AZD800-AM03-01

AC axial fan

sickled blades (S series)



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Nominal data

Type	**AZD800-AM03-01**
Motor	**MZD138-HF**

Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	400	400	400	400	480	480
Connection		Δ	Y	Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60	60	60
Type of data definition		ml	ml	ml	ml	ml	ml
Valid for approval / standard		-	-	-	-	-	-
Speed	min^{-1}	435	330	465	300	505	360
Power input	W	370	200	450	200	540	280
Current draw	A	1.15	0.48	1.12	0.48	1.25	0.55
Max. back pressure	Pa	44	25	51	22	60	30
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	80	80	80	80	70	70
Starting current	A	2.2	1.4	1.9		2.2	1.45

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

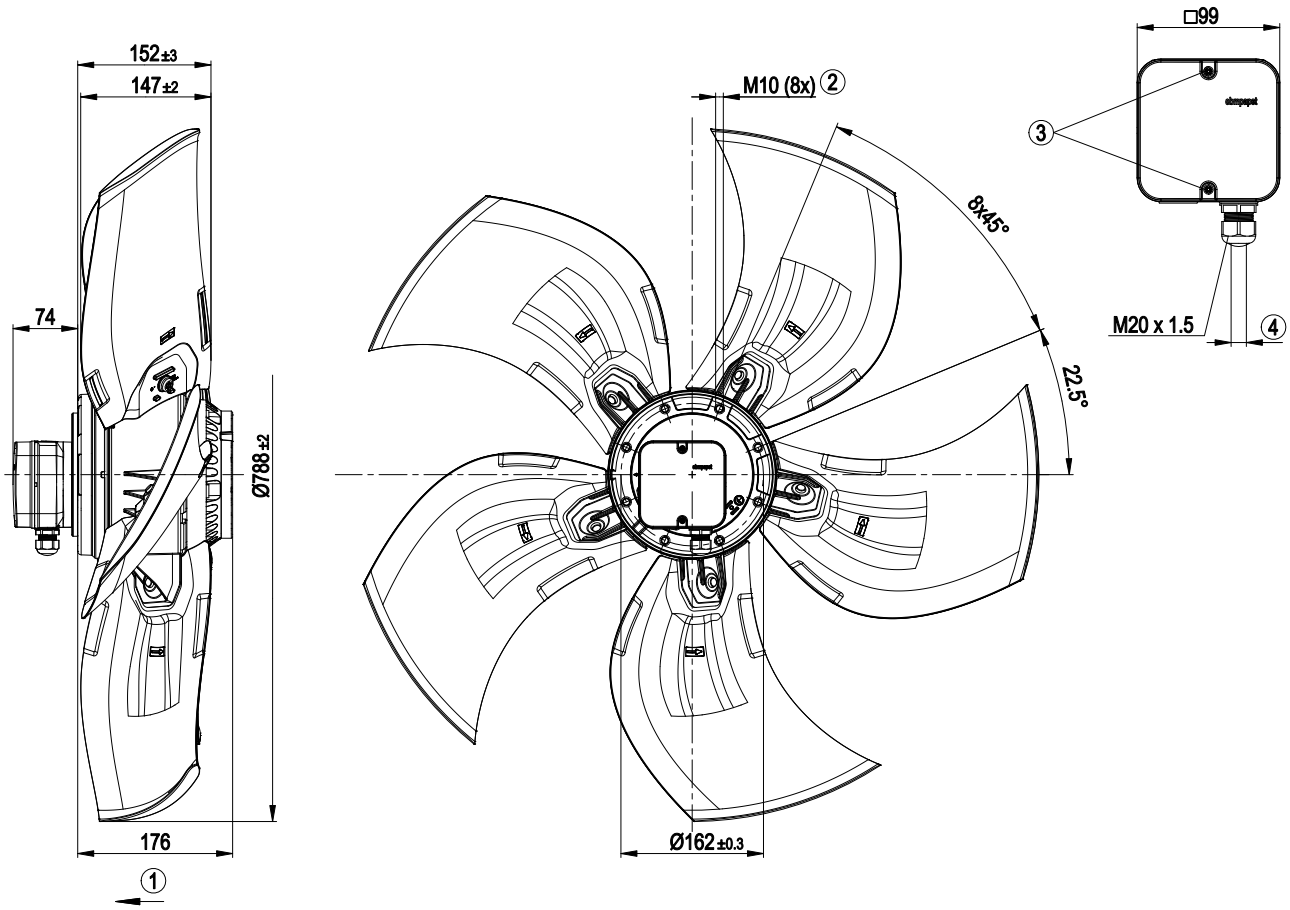
Mass	22.1 kg
Size	800 mm
Surface of rotor	Cast in aluminium
Material of terminal box	PP plastic
Material of blades	Die-cast aluminium
Number of blades	5
Blade angle	0°
Direction of air flow	"V"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	On rotor and stator sides
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 60034; EN 61800-5-1
Approval	EAC; VDE

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Product drawing



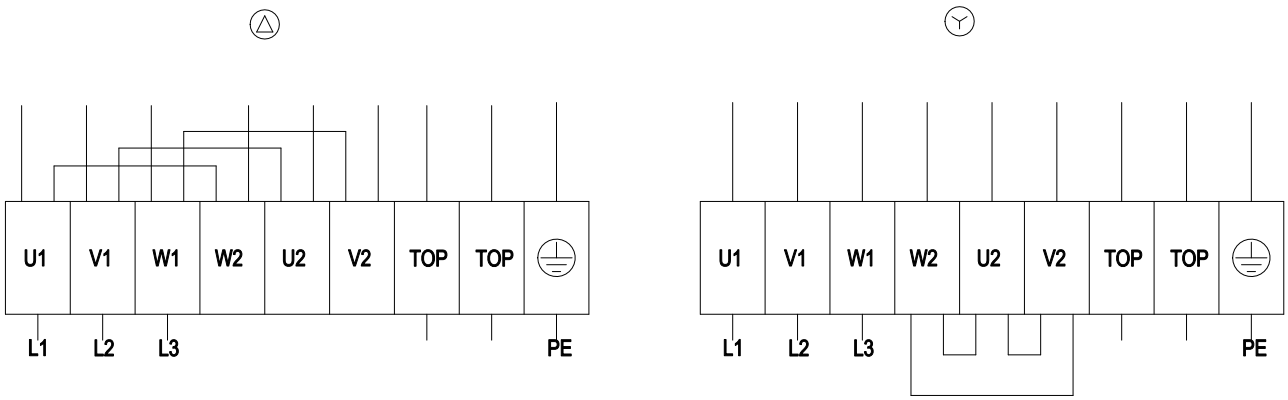
1	Direction of air flow "V"
2	Depth of screw max. 18 mm
3	Tightening torque 1.5±0.2 Nm
4	Cable diameter: min. 7 mm, max. 14 mm, tightening torque: 2±0.3 Nm

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Connection screen



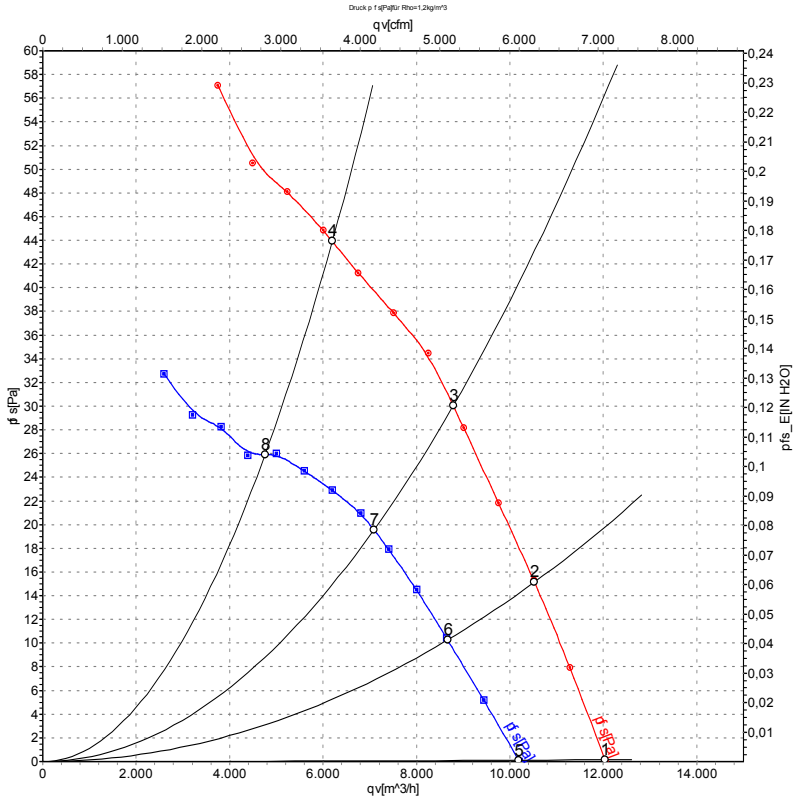
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green/yellow				

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Charts: Air flow 50 Hz



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	LpA_{in}	LwA_{in}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	Δ	400	50	460	290	1.06	55	60	12050	0
2	Δ	400	50	450	312	1.07	53	58	10530	15
3	Δ	400	50	445	331	1.08	53	58	8785	30
4	Δ	400	50	435	370	1.15	54	61	6195	44
5	Y	400	50	390	160	0.41	51	56	10200	0
6	Y	400	50	375	175	0.43	50	55	8665	10
7	Y	400	50	360	183	0.45	49	55	7090	20
8	Y	400	50	330	200	0.48	49	55	4760	25

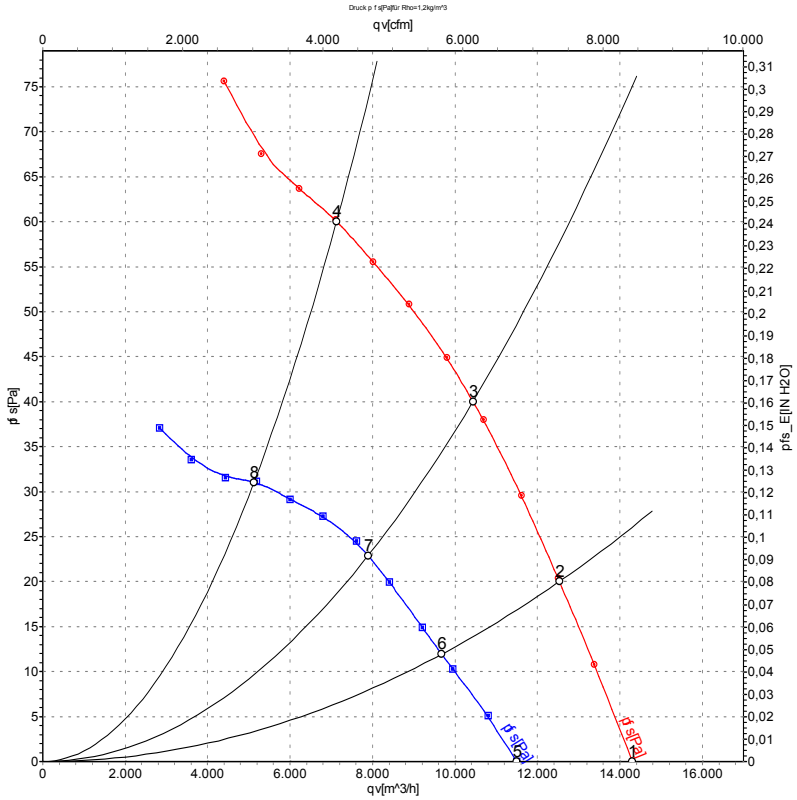
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



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	LpA_{in}	LwA_{in}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	Δ	480	60	540	400	1.15	58	64	14310	0
2	Δ	480	60	530	440	1.15	56	62	12530	20
3	Δ	480	60	525	475	1.17	56	61	10440	40
4	Δ	480	60	505	540	1.25	58	65	7125	60
5	Y	480	60	440	230	0.47	54	59	11500	0
6	Y	480	60	415	248	0.50	52	57	9685	12
7	Y	480	60	395	258	0.51	51	56	7890	23
8	Y	480	60	360	280	0.55	50	57	5125	30

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side
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