S4D500-AD03-01

AC axial fan

sickled blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S4D500-AD03-01**
Motor	**M4D110-GF**

Phase		3~	3~	3~	3~
Nominal voltage	[V]	400	400	480	480
Connection		**D**	Y	**D**	Y
Frequency	[Hz]	50	50	60	60
Type of data definition		ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE
Speed	[min^{-1}]	1325	1035	1570	1170
Power input	[W]	820	550	1220	770
Current draw	[A]	1.59	0.95	1.86	1.13
Max. back pressure	[Pa]	160	100	150	84
Max. ambient temperature	[°C]	80	80	50	50

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

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Technical features

Leackage current	<= 3.5 mA
Size	500 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Electrical leads	Via terminal box
Humidity class	F3-1
Blade angle	0
Direction of air flow	"V"
Insulation class	"F"
Cable exit	Axial
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	15.5 kg
Material of terminal box	ABS plastic, black
Material of blades	Aluminium sheet
Material of guard grille	Steel, phosphated and coated in black plastic
Motor protection	Thermal overload protector (TOP) brought out
Product conforming to standard	CE; EN 61800-5-1
Surface of rotor	Cast in aluminium
Number of blades	5
Type of protection	IP 54
Protection class	I
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Approval	CCC; GOST; VDE

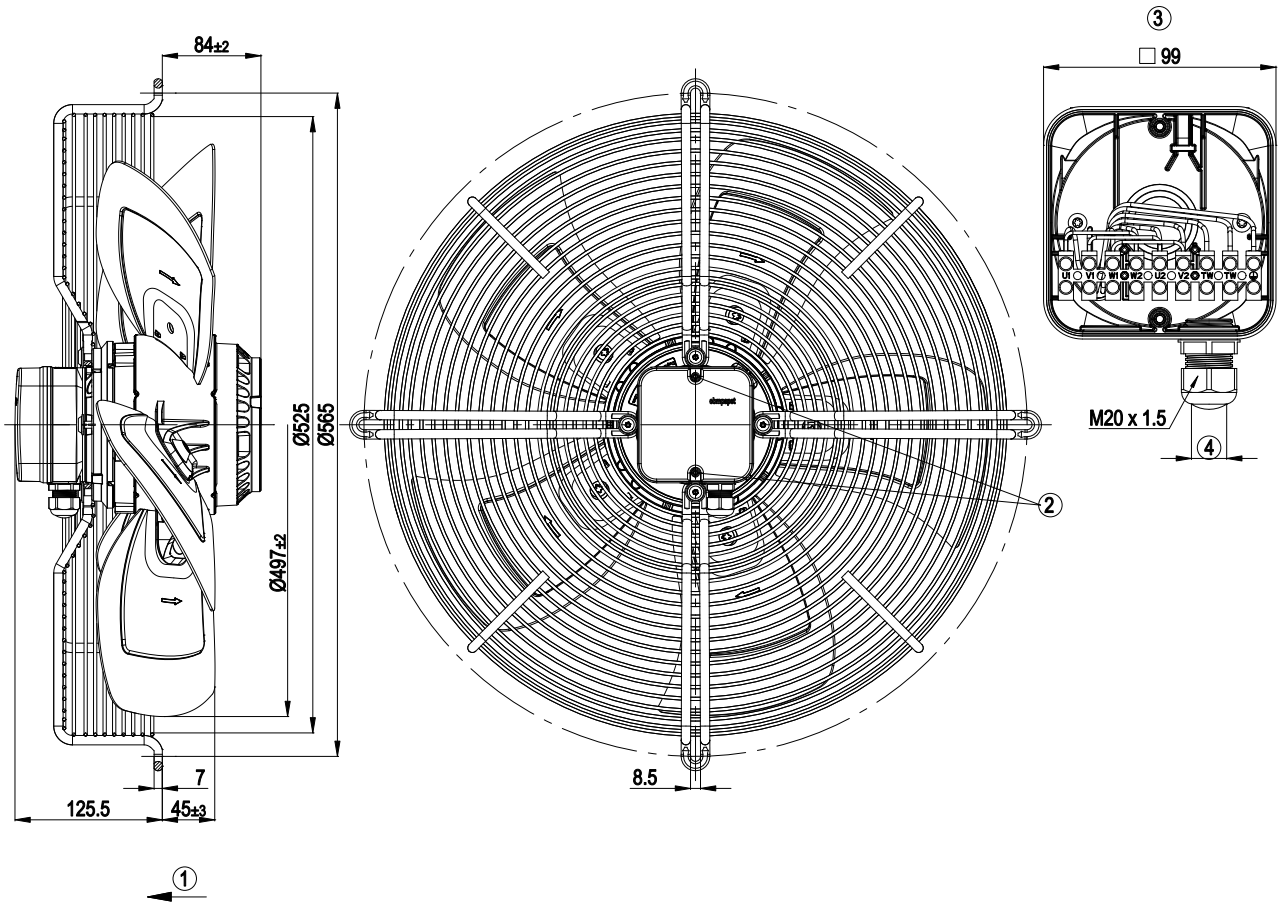
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Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.8 ± 0.15 Nm
3	Shown without terminal box cover
4	Cable diameter: min. 6 mm, max. 12 mm; tightening torque: 2 ± 0.15 Nm

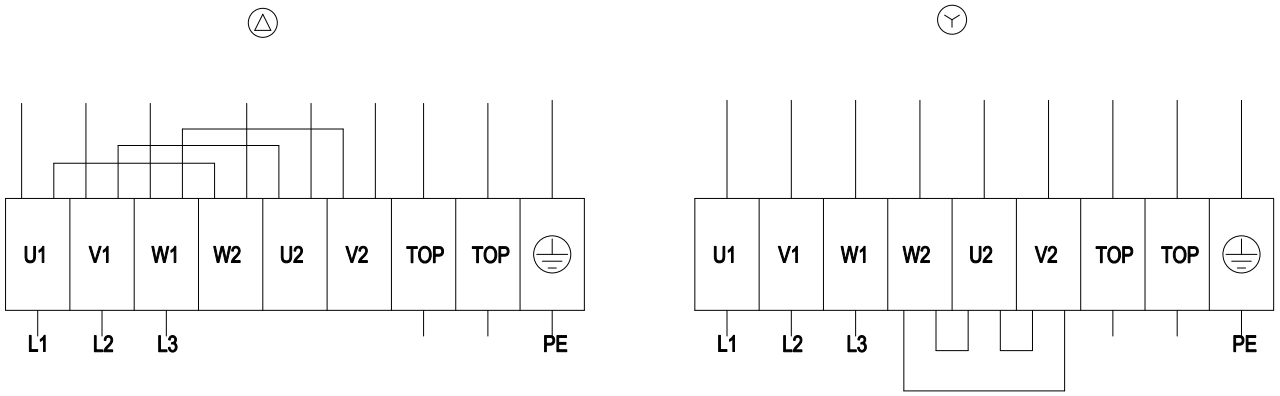
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Connection screen



Note: Direction of rotation changes when two phases are reversed

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				

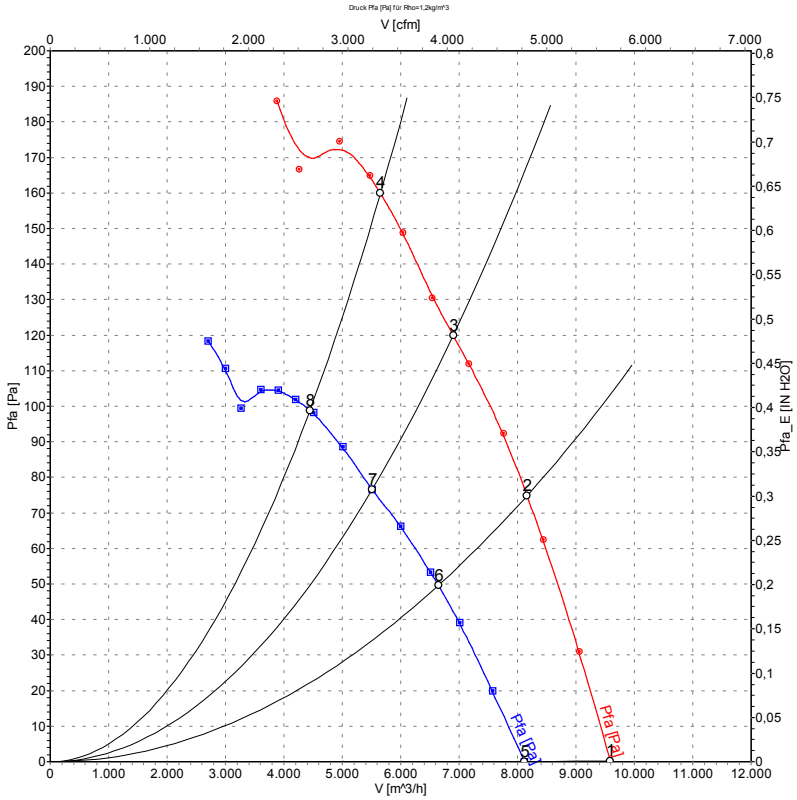
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Charts: Air flow 50 Hz Δ



Measurement: LU-100710
Measurement: LU-100714

Measured values

	Conn.	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	$\hat{V}$	p_{fa}
		[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	Δ	400	50	1380	620	1.30	71	66	77	9590	0
2	Δ	400	50	1360	700	1.38	71	65	77	8160	75
3	Δ	400	50	1345	749	1.44	71	65	78	6900	120
4	Δ	400	50	1325	820	1.59	73	67	80	5655	160
5	Y	400	50	1160	455	0.77	73	67	80	8120	0
6	Y	400	50	1105	498	0.84	73	67	80	6645	50
7	Y	400	50	1075	519	0.87	73	67	80	5515	76
8	Y	400	50	1035	550	0.95	73	67	80	4445	100

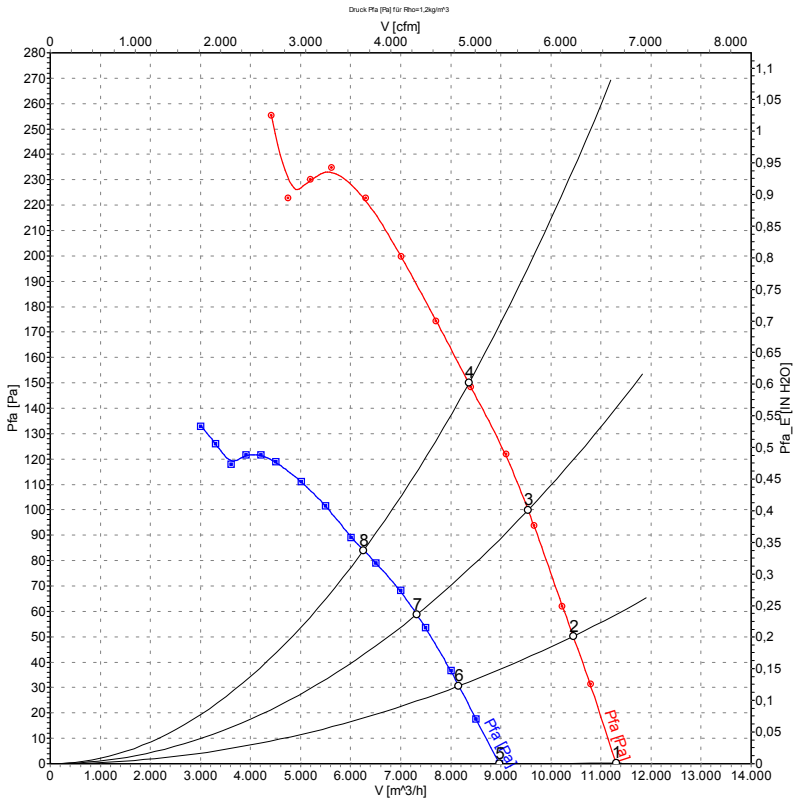
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Charts: Air flow 60 Hz Δ



Measurement: LU-100711
Measurement: LU-100715

Measured values

	Conn.	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	$\hat{V}$	p_{fa}
		[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	Δ	480	60	1620	1000	1.55	74	70	80	11300	0
2	Δ	480	60	1605	1069	1.63	74	69	80	10440	50
3	Δ	480	60	1590	1138	1.70	74	69	80	9545	100
4	Δ	480	60	1570	1220	1.86	75	69	81	8360	150
5	Y	480	60	1280	695	0.98	75	69	81	8970	0
6	Y	480	60	1250	723	1.02	75	69	81	8160	31
7	Y	480	60	1210	748	1.06	75	69	81	7320	59
8	Y	480	60	1170	770	1.13	75	69	81	6260	84

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