S4D630-BB03-10

Güntner GmbH & Co. KG

VT03203U

AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for full nozzle

ebm-papst Mulfingen GmbH & Co. KG
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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen
Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**S4D630-BB03-10**
Motor	**M4D138-NA**

Phase		3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400	460
Wiring		Δ	Δ	Y	Y	Y
Frequency	Hz	50	60	50	60	60
Method of obtaining data		ml	ml	ml	ml	ml
Valid for approval/standard		-	-	-	-	-
Speed (rpm)	min^{-1}	1370	1550	1370	1550	1610
Power consumption	W	2160	2960	2160	2960	3150
Current draw	A	7.6	9.2	4.4	5.3	5.1
Max. back pressure	Pa	200	170	200	170	180
Max. back pressure	in. wg	0.8	0.68	0.8	0.68	0.72
Min. ambient temperature	°C	-40	-40	-40	-40	-40
Max. ambient temperature	°C	40	40	40	40	40
Starting current	A	38	33	22	19	22

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

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Technical description

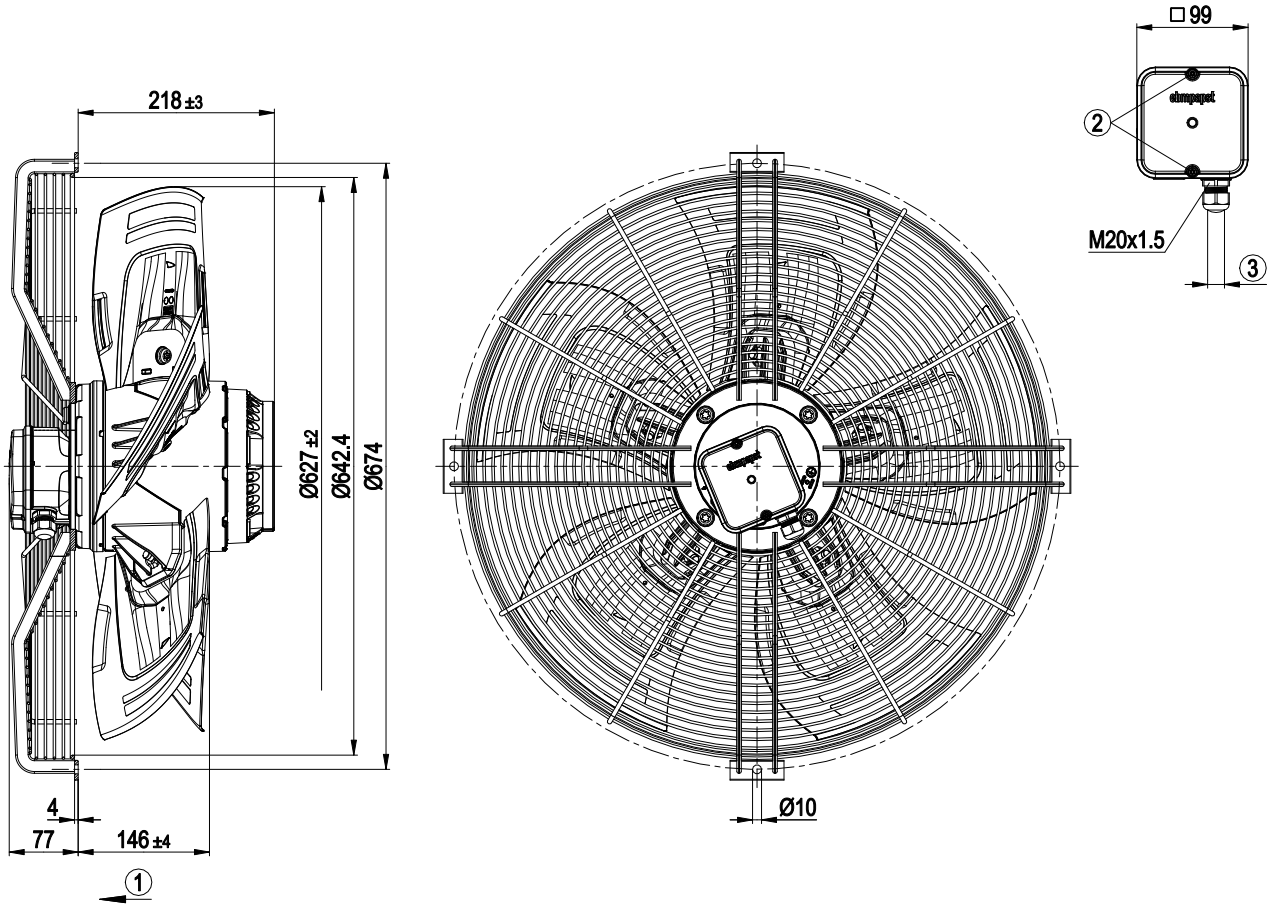
Weight	32.15 kg
Size	630 mm
Motor size	138
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum insert, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	-5°
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
Max. permitted ambient temp. for motor (transport/storage)	+70 °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 with low-temperature lubricant
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	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)
Comment on CE	Commissioning not permitted in the European Economic Area
Approval	UL 1004-1; CSA C22.2 No. 100; EAC

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Product drawing



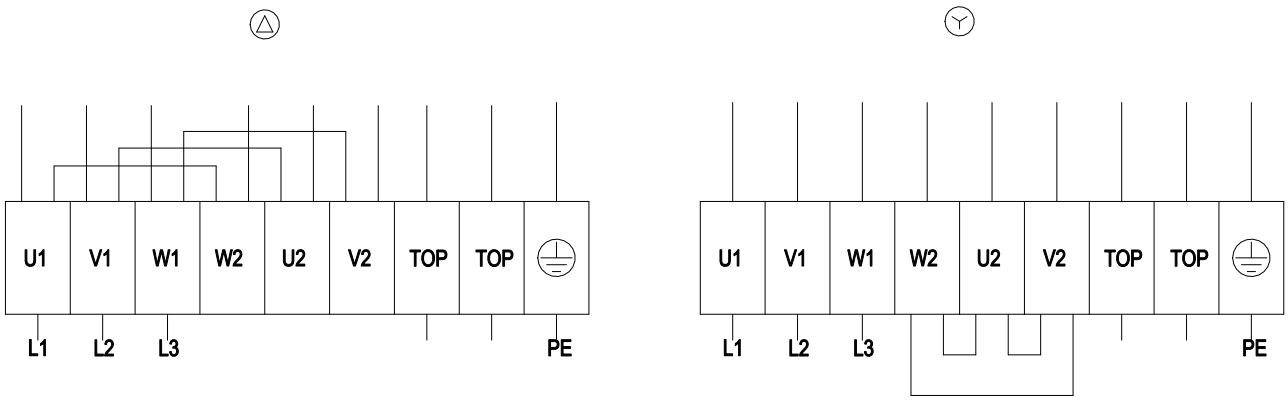
1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter min. 7 mm, max. 14 mm, tightening torque 2 ± 0.3 Nm

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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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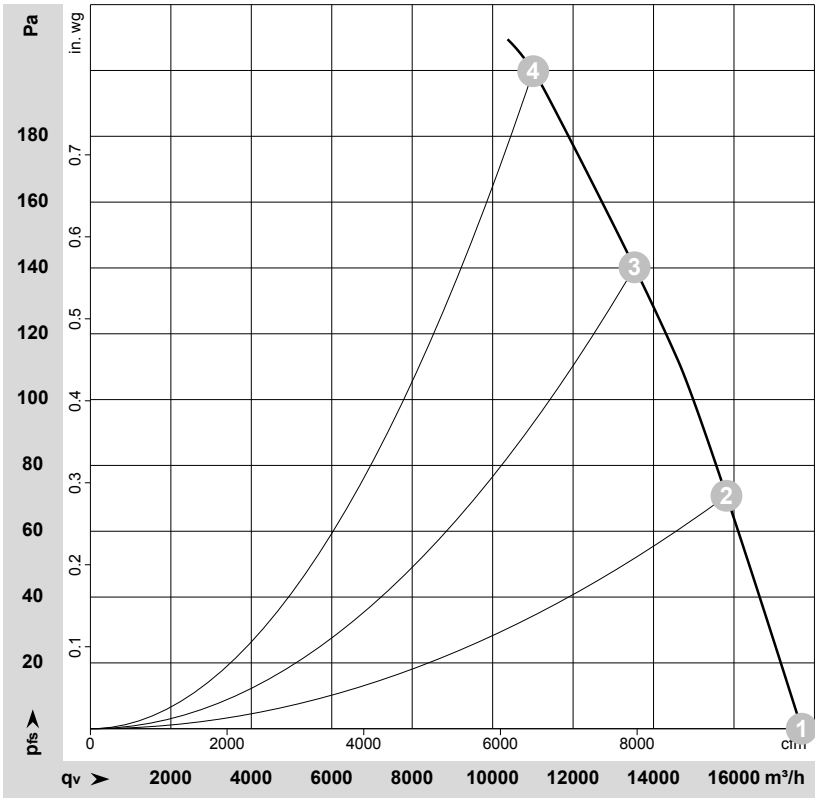
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-188023-1

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	1415	1587	3.72	73	81	84	17685	0	10410	0.00
2	Y	400	50	1400	1766	3.95	73	81	84	15815	70	9305	0.28
3	Y	400	50	1385	1972	4.21	74	81	85	13530	140	7960	0.56
4	Y	400	50	1370	2160	4.40	76	84	88	11010	200	6480	0.80

Wired = Wiring · U = Voltage · 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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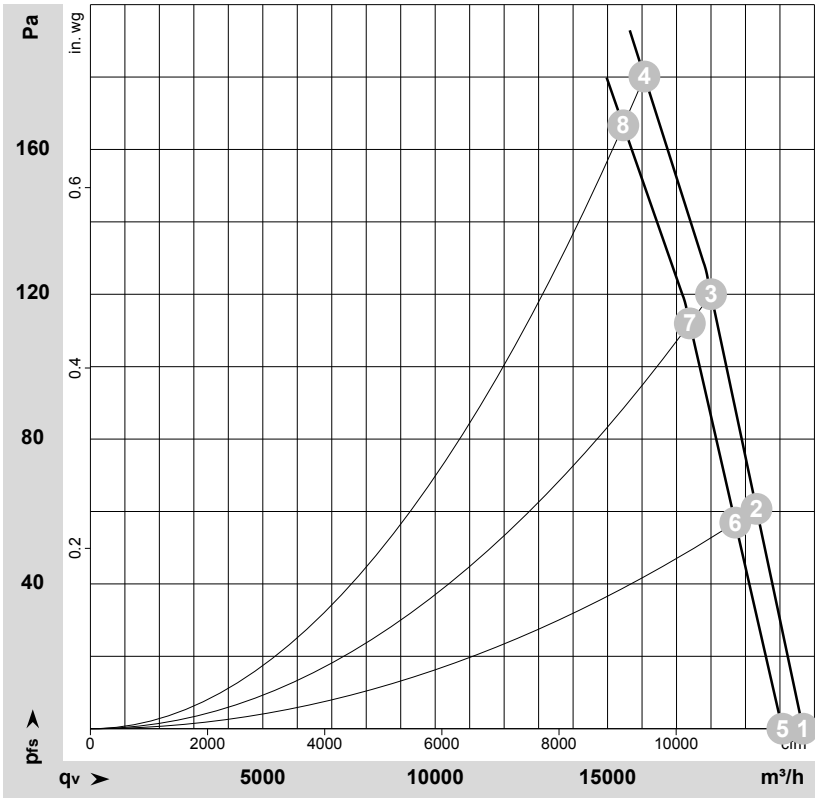
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-188150-1
Measurement: LU-188152-1

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	460	60	1655	2576	4.44	77	85	89	20670	0	12165	0.00
2	Y	460	60	1640	2754	4.67	77	85	89	19320	60	11370	0.24
3	Y	460	60	1630	2929	4.91	77	85	89	18000	120	10595	0.48
4	Y	460	60	1610	3150	5.10	78	86	90	16070	180	9460	0.72
5	Y	400	60	1610	2434	4.49	77	84	88	20070	0	11815	0.00
6	Y	400	60	1590	2596	4.75	76	84	88	18705	57	11010	0.23
7	Y	400	60	1575	2753	5.00	76	84	88	17385	112	10235	0.45
8	Y	400	60	1550	2960	5.30	77	85	89	15455	167	9100	0.67

Wired = Wiring · U = Voltage · 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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