AC axial fan

sickled blades (S series)

with full square nozzle

W8D800-CJ05-85 ebmpapst Datasheet
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Nominal data

Type	W8D800-CJ05-85			
Motor	M8D138-LA			
Phase		3~	3~	3~
Nominal voltage	[V]	400	400	480
Connection		Y	Y	Y
Frequency	[Hz]	50	60	60
Type of data definition		rfa	rfa	rfa
Valid for approval / standard		CE	CE	CE
Speed	[min^{-1}]	700	785	820
Power input	[W]	660	940	1040
Current draw	[A]	2.1	2.18	2.27
Max. back pressure	[Pa]	105	57	65
Max. ambient temperature	[°C]	75	70	70

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	800 mm
Operation mode	S1
Direction of rotation	Counter-clockwise, seen on rotor
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Electrical leads	Via terminal box
Blade angle	0°
Direction of air flow	"A"
Insulation class	"F"
Cable exit	Axial
Condensate discharge holes	On the stator side
Bearing motor	Ball bearing
Mass	48 kg
Material of terminal box	ABS Plastic, black
Material of blades	Die-cast aluminium, coated in grey
Material of guard grille	Steel, galvanised and plastic-coated in pebble-grey (RAL 7032)
Material of wall ring	Sheet steel, pre-galvanised and plastic-coated in pebble-grey (RAL 7032)
Motor protection	Thermal overload protector (TOP) brought out
Product conforming to standard	CE; EN 61800-5-1
Surface of rotor	Coated in grey
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	VDE

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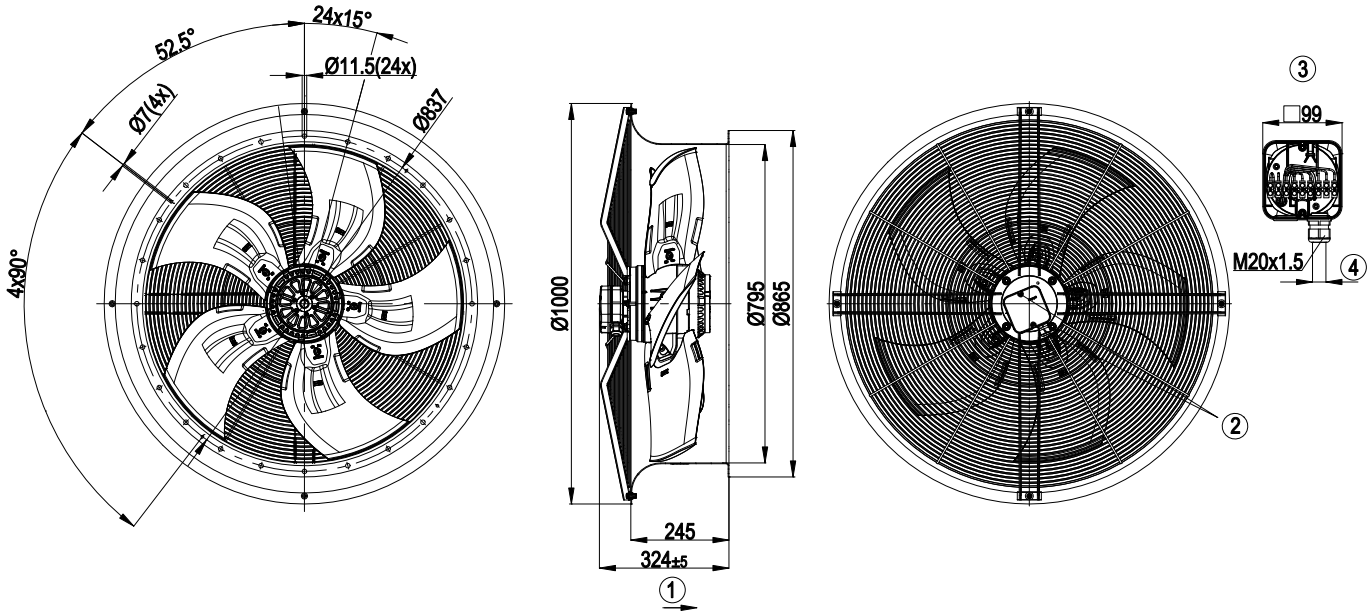
Product drawing



1	Direction of air flow "A"
2	Tightening torque 0.8±0.3 Nm
3	Illustration without terminal box cover
4	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.15 Nm

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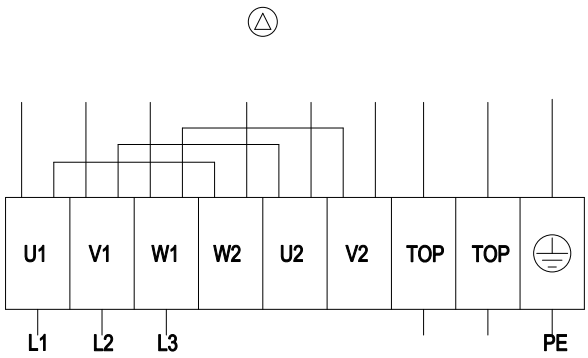
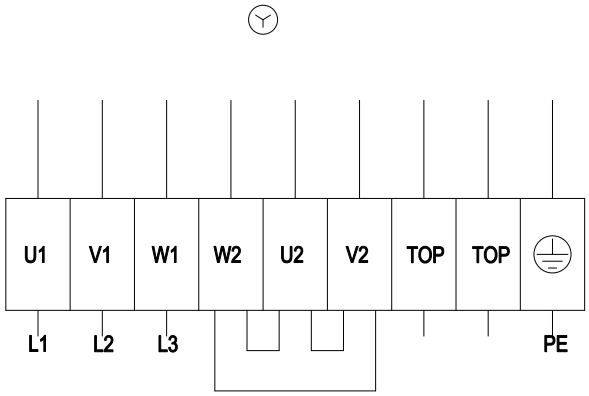
Connection screen





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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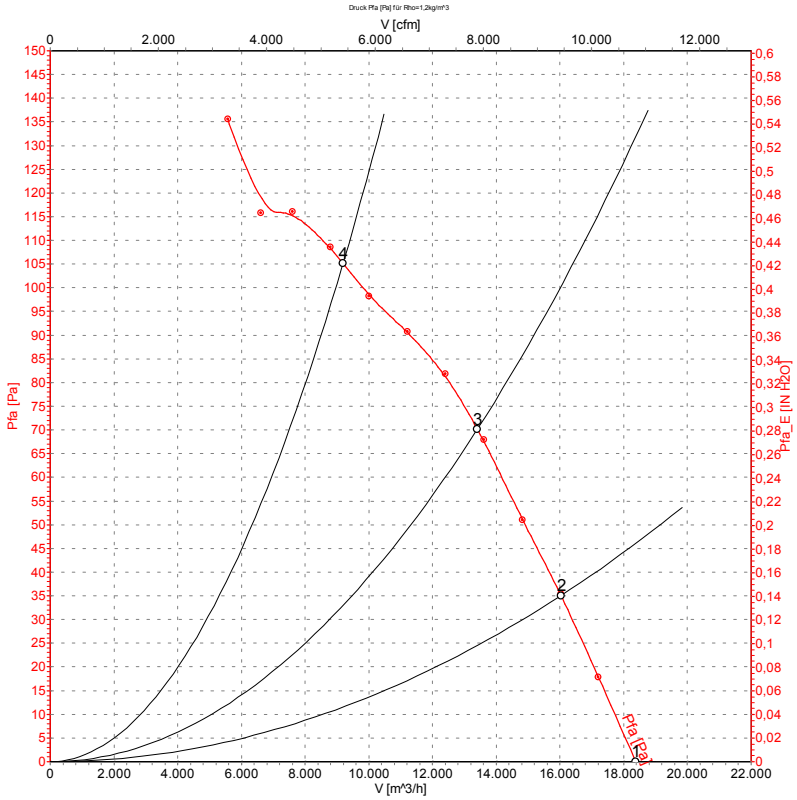
Charts: Air flow 50 Hz



Measurement: LU-101483

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	Y	400	50	700	660	2.10	62	61	67	18380	0
2	Y	400	50	690	750	2.18	60	55	66	16030	35
3	Y	400	50	680	820	2.25	60	53	66	13400	70
4	Y	400	50	660	980	2.41	64	59	71	9190	105

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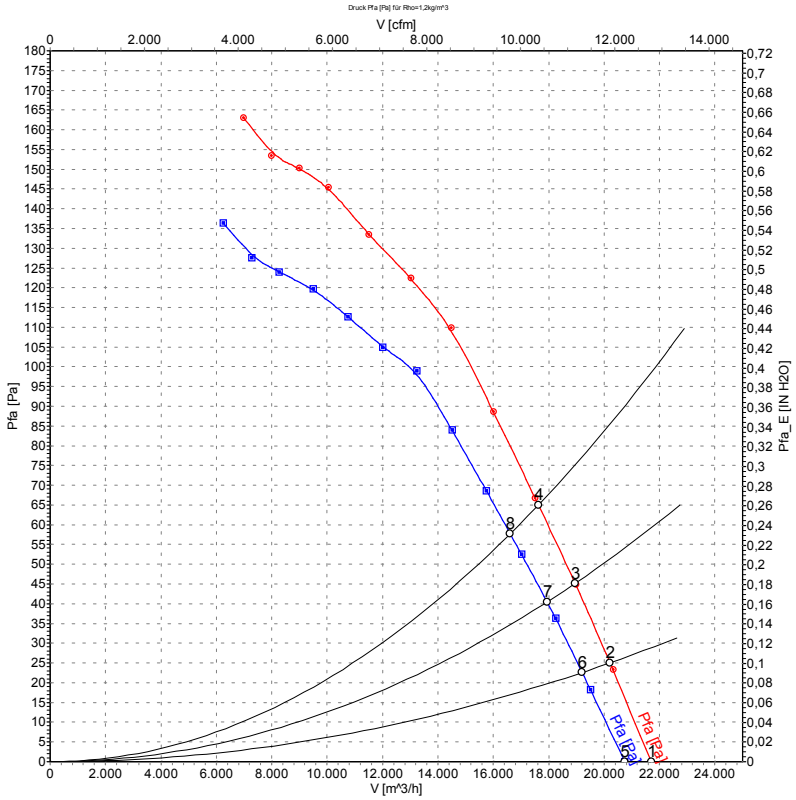
Charts: Air flow 60 Hz



Measurement: LU-101487
Measurement: LU-101486

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	Y	480	60	820	1040	2.27	64	67	70	21700	0
2	Y	480	60	815	1119	2.40	63	64	69	20210	25
3	Y	480	60	805	1179	2.46	62	60	69	18950	45
4	Y	480	60	790	1250	2.53	62	58	68	17630	65
5	Y	400	60	785	940	2.18	63	65	70	20750	0
6	Y	400	60	775	1001	2.30	62	62	68	19210	23
7	Y	400	60	765	1046	2.36	62	59	68	17940	40
8	Y	400	60	750	1100	2.43	61	56	67	16610	58