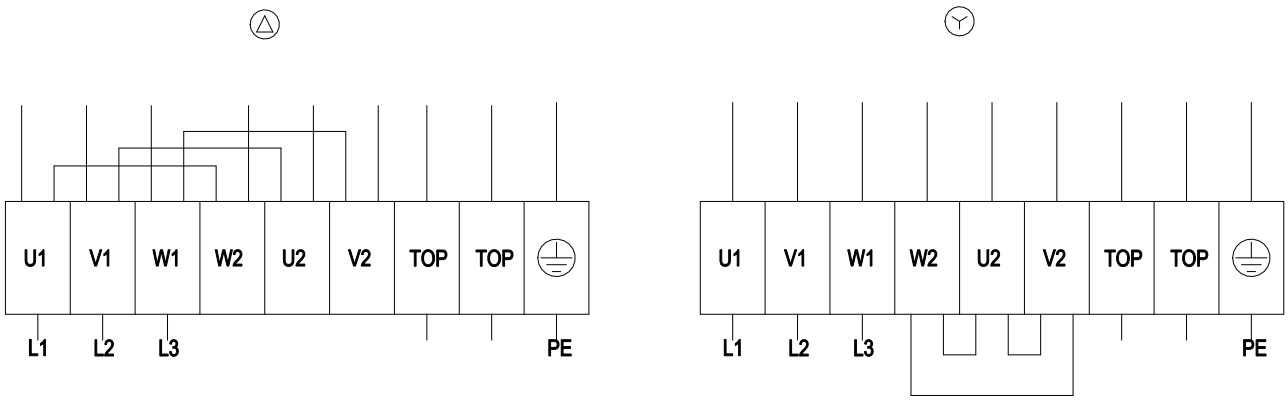
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Connection diagram



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				

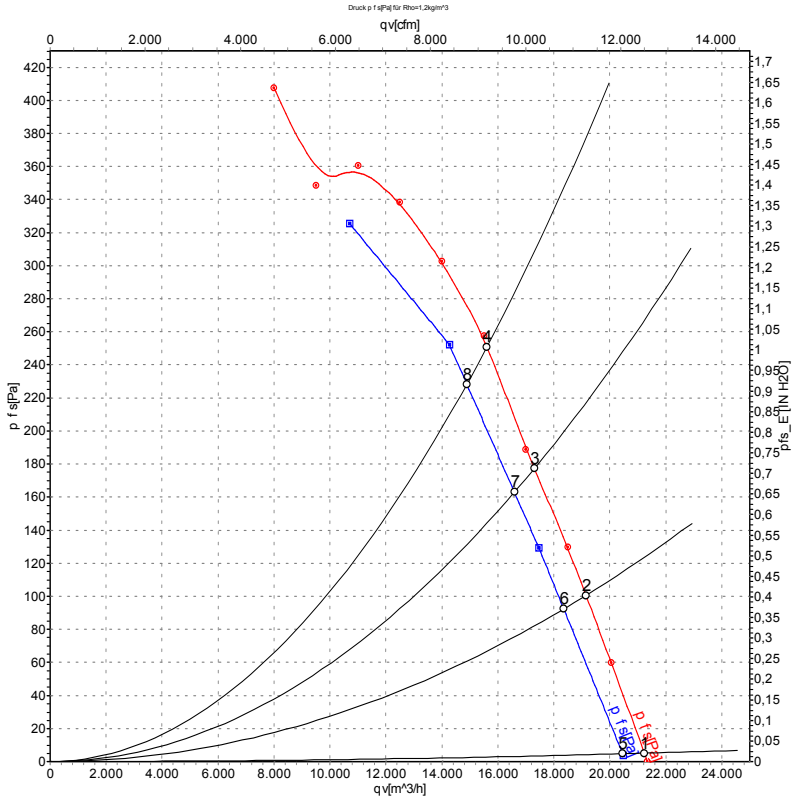
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Curves: Air performance 60 Hz



Measurement: LU-109990-1
Measurement: LU-111335-1

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	480	60	1670	2578	4.59	75	82	84	21240	0	12500	0.00
2	Y	480	60	1645	2858	4.89	73	81	82	19150	100	11270	0.40
3	Y	480	60	1630	3082	5.15	73	80	81	17300	175	10180	0.70
4	Y	480	60	1610	3300	5.48	75	82	82	15600	250	9180	1.00
5	Y	400	60	1610	2381	4.55	73	81	82	20460	0	12040	0.00
6	Y	400	60	1575	2612	4.89	72	79	81	18350	92	10800	0.37
7	Y	400	60	1550	2789	5.17	72	79	80	16590	163	9765	0.65
8	Y	400	60	1520	2960	5.49	73	80	81	14890	225	8765	0.90

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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