W4D560-DE03-15

AC axial fan

sickled blades (S series)

with full square nozzle

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ErP2013 EXCEEDS THE NORM

Nominal data

Type	**W4D560-DE03-15**
Motor	**M4D110-GF**

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^{-1}	1270	925
Power input	W	1030	630
Current draw	A	1.9	1.06
Max. back pressure	Pa	150	80
Min. ambient temperature	°C	-40	-40
Max. ambient temperature	°C	60	60
Starting current	A	6.5	

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}	%	30.8	29.9	33.9
Efficiency grade N		36.9	36	40
Power input P_e	kW	1.08		
Air flow q_v	m^3/h	6705		
Pressure increase p_{fs}	Pa	180		
Speed n	min^{-1}	1255		

Data definition with optimum efficiency. LU-72505
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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Technical features

Mass	21.6 kg
Size	560 mm
Surface of rotor	Coated in black
Material of terminal box	PP plastic
Material of blades	Aluminium sheet, coated in black
Material of wall ring	Sheet steel, galvanised and coated in black plastic (RAL 9005)
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Blade angle	5°
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
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 61800-5-1; CE
Approval	VDE

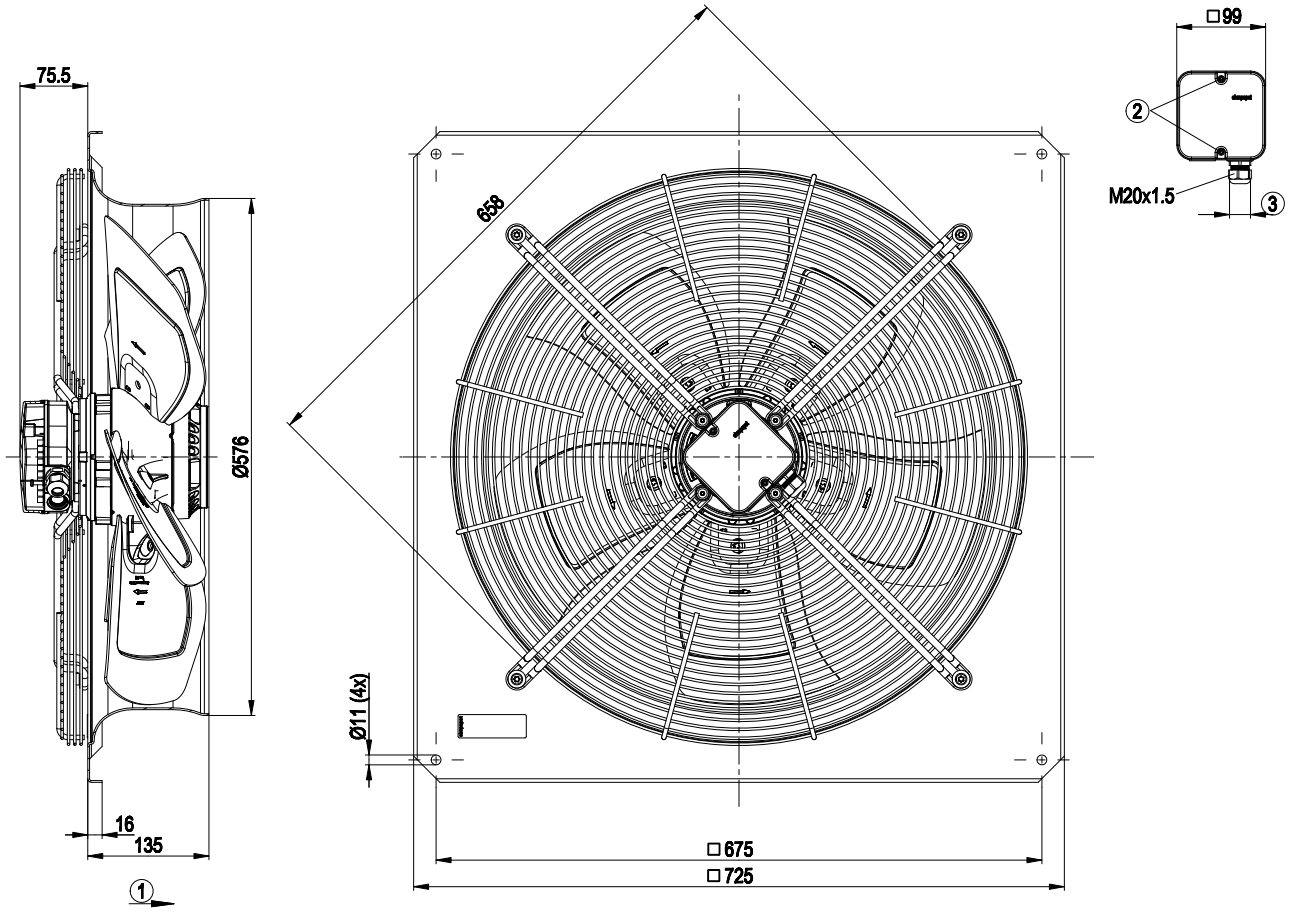
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Product drawing



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

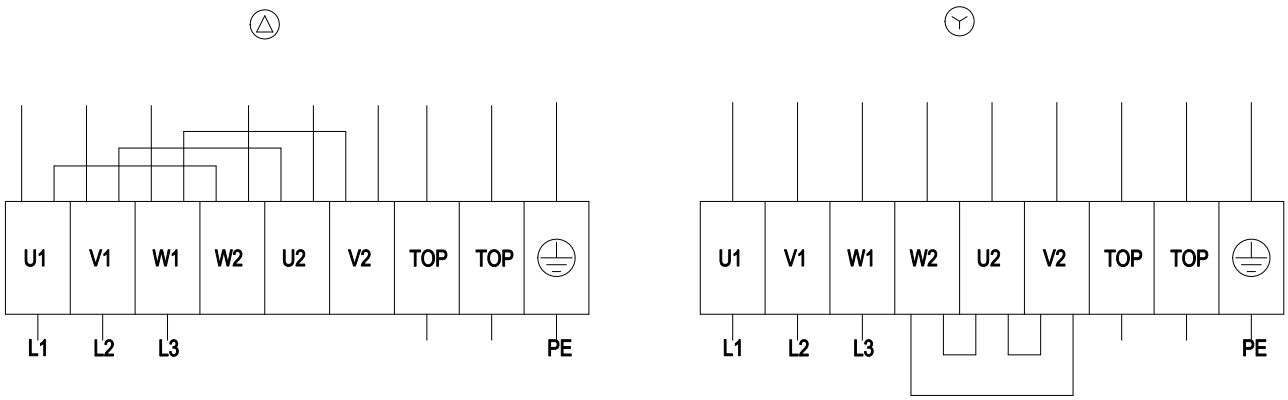
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Connection screen



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				

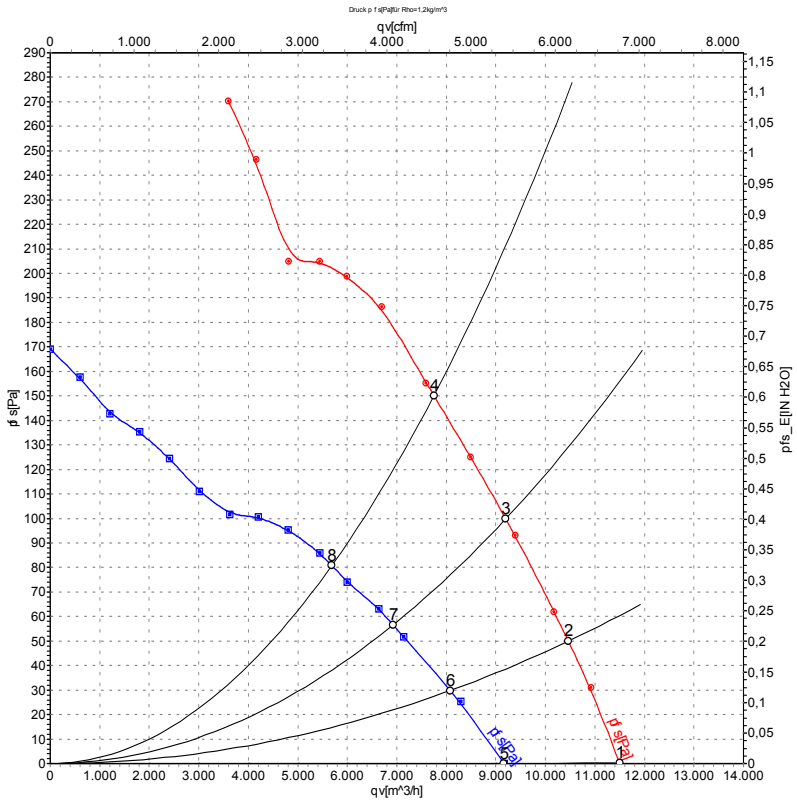
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Charts: Air flow 50 Hz Δ



Measurement: LU-72505
Measurement: LU-72506

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	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Δ	400	50	1335	798	1.57	11500	0
2	Δ	400	50	1315	880	1.68	10460	50
3	Δ	400	50	1295	957	1.78	9200	100
4	Δ	400	50	1270	1030	1.90	7750	150
5	Y	400	50	1050	547	0.93	9160	0
6	Y	400	50	1010	578	0.98	8075	30
7	Y	400	50	965	604	1.02	6925	56
8	Y	400	50	925	630	1.06	5685	80

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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