AZD800-AH09-01

AC axial fan - HyBlade

sickle-shaped blades (S series)



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Nominal data

Type	**AZD800-AH09-01**
Motor	**MZD138-HF**

Phase		3~	3~	3~	3~
Nominal voltage	VAC	400	400	400	400
Wiring		Δ	Y	Δ	Y
Frequency	Hz	50	50	60	60
Method of obtaining data		ml	ml	ml	ml
Valid for approval/standard		-	-	-	-
Speed	min^{-1}	430	340	480	310
Power consumption	W	220	130	280	140
Current draw	A	0.59	0.28	0.63	0.30
Max. back pressure	Pa	28	16	34	14
Min. ambient temperature	°C	-40	-40	-40	-40
Max. ambient temperature	°C	60	60	60	60
Starting current	A	1.27	0.43	1.15	0.39

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

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Technical description

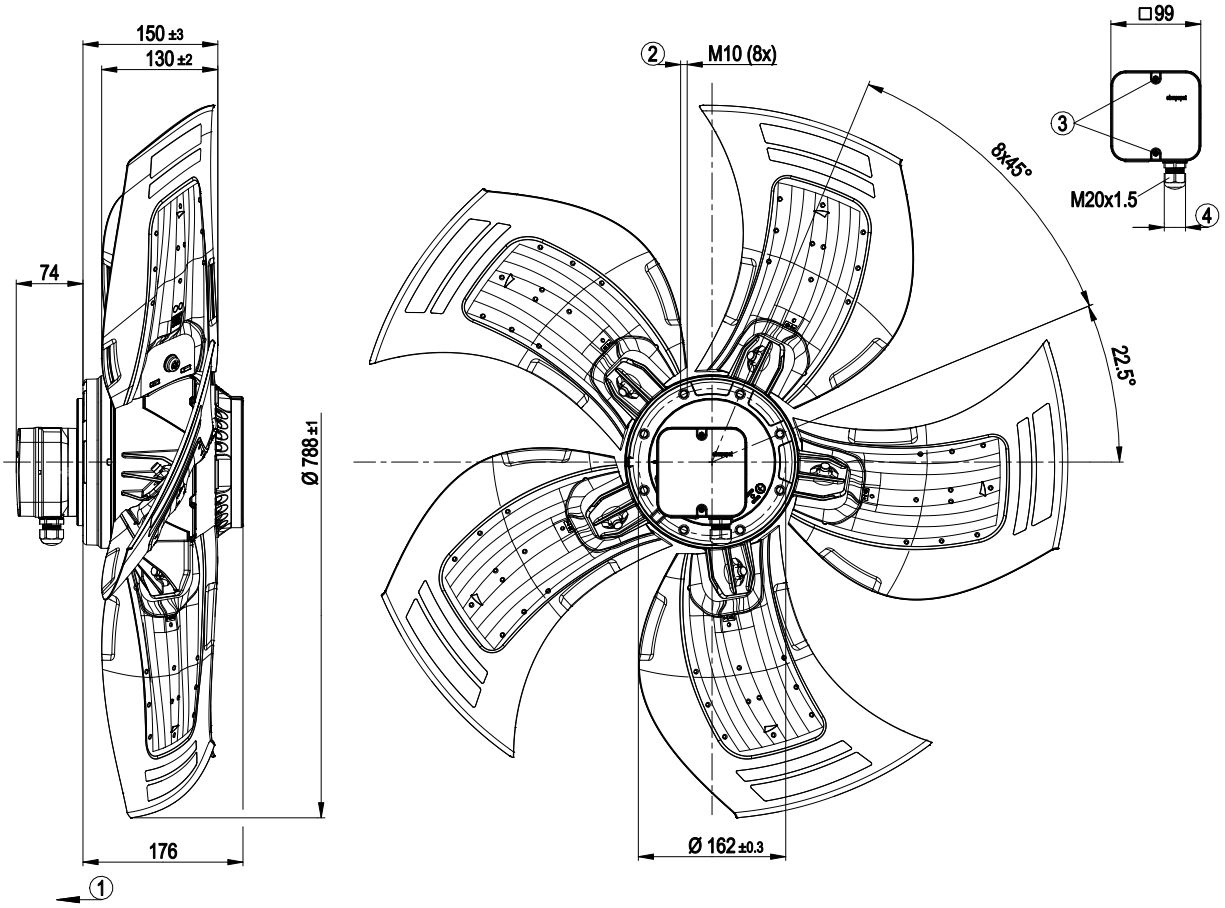
Weight	20.1 kg
Fan size	800 mm
Rotor surface	Cast in aluminum
Terminal box material	PP plastic
Blade material	Sheet aluminum insert, sprayed with PP plastic
Number of blades	5
Blade pitch	-5°
Airflow direction	"V"
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F3-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	On rotor and stator sides
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Via terminal box
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010); EN 61800-5-1
Approval	EAC; VDE

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Product drawing



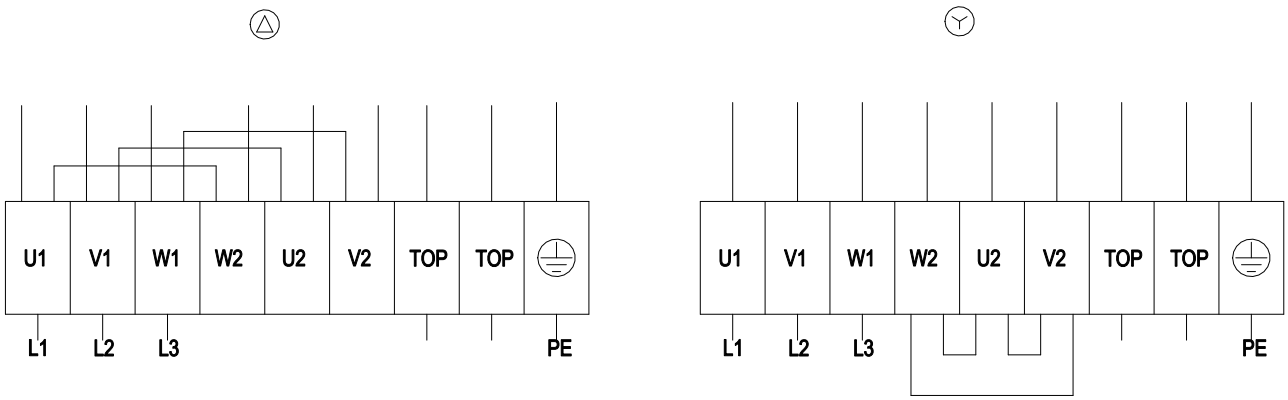
1	Direction of air flow "V"
2	Max. clearance for screw 18 mm
3	Tightening torque 1.5 ± 0.2 Nm
4	Cable diameter: min. 7 mm, max. 14 mm; tightening torque 2±0.3 Nm

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Connection diagram



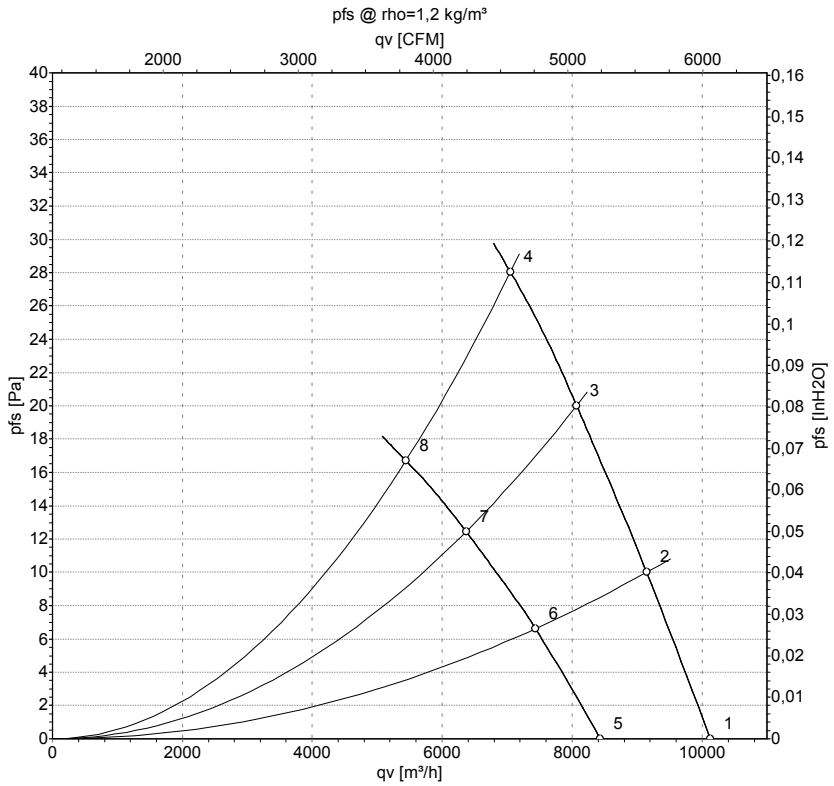
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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Curves: Air performance 50 Hz



Measurement: LU-150144-1
Measurement: LU-150170-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P_e	I	LpA_{in}	LwA_{in}	LwA_{out}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa
1	Δ	400	50	460	170	0.55	51	57	56	10130	0
2	Δ	400	50	450	187	0.56	49	55	54	9150	10
3	Δ	400	50	445	202	0.57	48	54	53	8070	20
4	Δ	400	50	430	220	0.59	49	55	54	7050	28
5	Y	400	50	385	108	0.24	47	53	52	8435	0
6	Y	400	50	370	116	0.25	45	51	50	7435	7
7	Y	400	50	355	123	0.26	43	49	48	6365	12
8	Y	400	50	340	130	0.28	42	49	48	5440	17

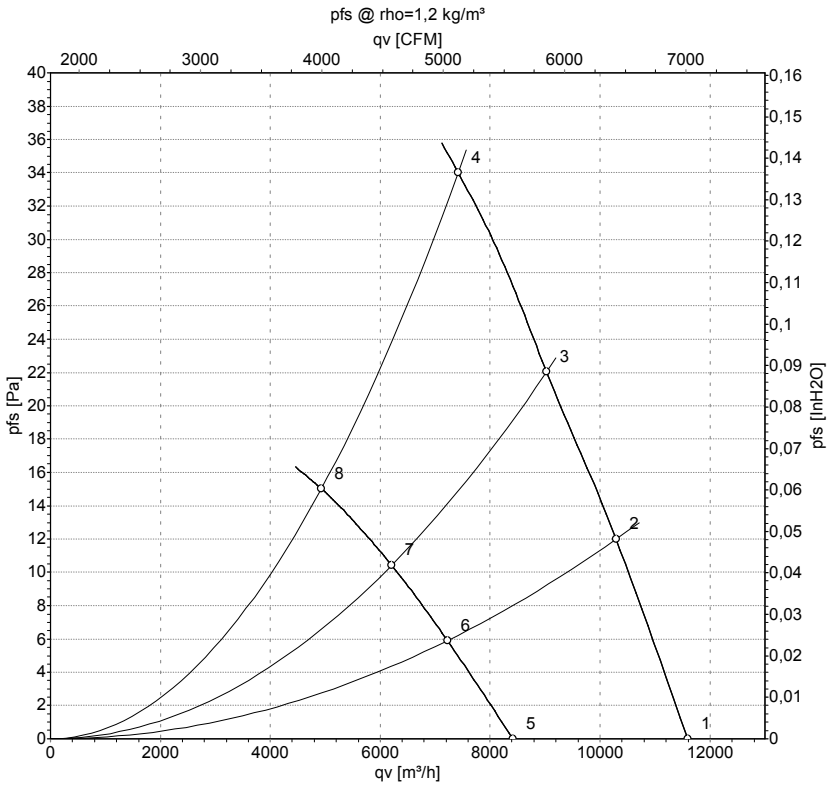
Wired = Wiring · U = Power supply · f = Frequency · n = Speed · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-150160-1
Measurement: LU-152085-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P_e	I	LpA_{in}	LwA_{in}	LwA_{out}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa
1	Δ	400	60	515	219	0.54	54	60	59	11590	0
2	Δ	400	60	500	242	0.57	51	58	56	10290	12
3	Δ	400	60	490	259	0.59	50	56	55	9030	22
4	Δ	400	60	480	280	0.63	51	57	56	7420	34
5	Y	400	60	380	127	0.27	47	53	52	8410	0
6	Y	400	60	355	132	0.28	44	50	49	7220	6
7	Y	400	60	335	135	0.28	42	48	48	6205	10
8	Y	400	60	310	140	0.30	40	47	47	4930	15

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