W6D450-DH03-15

AC axial fan

sickled blades (S series)

with full square nozzle

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Nominal data

Type	**W6D450-DH03-15**
Motor	**M6D110-EF**

Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	[V]	400	400	400	400	480	480
Connection		**D**	Y	**D**	Y	**D**	Y
Frequency	[Hz]	50	50	60	60	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}]	960	890	1120	970	1140	1040
Power input	[W]	190	130	250	190	290	210
Current draw	[A]	0.65	0.25	0.56	0.32	0.69	0.31
Max. back pressure	[Pa]	57	49	77	59	80	67
Max. ambient temperature	[°C]	95	95	90	90	90	90

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	450 mm
Operation mode	S1
Direction of rotation	Clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Electrical leads	Via terminal box
Blade angle	5°
Direction of air flow	"A"
Insulation class	"F"
Cable exit	Axial
Condensate discharge holes	Rotor-side
Bearing motor	Ball bearing
Mass	15 kg
Material of terminal box	ABS Plastic, black
Material of blades	Aluminium sheet, coated in black
Material of guard grille	Steel, phosphated and coated with black plastic
Material of wall ring	Sheet steel, pre-galvanised and coated with black plastic
Motor protection	Thermal overload protector (TOP) brought out
Product conforming to standard	CE; EN 61800-5-1
Surface of rotor	Coated in black
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	GOST; VDE

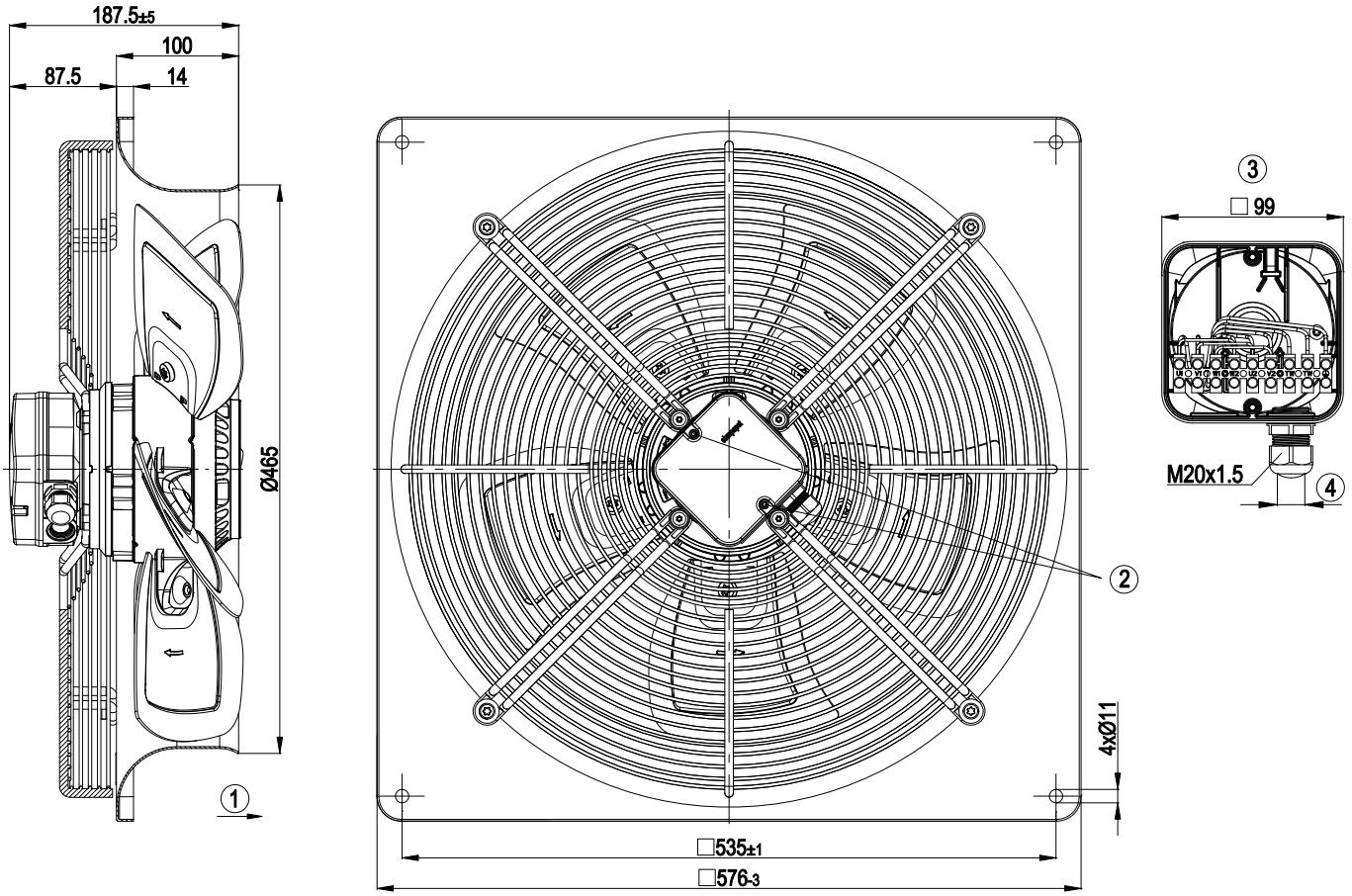
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Product drawing



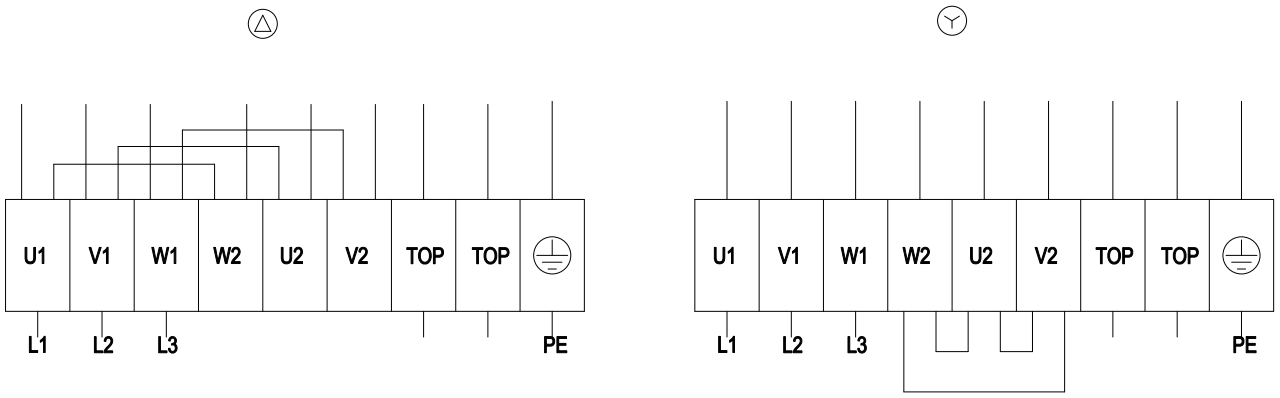
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Connection screen



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				

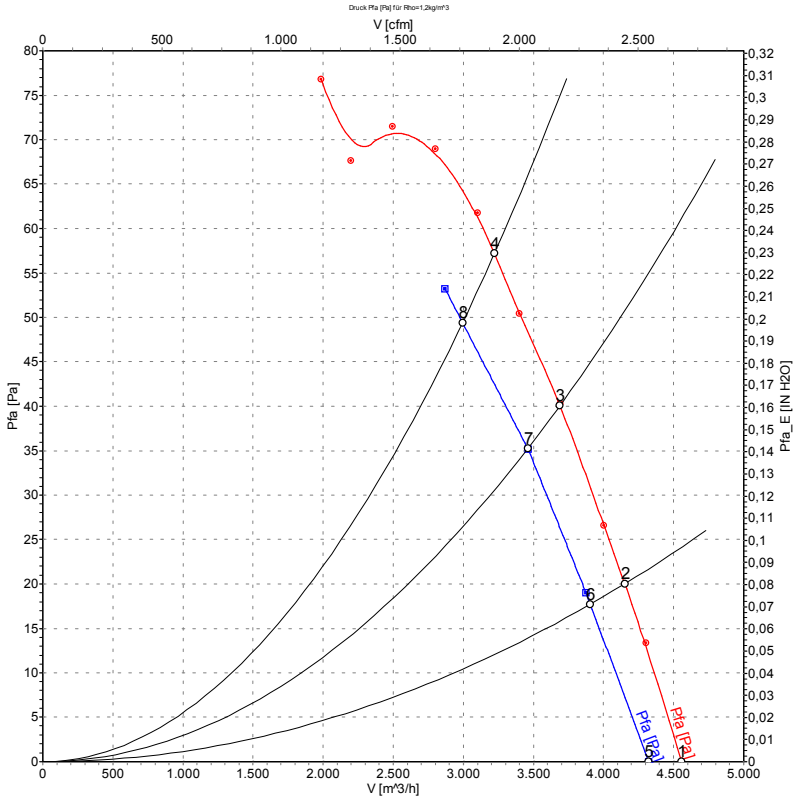
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Charts: Air flow 50 Hz



Measurement: LU-104115
Measurement: LU-105058

Measured values

	Conn.	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	LwA_{ds}	$\dot{V}$	p_{fa}
		[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	Δ	400	50	970	160	0.64	62	54	67	67	4555	0
2	Δ	400	50	965	172	0.64	62	54	68	68	4150	20
3	Δ	400	50	960	183	0.65	62	56	68	68	3690	40
4	Δ	400	50	960	190	0.65	62	57	69	69	3220	57
5	Y	400	50	920	106	0.23	60	53	66	66	4320	0
6	Y	400	50	910	116	0.24	60	53	66	66	3905	18
7	Y	400	50	895	125	0.24	60	54	66	66	3460	35
8	Y	400	50	890	130	0.25	60	55	67	67	2995	49

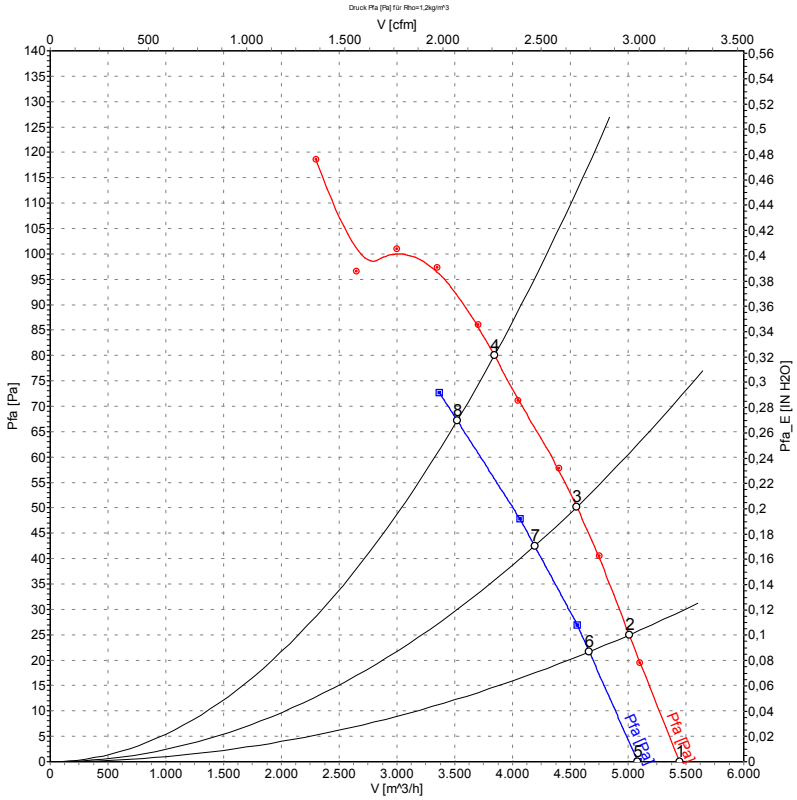
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Charts: Air flow 60 Hz



Measurement: LU-104116
Measurement: LU-105060

Measured values

	Conn.	U	f	n	P_1	I	LpA_{ss}	LpA_{ds}	LwA_{ss}	LwA_{ds}	$\mathring{V}$	p_{fa}
		[V]	[Hz]	[min^{-1}]	[W]	[A]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m^3/h]	[Pa]
1	Δ	480	60	1155	233	0.64	65	58	71	71	5445	0
2	Δ	480	60	1150	251	0.65	65	59	72	72	5010	25
3	Δ	480	60	1145	268	0.66	66	59	72	72	4555	50
4	Δ	480	60	1140	290	0.69	67	61	74	74	3845	80
5	Y	480	60	1080	168	0.26	64	57	70	70	5085	0
6	Y	480	60	1065	182	0.28	63	56	70	70	4665	22
7	Y	480	60	1055	195	0.29	64	57	70	70	4190	42
8	Y	480	60	1040	210	0.31	64	59	71	71	3520	67

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