W8D910-CD03-05

AC axial fan

sickled blades (S series)

with full round nozzle, Transformator fan

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Nominal data

Type	**W8D910-CD03-05**
Motor	**M8D138-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		-	-
Speed (rpm)	min^{-1}	650	475
Power input	W	1150	640
Current draw	A	2.78	1.36
Max. back pressure	Pa	90	47
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	65	65
Starting current	A	6.2	2.1

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	51 kg
Size	910 mm
Motor size	138
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of wall ring	Sheet steel, galvanised and plastic-coated in white aluminium (RAL 9006)
Material of guard grille	Steel, coated in white aluminium plastic (RAL 9006)
Number of blades	5
Blade angle	0°
Direction of air flow	A
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP54
Insulation class	"F"
Humidity (F) / environmental protection class (H)	H2
Note ambient temperature	Occasional start-up between -40 °C and -25 °C is permissible. For continuous operation at ambient temperatures below -25 °C (e.g. refrigeration applications), a fan version with special low-temperature bearings must be used.
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensation drainage 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 connection	Terminal box
Motor protection	Thermal overload protector (TOP) brought out, basic insulation
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2010)
Approval	EAC; VDE

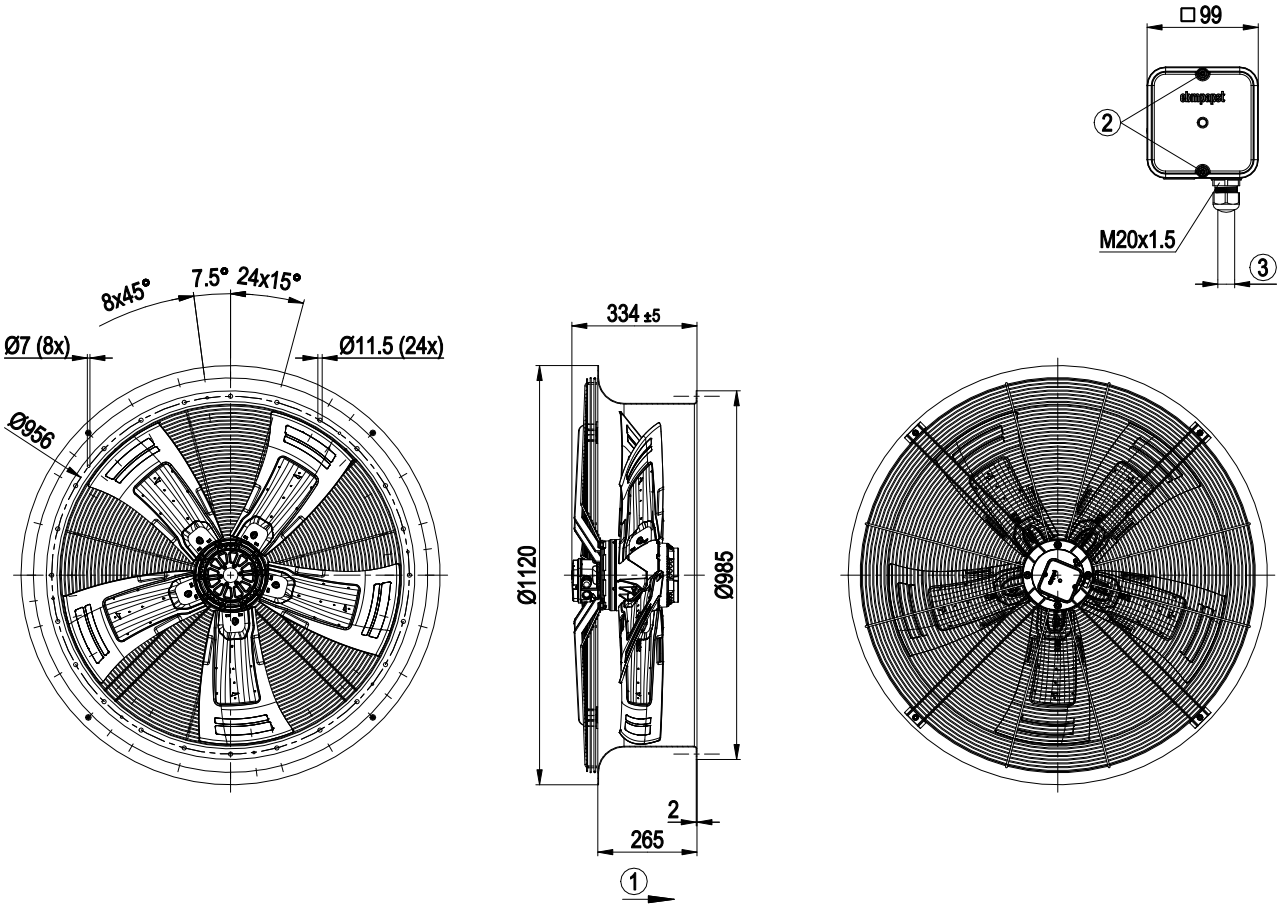
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Product drawing



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

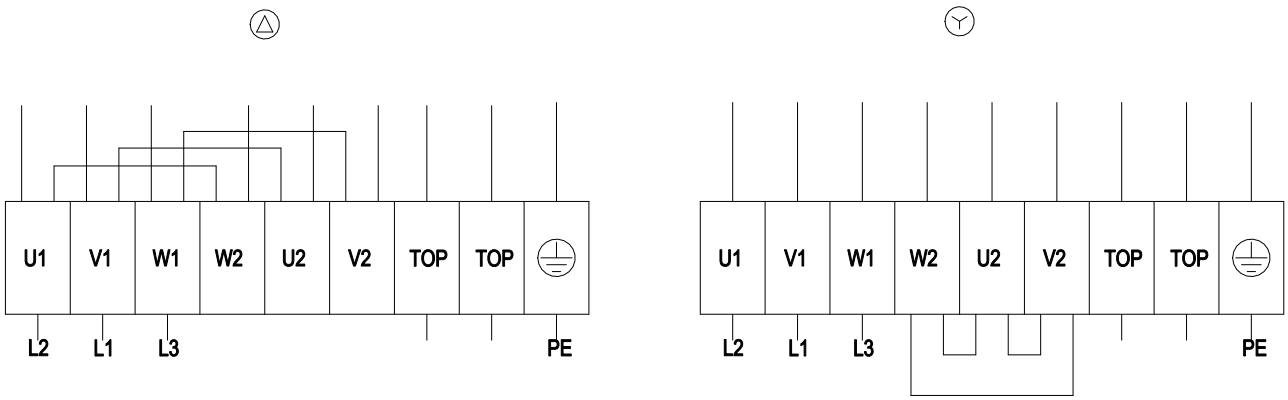
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Connection screen



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

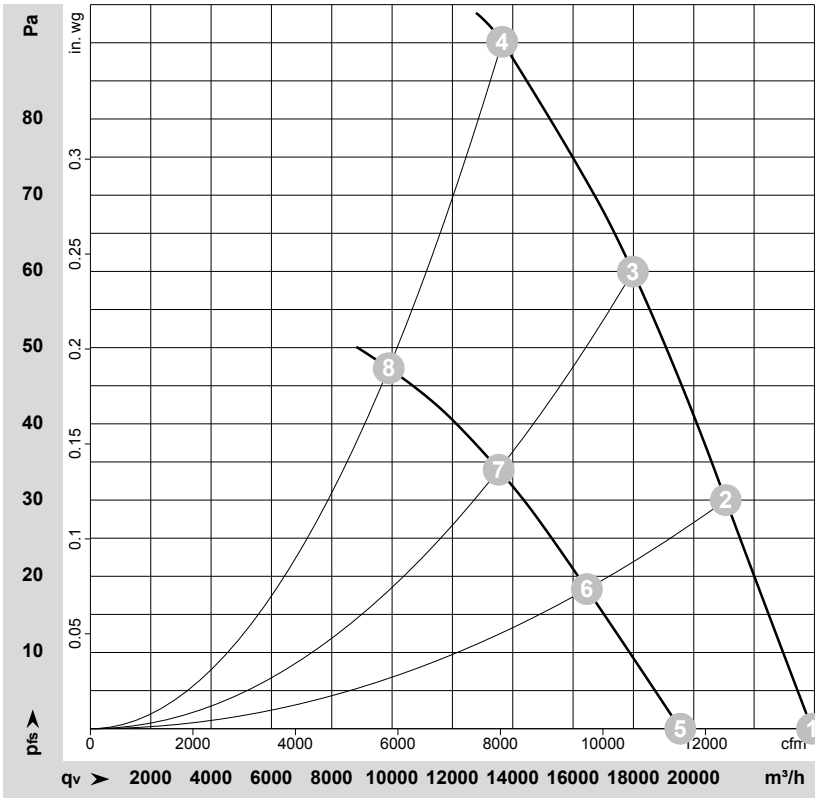
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-117443-1
Measurement: LU-117777-1

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}	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	in. wg
1	Δ	400	50	690	840	2.46	62	70	70	23920	0	14080	0.00
2	Δ	400	50	675	954	2.57	61	68	67	21060	30	12395	0.12
3	Δ	400	50	665	1053	2.68	60	67	66	17980	60	10585	0.24
4	Δ	400	50	650	1150	2.78	64	71	70	13650	90	8035	0.36
5	Y	400	50	565	555	1.18	57	64	64	19555	0	11510	0.00
6	Y	400	50	530	591	1.24	54	61	61	16460	19	9685	0.08
7	Y	400	50	500	622	1.31	53	59	59	13535	34	7965	0.14
8	Y	400	50	475	640	1.36	57	64	64	9890	48	5820	0.19

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · 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 · q_V = Air flow · p_{fs} = Pressure increase

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