S8D800-AJ05-05

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**S8D800-AJ05-05**
Motor	**M8D138-LA**

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}	660	750	790	660	750	790
Power input	W	980	1100	1250	980	1100	1250
Current draw	A	4.2	4.2	4.33	2.41	2.43	2.53
Max. back pressure	Pa	105	57	65	105	57	65
Max. ambient temperature	°C	75	70	70	75	70	70
Starting current	A	11	9.5				

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 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		33.2	29.2	33.2
Efficiency grade N		40	36	40
Power input P_e	kW	0.83		
Air flow q_v	m^3/h	12415		
Pressure increase p_{fs}	Pa	78		
Speed n	min^{-1}	680		

Data established at point of optimum efficiency

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Technical features

Mass	40.3 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PC / ABS plastic
Material of blades	Die-cast aluminum
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Blade angle	0
Direction of rotation	"V"
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	UL 1004-1; CSA C22.2 Nr.100

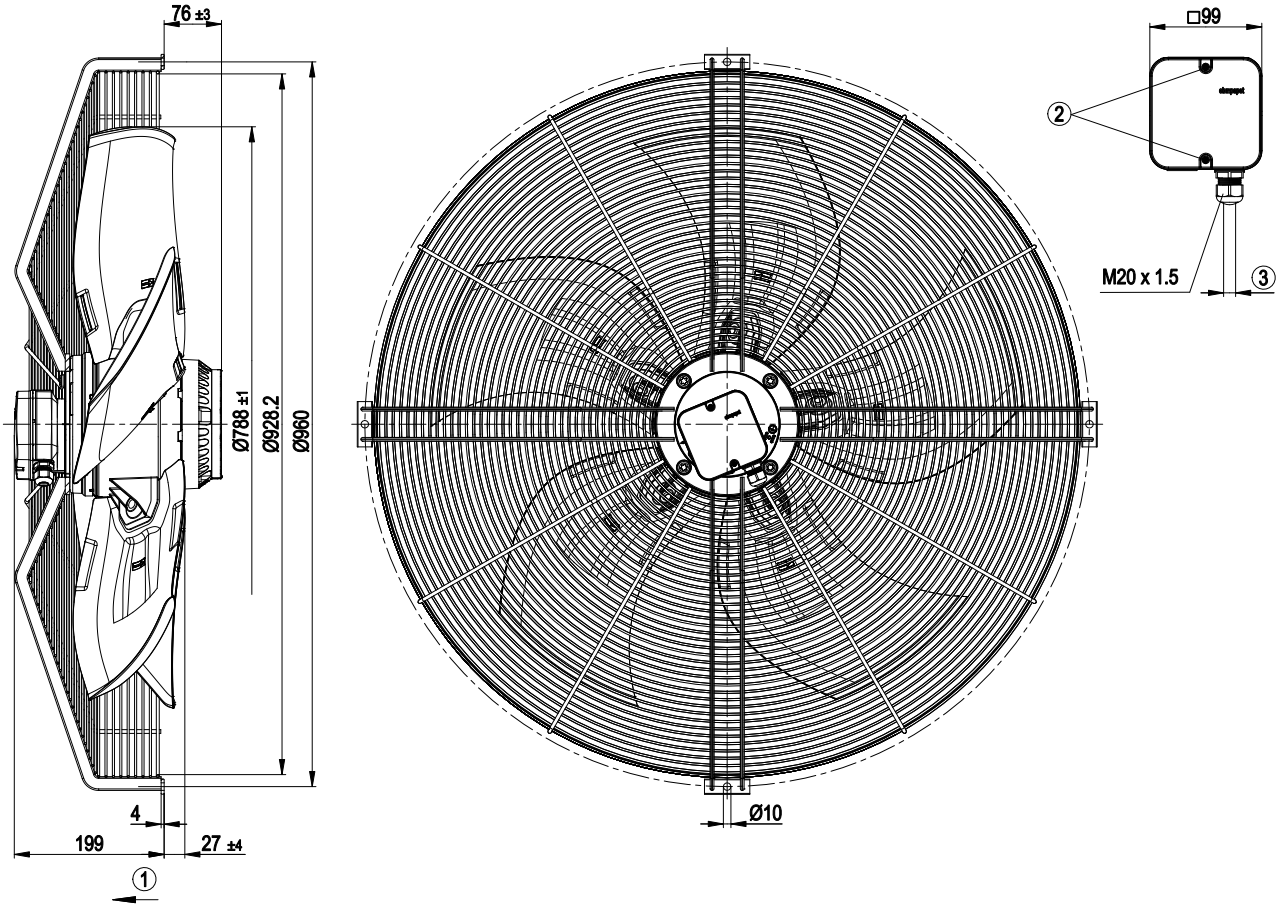
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Product drawing



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

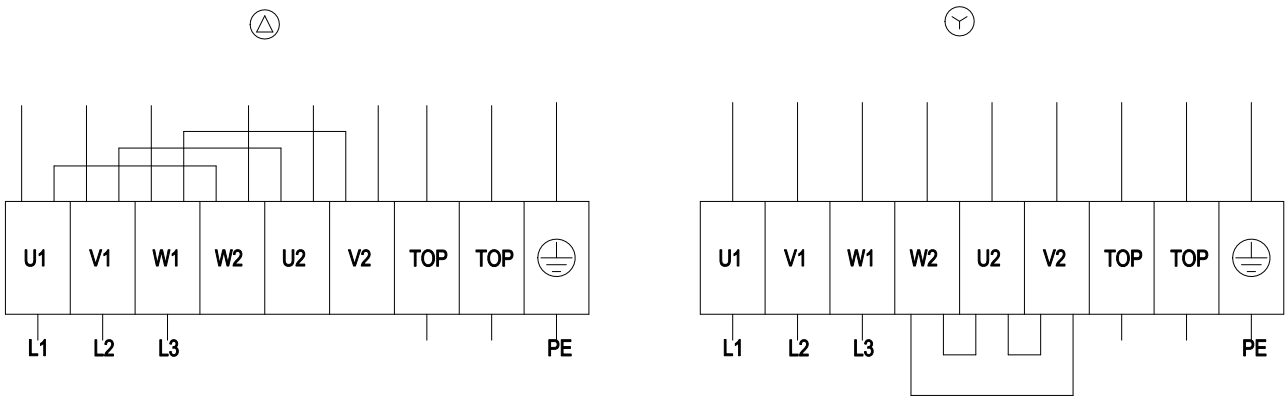
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Connection screen



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				

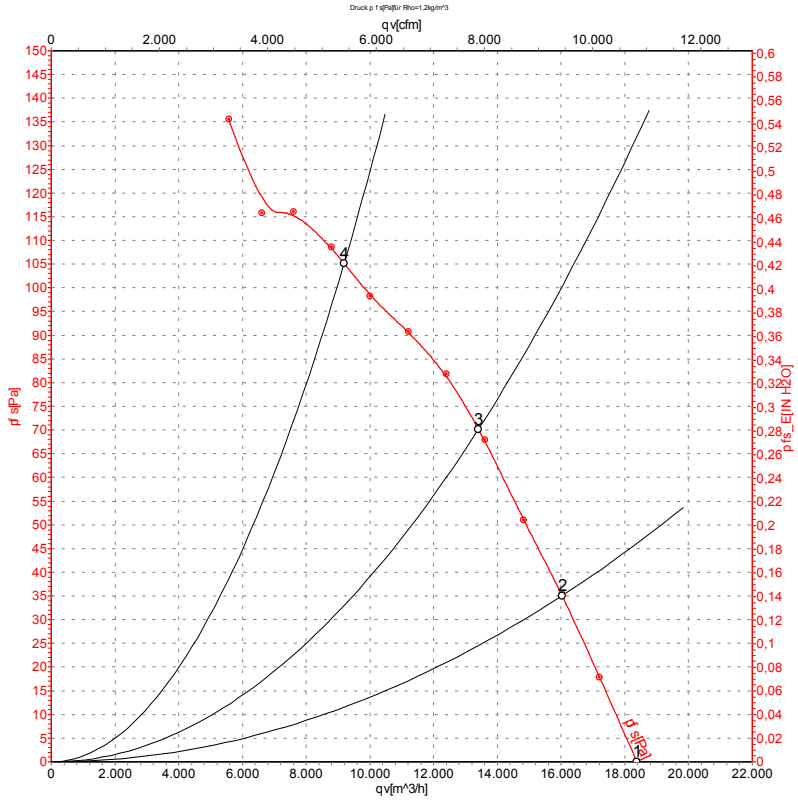
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Charts: Air flow 50 Hz



Measurement: LU-101483

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}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	Y	400	50	700	660	2.10	62	67	18380	0
2	Y	400	50	690	750	2.18	60	66	16030	35
3	Y	400	50	680	820	2.25	60	66	13400	70
4	Y	400	50	660	980	2.41	64	71	9190	105

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

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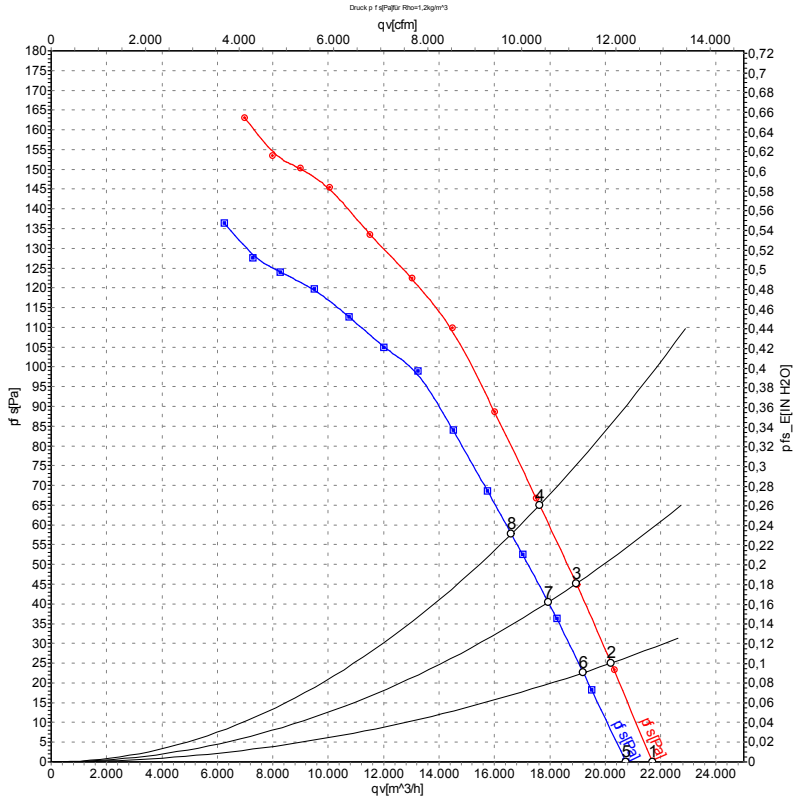
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Charts: Air flow 60 Hz



Measurement: LU-101487
Measurement: LU-101486

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}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	Y	480	60	820	1040	2.27	64	70	21700	0
2	Y	480	60	815	1119	2.40	63	69	20210	25
3	Y	480	60	805	1179	2.46	62	69	18950	45
4	Y	480	60	790	1250	2.53	62	68	17630	65
5	Y	400	60	785	940	2.18	63	70	20750	0
6	Y	400	60	775	1001	2.30	62	68	19210	23
7	Y	400	60	765	1046	2.36	62	68	17940	40
8	Y	400	60	750	1100	2.43	61	67	16610	58

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

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