

S4D560-AQ01-11 ebmpapst Datasheet

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Nominal data

Type	S4D560-AQ01-11				
Motor	M4D110-IA				
Phase		3~	3~	3~	3~
Nominal voltage	VAC	400	400	400	400
Wiring		Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		CE	CE	CE	CE
Speed (rpm)	min ⁻¹	1350	1110	1540	1150
Power consumption	W	1100	760	1380	840
Current draw	A	2.32	1.3	2.4	1.45
Max. back pressure	Pa	170	115	90	50
Max. back pressure	inH ₂ O	0.68	0.46	0.36	0.2
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	65	65	60	60
Starting current	A	10	3.35	9.5	3.2

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

Data according to ErP Directive

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	34	34	09 Power consumption P_e	kW	1.11
02 Measurement category		A		09 Air flow q_v	m ³ /h	6990
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	193
04 Efficiency grade N		40	40	10 Speed (rpm) n	min ⁻¹	1345
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

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

LU-111140



AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for short nozzle

Technical description

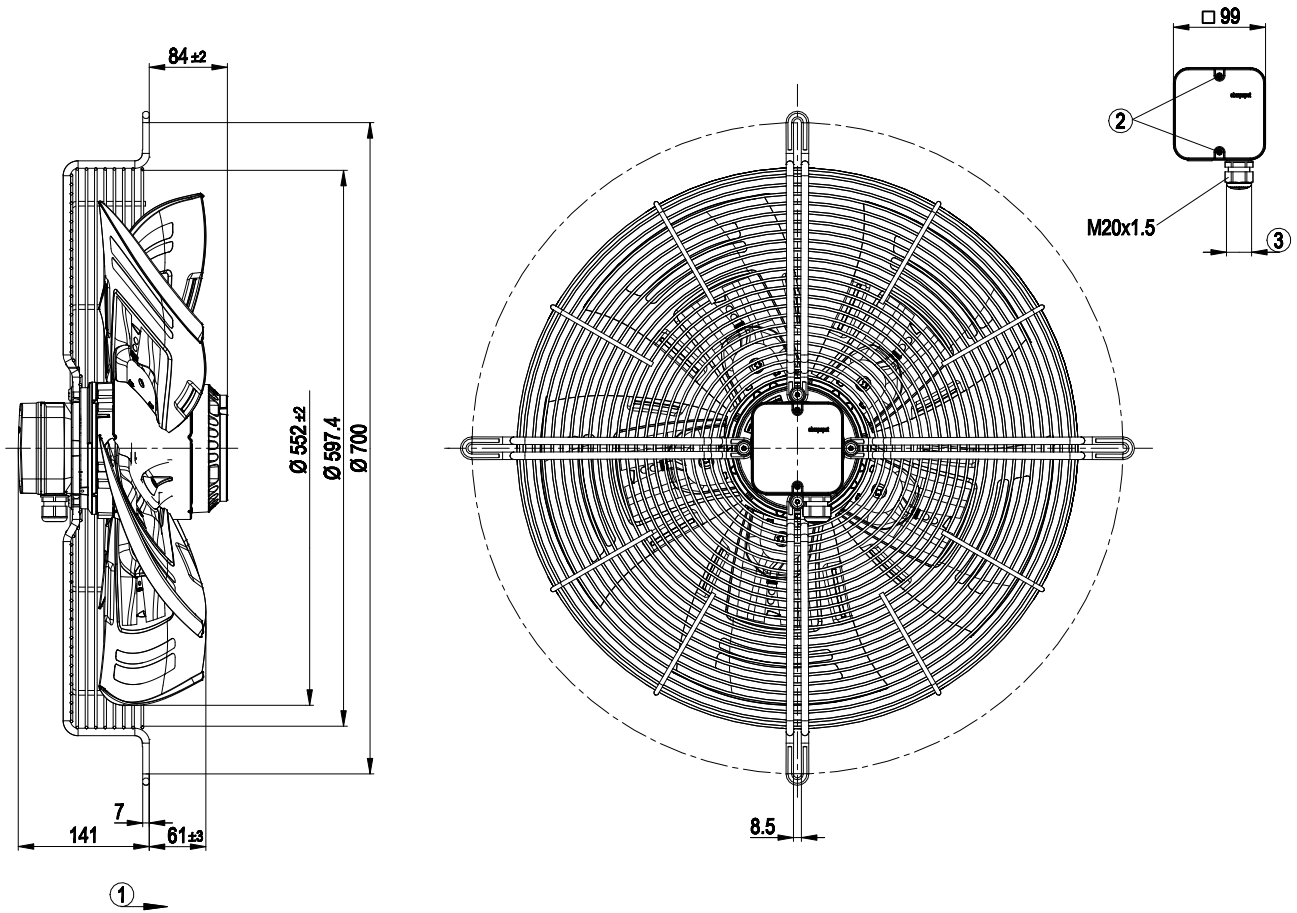
Weight	15.6 kg
Fan size	560 mm
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum insert, sprayed with PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	-5°
Airflow direction	"A"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
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 61800-5-1; CE
Approval	EAC; VDE



AC axial fan - HyBlade

sickle-shaped blades (S series)
with guard grille for short nozzle

Product drawing



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



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Connection diagram



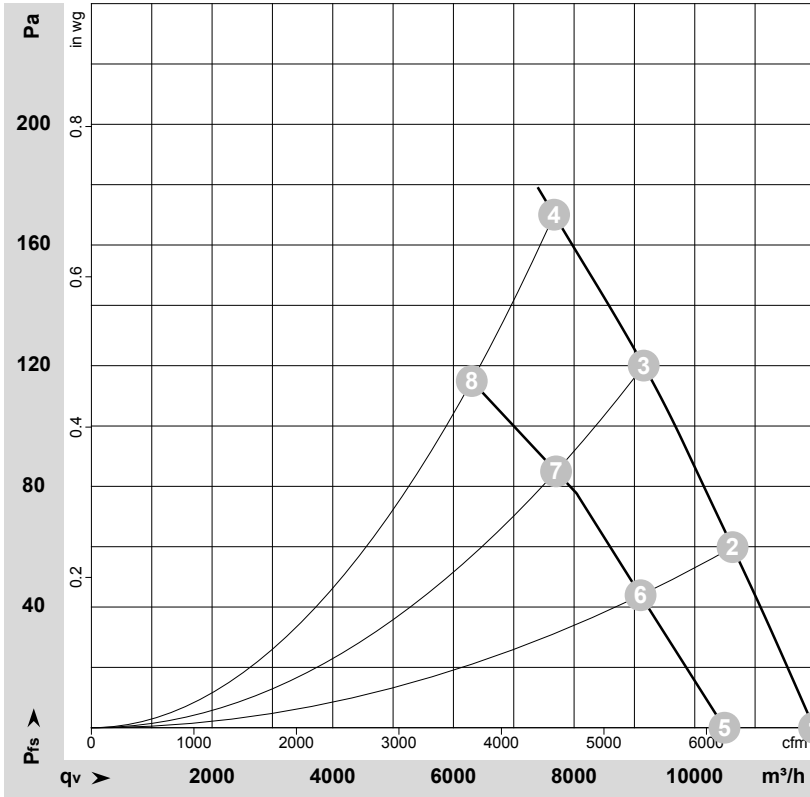
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-111140-1
Measurement: LU-171088-1

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}	qv	p _{fs}	qv	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m ³ /h	Pa	CFM	inH ₂ O
1	Δ	400	50	1400	806	1.98	69	76	76	11975	0	7050	0.00
2	Δ	400	50	1380	919	2.08	67	74	74	10625	60	6255	0.24
3	Δ	400	50	1365	1021	2.18	67	73	73	9155	120	5390	0.48
4	Δ	400	50	1350	1100	2.32	70	77	76	7670	170	4515	0.68
5	Y	400	50	1225	611	1.05	65	72	72	10495	0	6175	0.00
6	Y	400	50	1180	673	1.14	63	70	70	9100	44	5355	0.18
7	Y	400	50	1135	724	1.22	63	71	69	7700	85	4535	0.34
8	Y	400	50	1110	760	1.30	65	74	72	6305	115	3710	0.46

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 · qv = Air flow · p_{fs} = Pressure increase

