

A8D800-AD01-01

# AC axial fan - HyBlade®

sickled blades (S series)



## 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 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen  
County court Stuttgart · HRB 590142



## Nominal data

Type	A8D800-AD01-01						
Motor	M8D138-LA						
Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	400	400	415	415	415	415
Connection		Δ	Y	Δ	Y	Δ	Y
Frequency	Hz	50	50	50	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 <sup>-1</sup>	660	485	665	500	710	435
Power input	W	990	580	1020	610	1370	610
Current draw	A	2.37	1.21	2.44	1.24	2.77	1.32
Max. back pressure	Pa	105	54	100	56	115	43
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	70	70	70	70	60	60
Starting current	A	6	2	6.4	1.8	5.55	1.68

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

	Actual	Request 2013	Request 2015
Overall efficiency $\eta_{es}$	30.4	29.3	33.3
Efficiency grade N	37.1	36	40
Power input $P_e$	kW	0.87	
Air flow $q_v$	m <sup>3</sup> /h	11615	
Pressure increase $p_{fs}$	Pa	83	
Speed n	min <sup>-1</sup>	675	

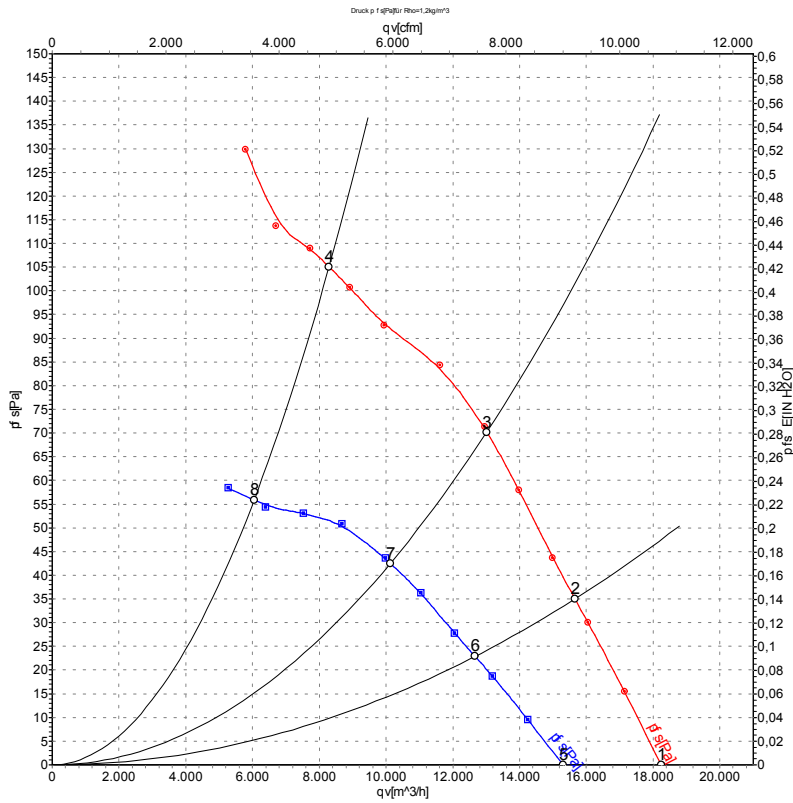
Data established at point of optimum efficiency



## Technical features

<b>Mass</b>	24 kg
<b>Size</b>	800 mm
<b>Surface of rotor</b>	Cast in aluminium
<b>Material of terminal box</b>	PP plastic
<b>Material of blades</b>	Aluminium sheet insert, sprayed with PP plastic
<b>Number of blades</b>	5
<b>Blade angle</b>	0°
<b>Direction of air flow</b>	"V"
<b>Direction of rotation</b>	Clockwise, seen on rotor
<b>Type of protection</b>	IP 54
<b>Insulation class</b>	"F"
<b>Humidity class</b>	F3-1
<b>Max. permissible ambient motor temp. (transp./ storage)</b>	+ 80 °C
<b>Min. permissible ambient motor temp. (transp./storage)</b>	- 40 °C
<b>Mounting position</b>	Any
<b>Condensate discharge holes</b>	On rotor and stator sides
<b>Operation mode</b>	S1
<b>Motor bearing</b>	Ball bearing
<b>Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)</b>	<= 3.5 mA
<b>Electrical leads</b>	Via terminal box
<b>Motor protection</b>	Thermal overload protector (TOP) brought out
<b>Cable exit</b>	Axial
<b>Protection class</b>	I (if protective earth is connected by customer)
<b>Product conforming to standard</b>	EN 61800-5-1; CE
<b>Approval</b>	VDE; CCC

## Charts: Air flow 50 Hz



Measurement: LU-115898  
Measurement: LU-115925

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 <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	700	684	2.05	59	65	65	18240	0
2	Δ	400	50	685	771	2.10	59	65	64	15660	35
3	Δ	400	50	680	846	2.20	60	66	65	13020	70
4	Δ	400	50	660	990	2.37	66	74	74	8295	105
5	Y	400	50	585	466	0.98	55	61	61	15300	0
6	Y	400	50	555	510	1.07	54	60	59	12660	23
7	Y	400	50	530	534	1.12	53	60	59	10130	43
8	Y	400	50	485	580	1.21	58	66	66	6045	56

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

