

## AC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

**ebm-papst Mulfingen GmbH & Co. KG**

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen  
County court Stuttgart · HRA 590344General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142

## Nominal data

Type	S6D800-AD01-01		
Motor	M6D138-LA		
Phase		3~	3~
Nominal voltage	VAC	400	400
Connection		Δ	Y
Frequency	Hz	50	50
Type of data definition		ml	ml
Valid for approval / standard		CE	CE
Speed	min <sup>-1</sup>	880	670
Power input	W	1940	1210
Current draw	A	3.9	2.23
Max. back pressure	Pa	160	92
Max. ambient temperature	°C	60	60
Starting current	A	13	4.3

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 $\eta_{es}$		35.2	31.2	35.2
Efficiency grade N		40	36	40
Power input $P_e$	kW	1.72		
Air flow $q_v$	m <sup>3</sup> /h	17215		
Pressure increase $p_{fs}$	Pa	124		
Speed n	min <sup>-1</sup>	905		

Data established at point of optimum efficiency

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

## Technical features

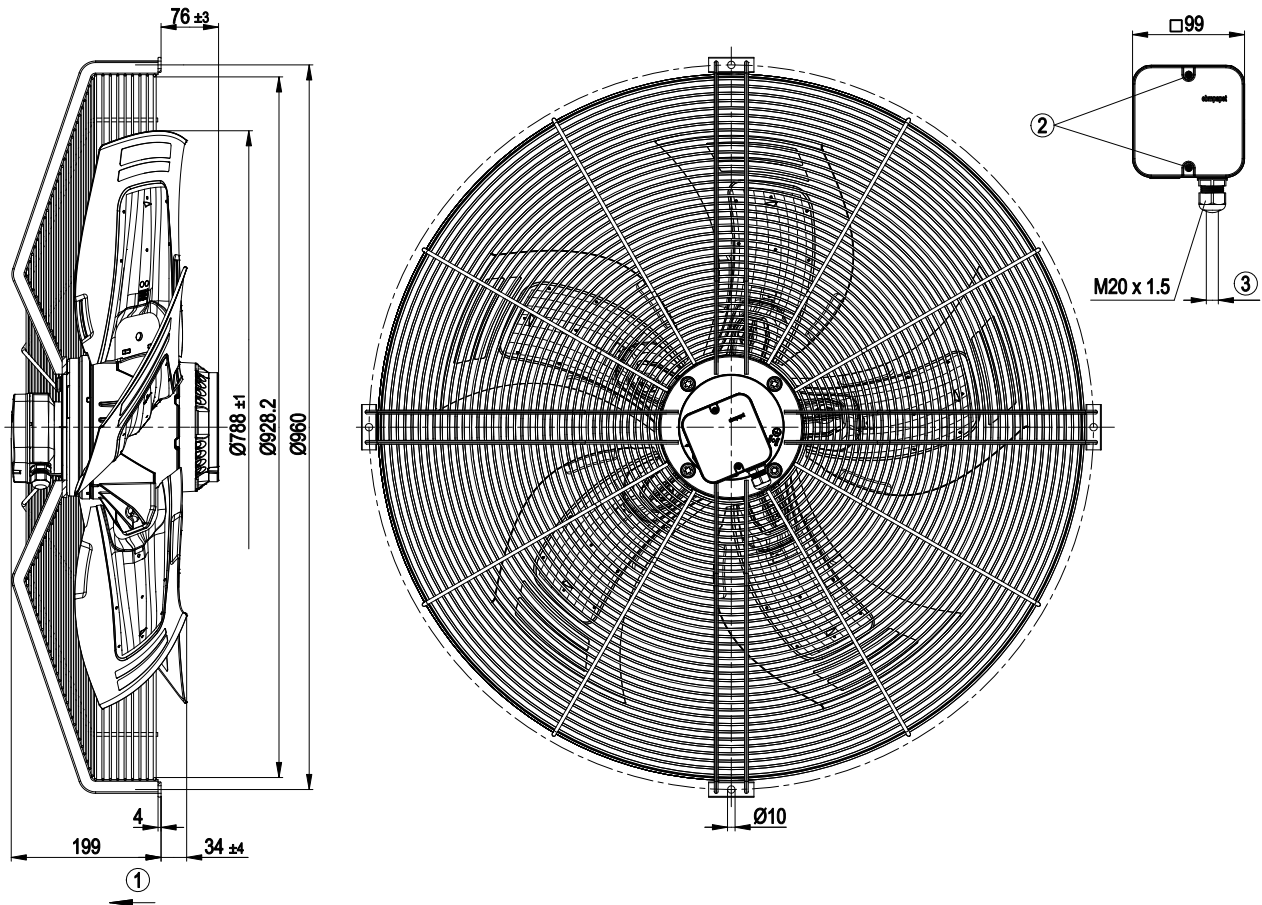
Mass	33.5 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Blade angle	0°
Direction of air flow	"V"
Direction of 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

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## Product drawing



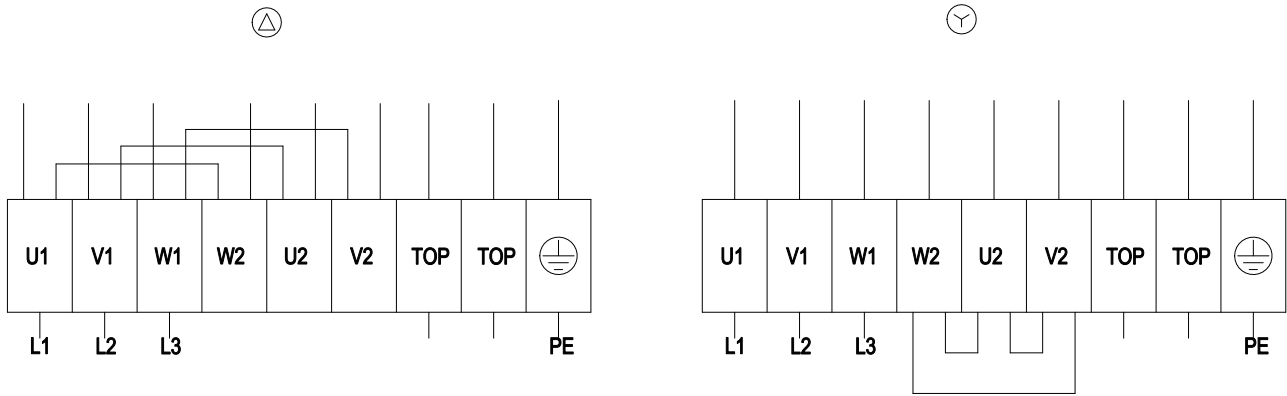
1	Direction of air flow "V"
2	Tightening torque 1.5±0.2 Nm
3	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

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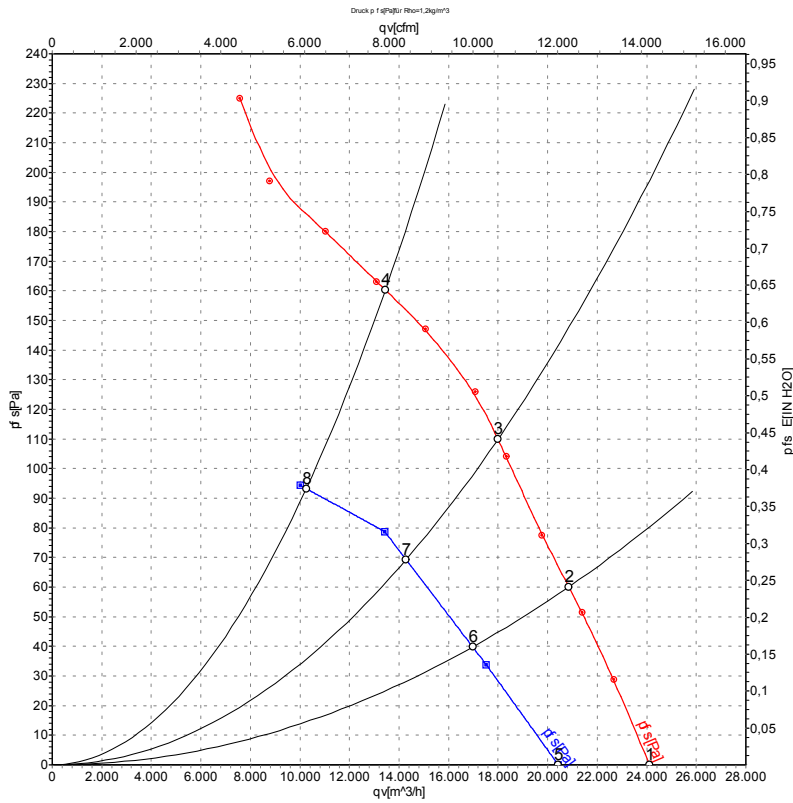
## Connection screen



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				



## Charts: Air flow 50 Hz



Measurement: LU-113998  
Measurement: LU-115288

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebmpapst. 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 <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	LwA <sub>out</sub>	qv	p <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	dB(A)	m <sup>3</sup> /h	Pa
1	Δ	400	50	925	1380	3.30	65	72	72	24110	0
2	Δ	400	50	910	1581	3.44	65	72	71	20850	60
3	Δ	400	50	900	1720	3.60	66	73	72	17990	110
4	Δ	400	50	880	1940	3.90	70	77	76	13450	160
5	Y	400	50	780	1000	1.85	61	68	67	20430	0
6	Y	400	50	740	1079	1.98	60	66	66	16980	40
7	Y	400	50	710	1129	2.08	60	67	66	14290	69
8	Y	400	50	670	1210	2.23	62	70	69	10250	92

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P<sub>e</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side  
LwA<sub>out</sub> = Sound power level outlet side · qv = Air flow · p<sub>fs</sub> = Pressure increase

