

W4D560-DP01-05

AC axial fan - HyBlade

sickle-shaped blades (S series)

with square full nozzle

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	W4D560-DP01-05		
Motor	M4D110-IA		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Δ	Y
Frequency	Hz	50	50
Method of obtaining data		ml	ml
Valid for approval/standard		-	-
Speed (rpm)	min ⁻¹	1310	1040
Power consumption	W	1300	840
Current draw	A	2.55	1.44
Max. back pressure	Pa	170	100
Max. back pressure	in. wg	0.68	0.4
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	60
Starting current	A	10	

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change



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Technical description

Weight	22.5 kg
Size	560 mm
Motor size	110
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum insert, sprayed with PP plastic
Fan housing material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Blade pitch	0°
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H2
Ambient temperature note	Occasional start-up at temperatures between -40°C and -25°C is permitted. For continuous operation at ambient temperatures below -25°C (such as refrigeration applications), use must be made of a fan design with special low-temperature bearings.
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010)
Approval	VDE; EAC

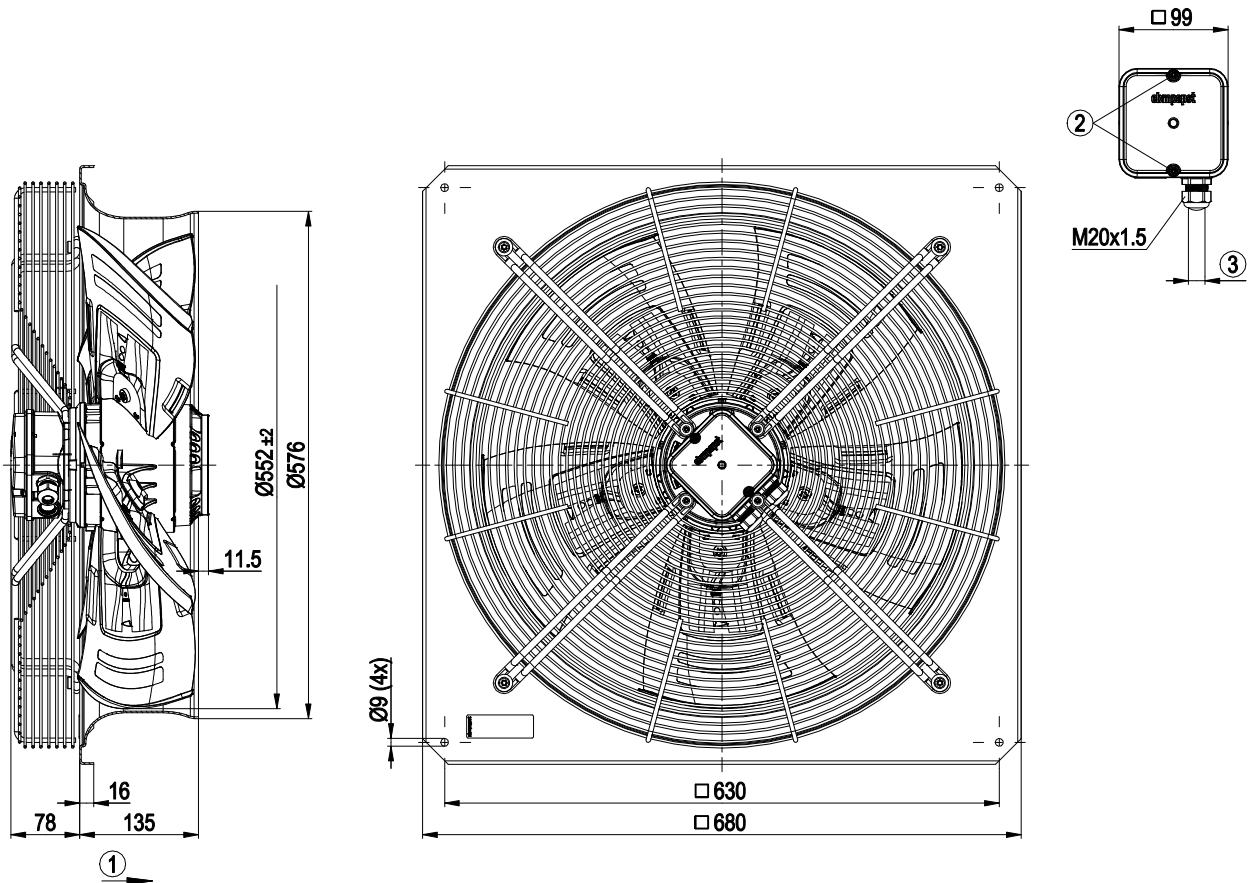


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Product drawing



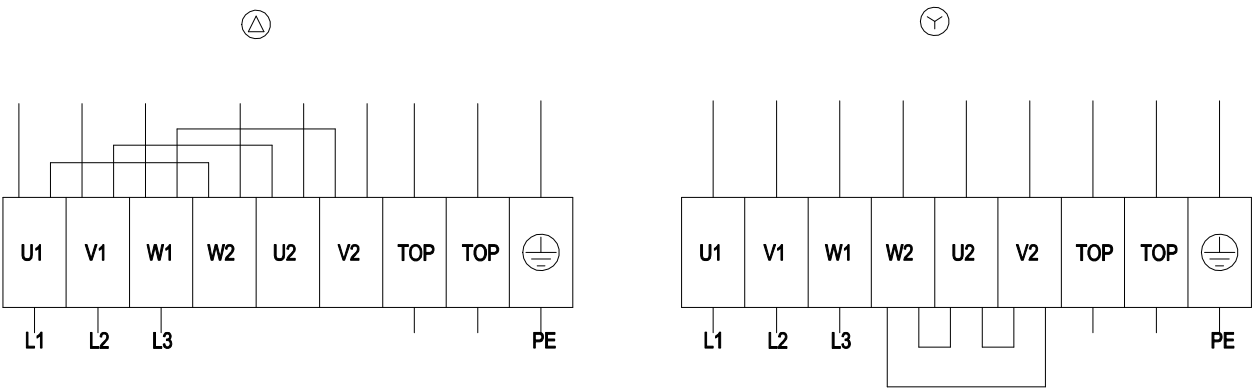
1	Direction of air flow "A"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter min. 6 mm, max. 12 mm, tightening torque 2 ± 0.3 Nm



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Connection diagram



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

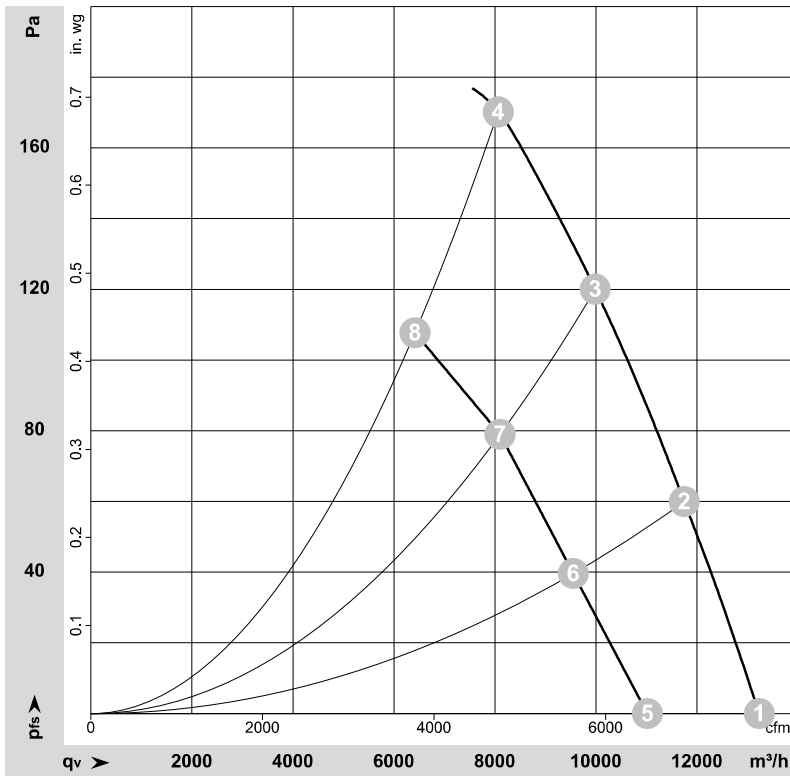


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Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-113443-1
Measurement: LU-113592-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	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)	m³/h	Pa	cfm	in. wg
1	Δ	400	50	1365	1040	2.26	69	76	76	13235	0	7790	0.00
2	Δ	400	50	1345	1141	2.36	67	75	76	11750	60	6915	0.24
3	Δ	400	50	1325	1225	2.46	67	74	75	9985	120	5880	0.48
4	Δ	400	50	1310	1300	2.55	73	80	80	8065	170	4745	0.68
5	Y	400	50	1135	740	1.27	64	71	71	11020	0	6485	0.00
6	Y	400	50	1085	779	1.33	63	70	70	9550	40	5620	0.16
7	Y	400	50	1060	815	1.40	62	69	69	8100	79	4770	0.32
8	Y	400	50	1040	840	1.44	67	74	73	6415	108	3775	0.43

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_v = Air flow · p_{fs} = Pressure increase

