

Nominal data

Type	S6D710-AR05-06						
Motor	M6D110-IA						
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	920	1030	1080	920	1030	1080
Power input	W	610	890	980	610	890	980
Current draw	A	2.51	2.96	3.03	1.45	1.71	1.75
Max. back pressure	Pa	100	125	140	100	125	140
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	65	62	62	65	62	62

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

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	36	28.2	32.2
Efficiency grade N		43.8	36	40
Power input P_e	kW	0.58		
Air flow q_v	m³/h	8550		
Pressure increase p_{fs}	Pa	88		
Speed n	min ⁻¹	925		

Data definition with optimum efficiency.
 The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

LU-111172

Technical features

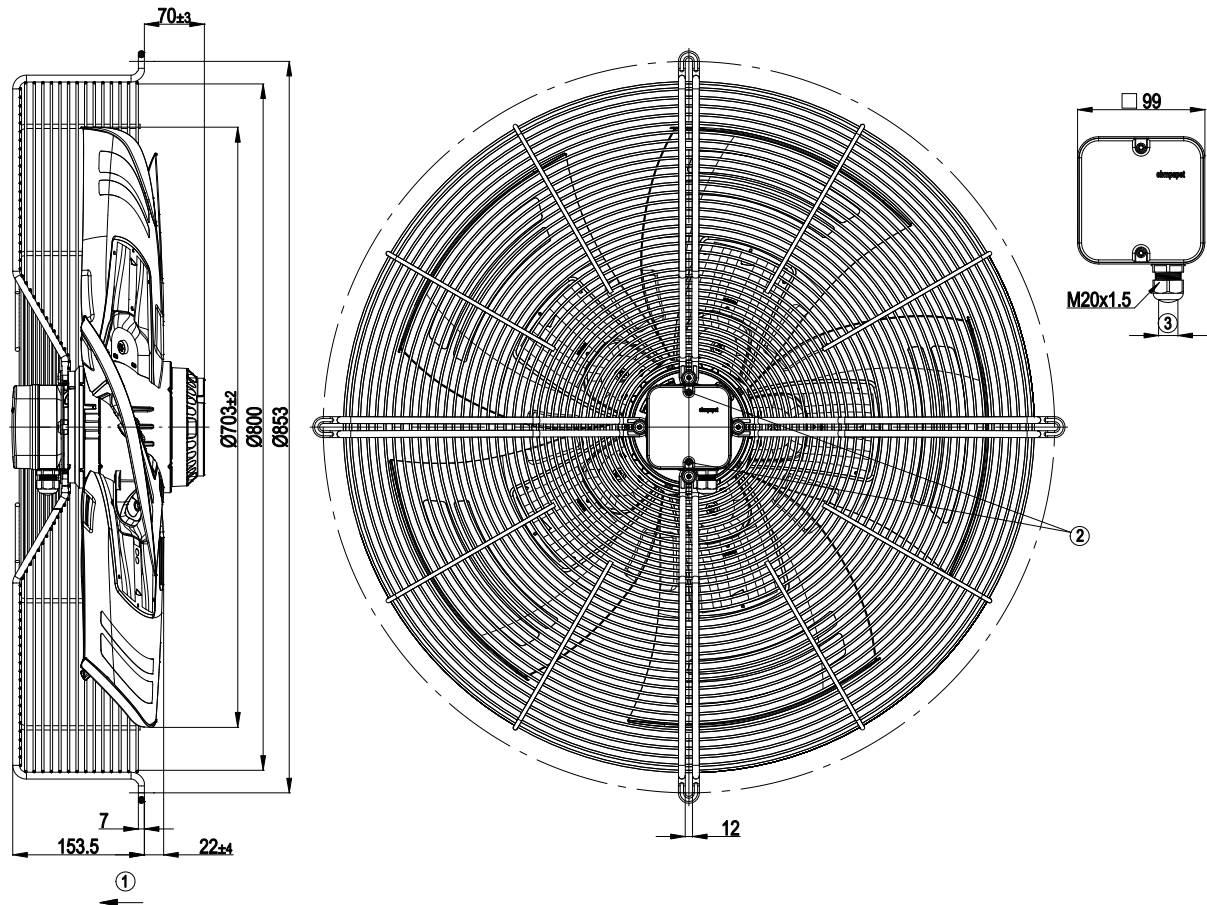
Mass	19 kg
Size	710 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PC / ABS plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Blade angle	-10°
Direction of air flow	"V"
Direction of rotation	Counter-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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
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 61800-5-1; CE
Approval	CCC; EAC; UL 1004-1; VDE; CSA C22.2 Nr.100

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Product drawing

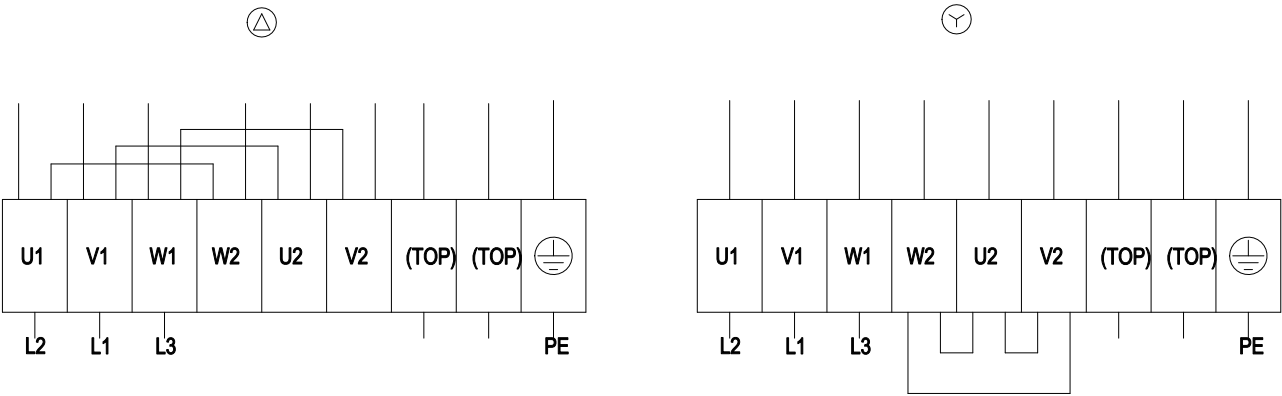


1	Direction of air flow "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter: min. 6 mm, max. 12 mm; tightening torque: 2 ± 0.3 Nm

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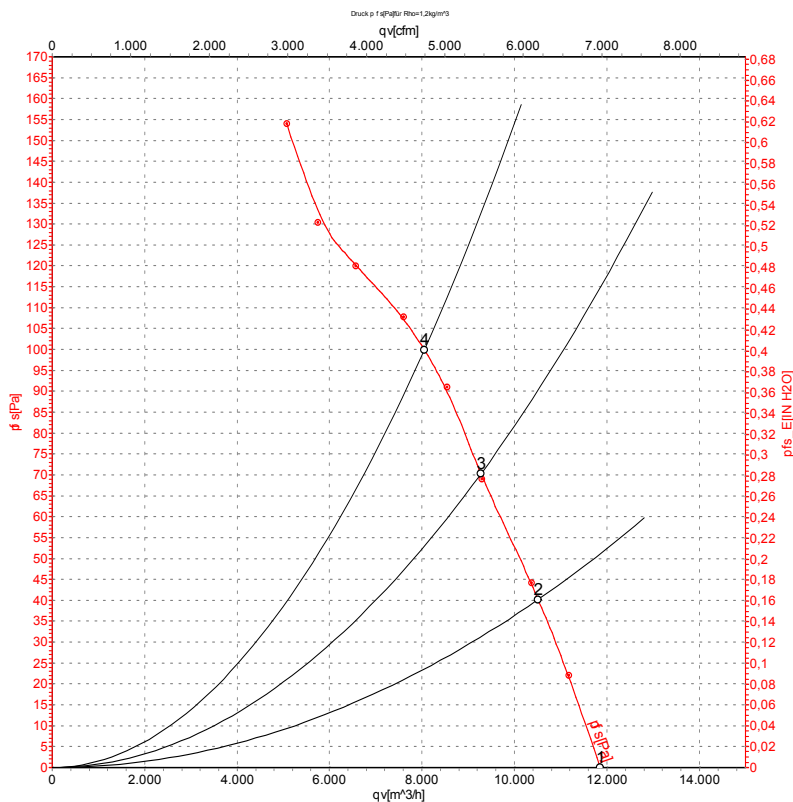
Connection screen



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				



Charts: Air flow 50 Hz



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: L_{WA} measured as per ISO 13347 /
L_{pA} 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	L _{pA_{in}}	L _{WA_{in}}	L _{WA_{out}}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m ³ /h	Pa
1	Y	400	50	960	378	1.27	67	73	72	11860	0
2	Y	400	50	945	472	1.33	66	72	71	10510	40
3	Y	400	50	935	541	1.36	66	72	71	9275	70
4	Y	400	50	920	610	1.45	69	75	75	8050	100

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · L_{pA_{in}} = Sound pressure level inlet side · L_{WA_{in}} = Sound power level inlet side
L_{WA_{out}} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

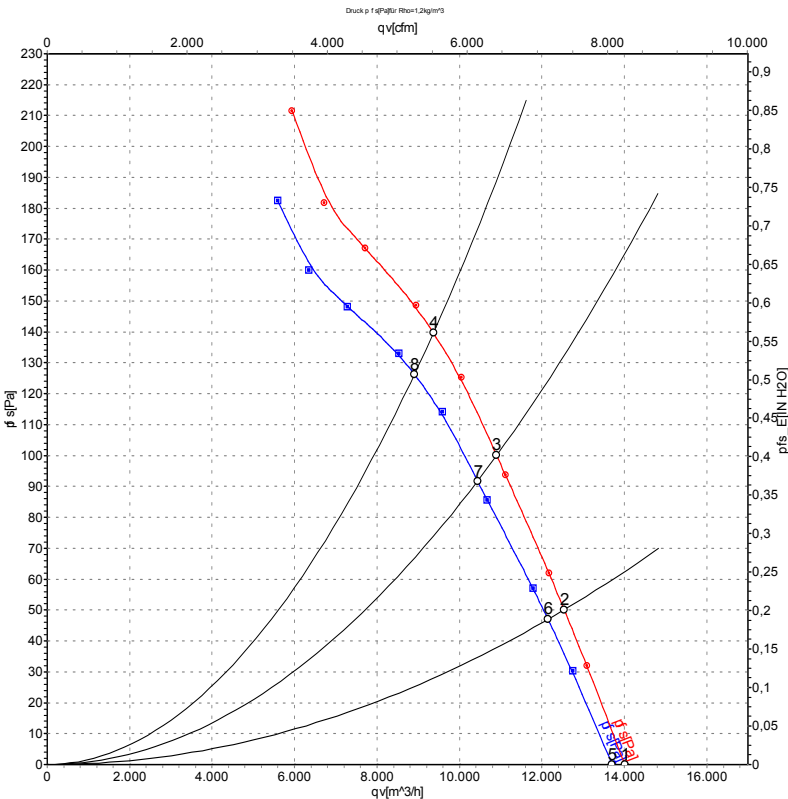


AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

Charts: Air flow 60 Hz



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	LpA _{in}	LwA _{in}	LwA _{out}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m³/h	Pa
1	Y	480	60	1140	589	1.33	71	77	76	14010	0
2	Y	480	60	1120	727	1.43	71	77	75	12540	50
3	Y	480	60	1100	865	1.56	71	77	76	10900	100
4	Y	480	60	1080	980	1.75	73	80	79	9370	140
5	Y	400	60	1115	537	1.16	70	77	76	13710	0
6	Y	400	60	1085	677	1.34	70	76	75	12150	47
7	Y	400	60	1055	798	1.50	70	76	75	10440	92
8	Y	400	60	1030	890	1.71	72	79	78	8910	125

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

