

S6D800-AI09-10

Emerson

AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

S6D800-AI09-10 ebmpapst Datasheet

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Nominal data

Type	S6D800-AI09-10	
Motor	M6D138-HF	
Phase		3~
Nominal voltage	VAC	460
Connection		Δ
Frequency	Hz	60
Type of data definition		ml
Valid for approval / standard		CE
Speed	min ⁻¹	995
Power input	W	1510
Current draw	A	2.54
Max. back pressure	Pa	145
Min. ambient temperature	°C	-40
Max. ambient temperature	°C	60
Starting current	A	6.5

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}	%	35.8	29.6	33.6
Efficiency grade N		42.2	36	40
Power input P_e	kW	0.96		
Air flow q_v	m ³ /h	11145		
Pressure increase p_{fs}	Pa	112		
Speed n	min ⁻¹	875		

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

LU-138334



ebmpapst

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Technical features

Mass	30.4 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP 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	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
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2010); EN 61800-5-1; CE
Approval	CSA C22.2 Nr.100; EAC; UL 1004-1



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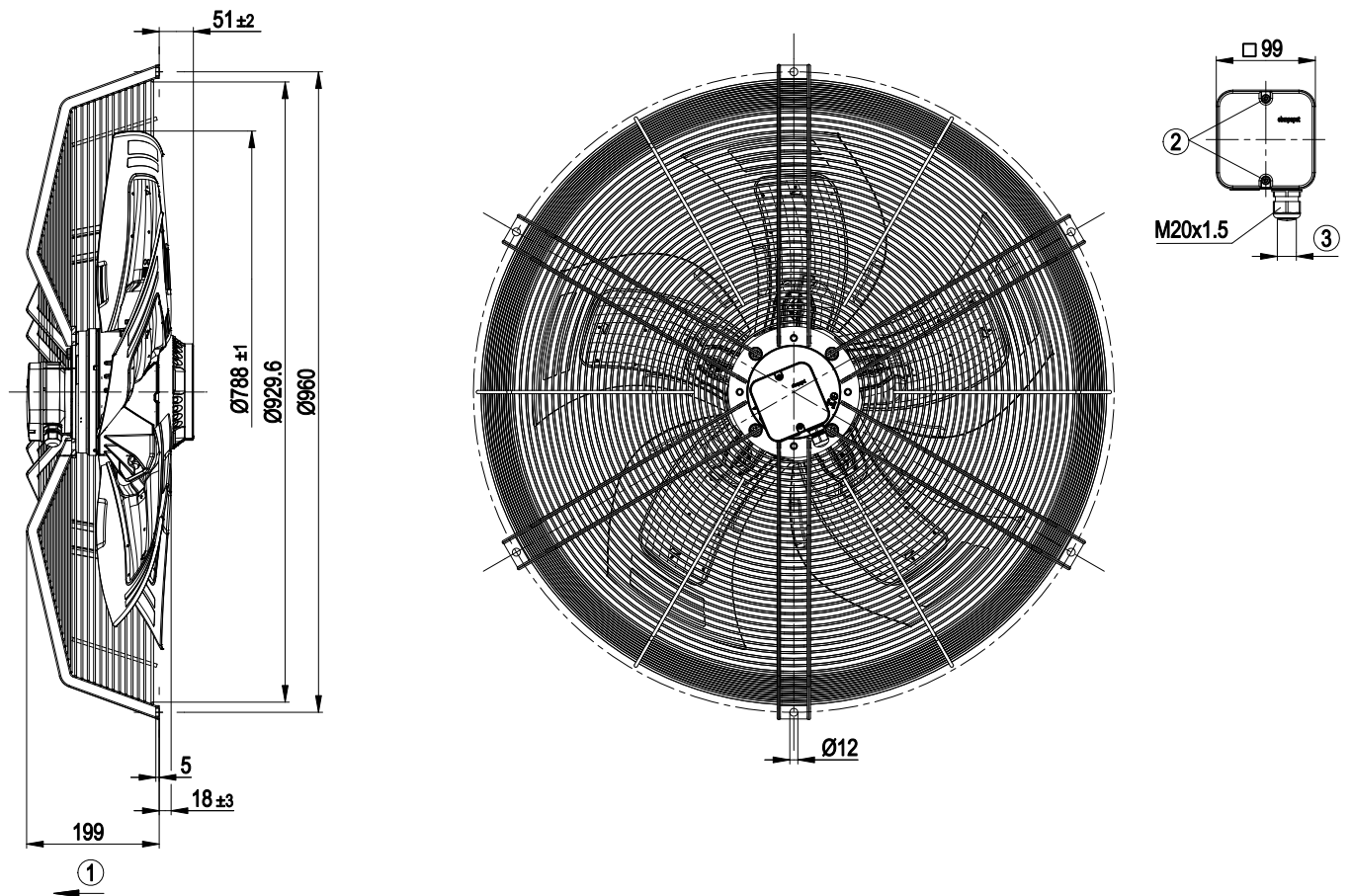
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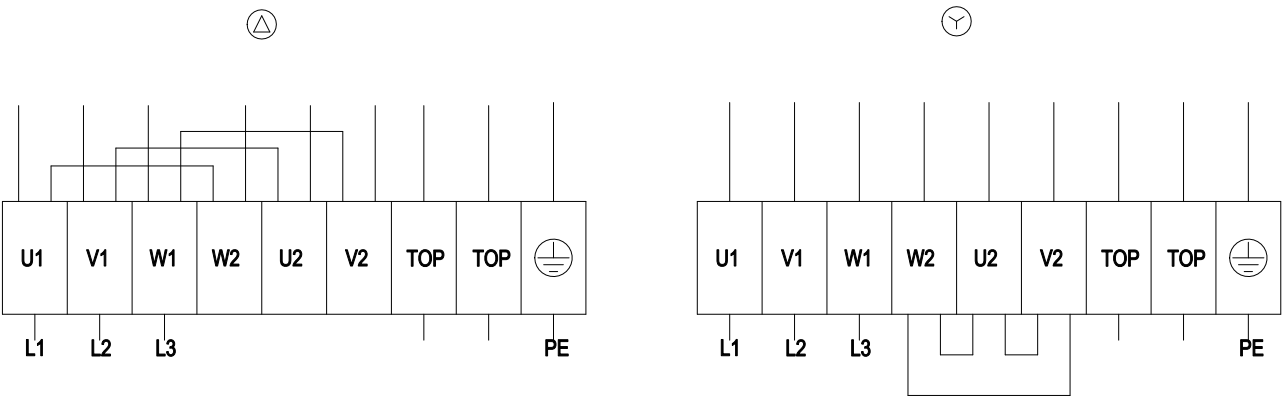
Product drawing



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



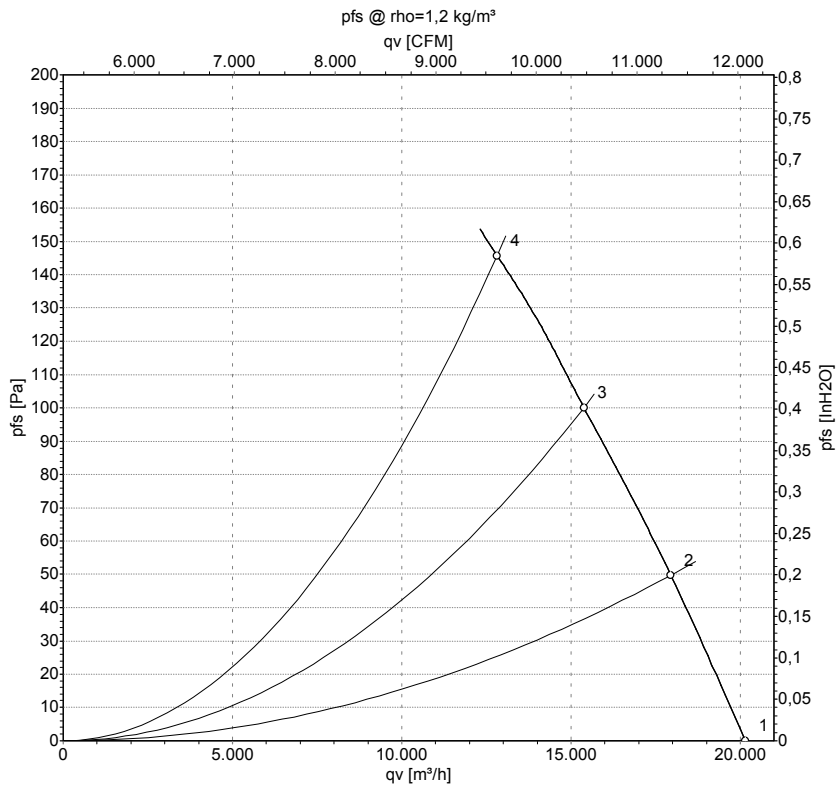
Connection screen



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 60 Hz



Measurement: LU-138340

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	Δ	460	60	1080	1020	1.83	70	77	77	20155	0
2	Δ	460	60	1055	1202	2.07	68	74	74	17950	50
3	Δ	460	60	1025	1372	2.31	68	75	74	15385	100
4	Δ	460	60	995	1510	2.54	70	77	76	12820	145

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