

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

S6D710-AN03-06 ebmpapst Datasheet

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Nominal data

Type	S6D710-AN03-06						
Motor	M6D138-HF						
Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	277	400	400	480
Connection		Δ	Δ	Δ	Y	Y	Y
Frequency	Hz	50	60	60	50	60	60
Type of data definition		ml	ml	ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE	CE	CE
Speed	min ⁻¹	910	1015	1070	910	1015	1070
Power input	W	1010	1480	1640	1010	1480	1640
Current draw	A	4.15	5.0	5.0	2.4	2.9	2.88
Max. back pressure	Pa	130	160	175	130	1600	175
Max. ambient temperature	°C	90	60	60	90	60	60
Starting current	A	15	13		9	7.8	

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

		Actual	Request 2013	Request 2015
Installation category	A			
Efficiency category	Static			
Variable speed drive	No			
Specific ratio*	1.00			
Overall efficiency η_{es}		37	29.6	33.6
Efficiency grade N		43.4	36	40
Power input P_e	kW	0.97		
Air flow q_v	m ³ /h	10730		
Pressure increase p_{fs}	Pa	121		
Speed n	min ⁻¹	920		

Data established at point of optimum efficiency

* Specific ratio = $1 + p_b / 100\,000\text{ Pa}$ 

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Technical features

Mass	30.7 kg
Size	710 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PC / ABS plastic
Material of blades	Die-cast aluminum
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Blade angle	-5°
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	On rotor and stator sides
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	Via terminal box
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034; EN 61800-5-1; CE
Approval	VDE; UL 1004-1; CSA C22.2 Nr.100

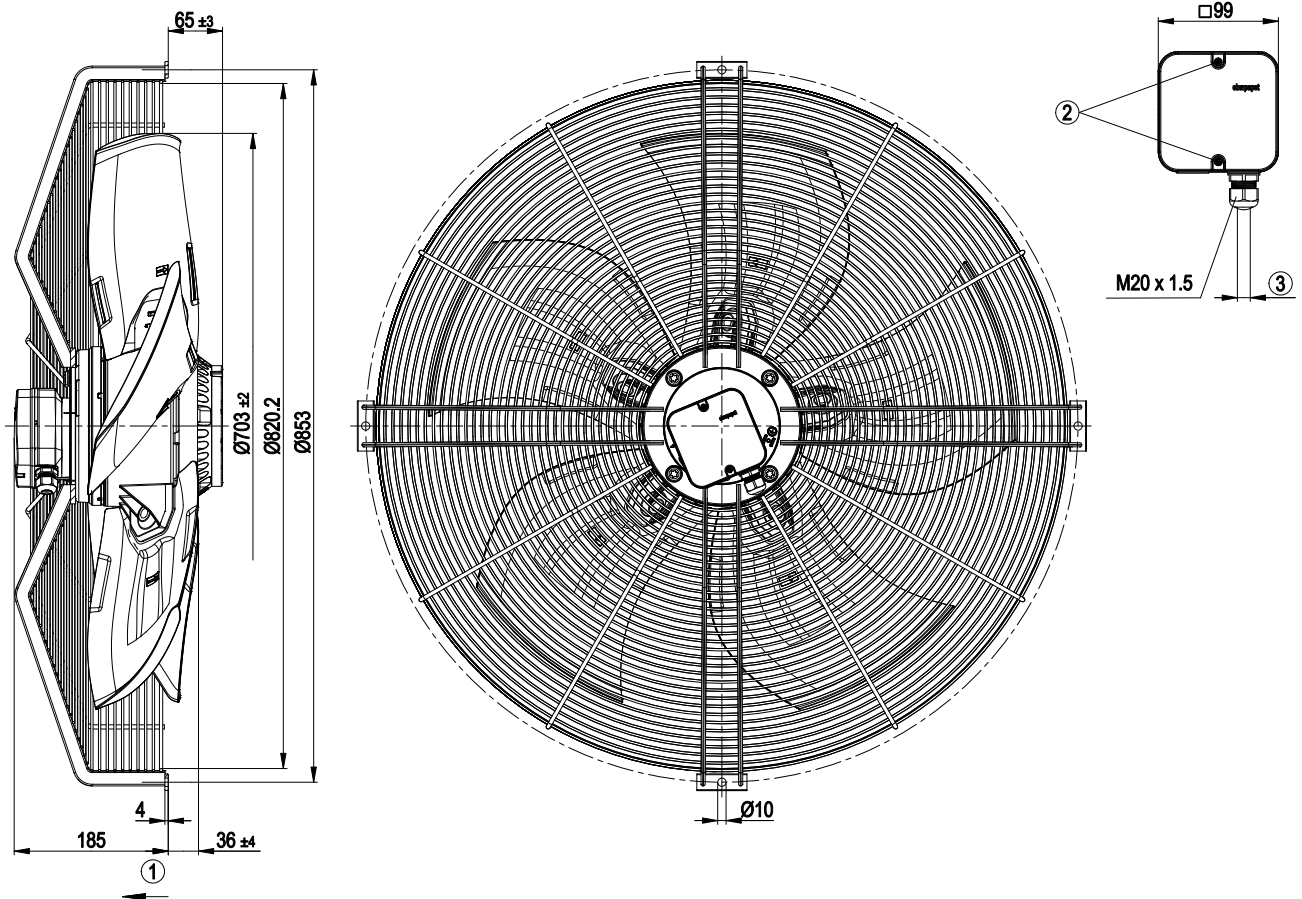


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Product drawing

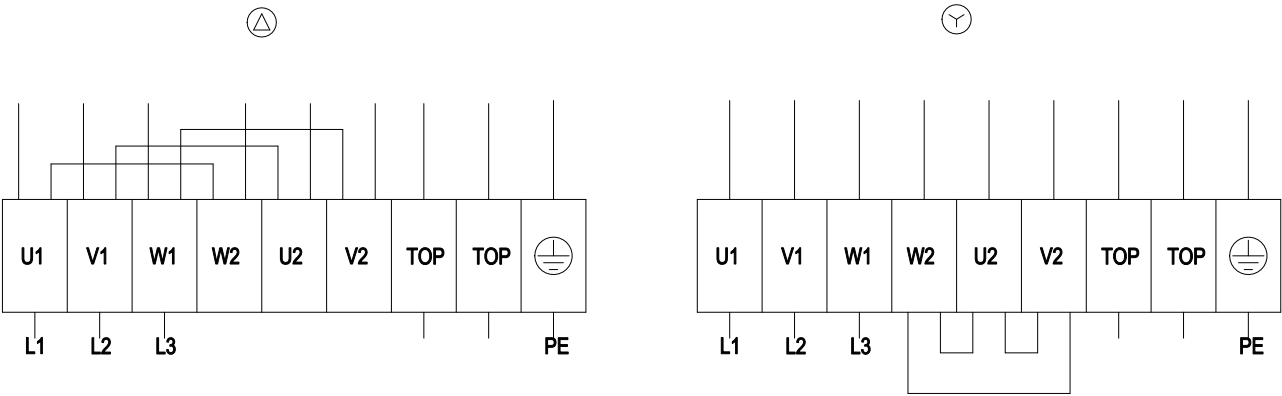


1	Direction of air flow "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2 ± 0.3 Nm

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Connection screen

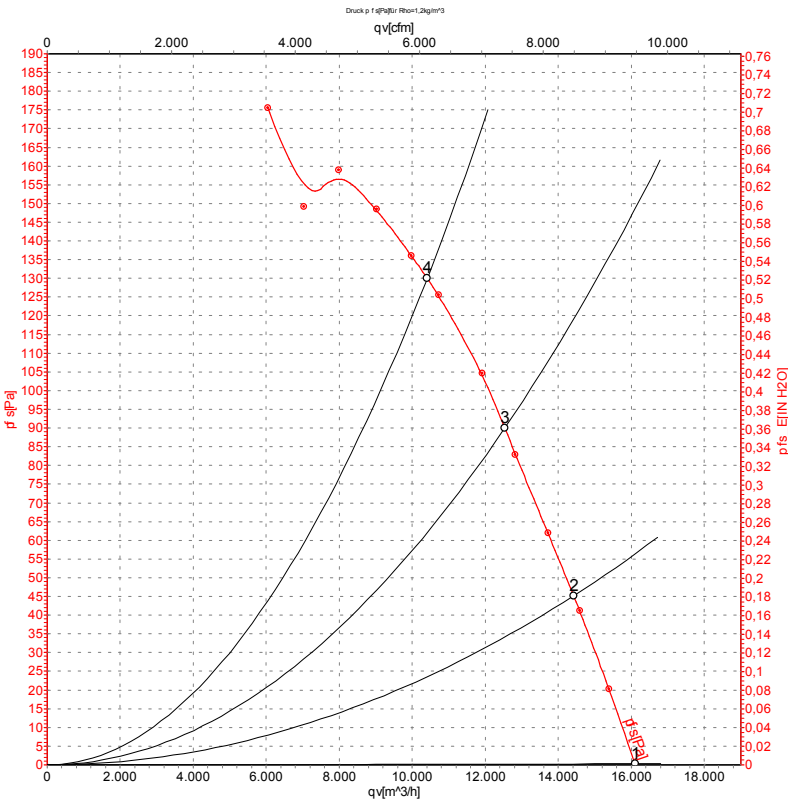


Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				



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Charts: Air flow 50 Hz Y



Measurement: LU-73489

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: LwA measured as per ISO 13347 /
LpA measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	Conn.	U	f	n	P _e	I	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa
1	Y	400	50	945	706	2.15	16110	0
2	Y	400	50	935	824	2.25	14420	45
3	Y	400	50	925	911	2.34	12530	90
4	Y	400	50	910	1010	2.40	10410	130

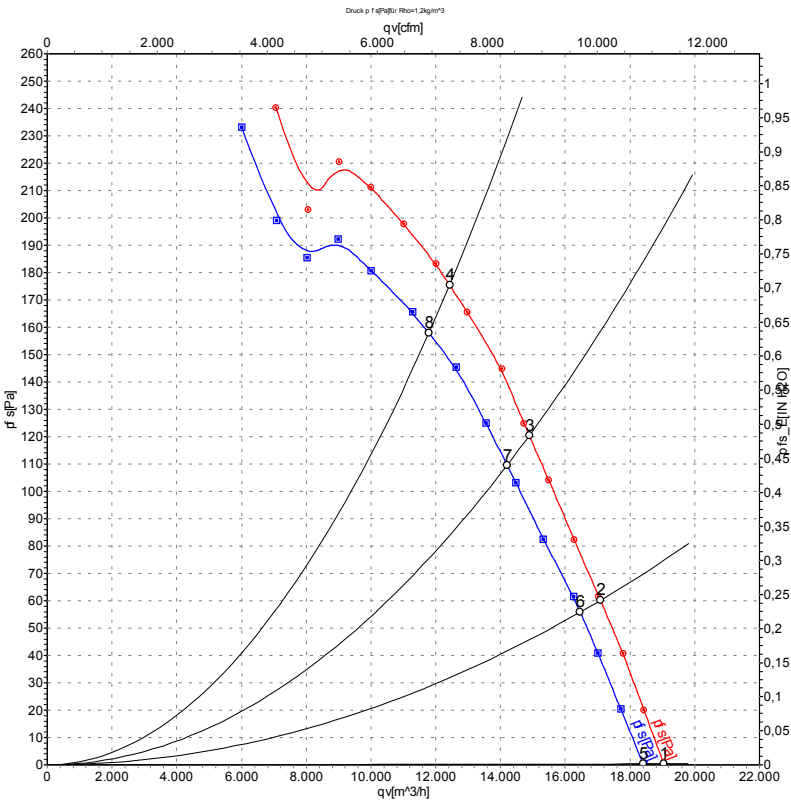
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase



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Charts: Air flow 60 Hz Y



Measurement: LU-73497
Measurement: LU-73495

Air performance measured as per ISO 5801
Installation category A. For detailed
information on the measuring set-up, please
contact ebm-papst. Suction-side noise
levels: LwA measured as per ISO 13347 /
LpA measured with 1m distance to fan axis.
The values given are valid under the
measuring conditions mentioned above and
may vary according to the actual installation
situation. With any deviation from the
standard set-up, the specific values have to
be checked and reviewed with the unit
installed.

Measured values

	Conn.	U	f	n	P _e	I	qv	P _{fs}
		V	Hz	min ⁻¹	W	A	m ³ /h	Pa
1	Y	480	60	1120	1145	2.37	19050	0
2	Y	480	60	1105	1317	2.54	17090	60
3	Y	480	60	1090	1477	2.72	14890	120
4	Y	480	60	1070	1640	2.88	12430	175
5	Y	400	60	1085	1047	2.22	18410	0
6	Y	400	60	1060	1217	2.49	16460	56
7	Y	400	60	1040	1341	2.68	14210	110
8	Y	400	60	1020	1452	2.87	11790	158

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase

