AC axial fan - HyBlade

sickle-shaped blades (S series)

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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

Type	**A4D400-AM06-03**
Motor	**M4D094-EA**

Phase		3~	3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400	460	480
Wiring		Δ	Δ	Y	Y	Y	Y
Frequency	Hz	50	60	50	60	60	60
Method of obtaining data		ml	ml	ml	ml	ml	ml
Valid for approval/standard		-	-	-	-	-	-
Speed (rpm)	min^{-1}	1320	1410	1320	1410	1500	1520
Power consumption	W	300	430	300	430	460	470
Current draw	A	0.97	1.22	0.56	0.70	0.68	0.67
Max. back pressure	Pa	100	110	100	110	120	130
Max. back pressure	inH2O	0.4	0.44	0.4	0.44	0.48	0.52
Min. ambient temperature	°C	-40	-40	-40	-40	-40	-40
Max. ambient temperature	°C	65	50	65	50	50	50
Starting current	A	2.95	2.8	1.7	1.62		

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

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Technical description

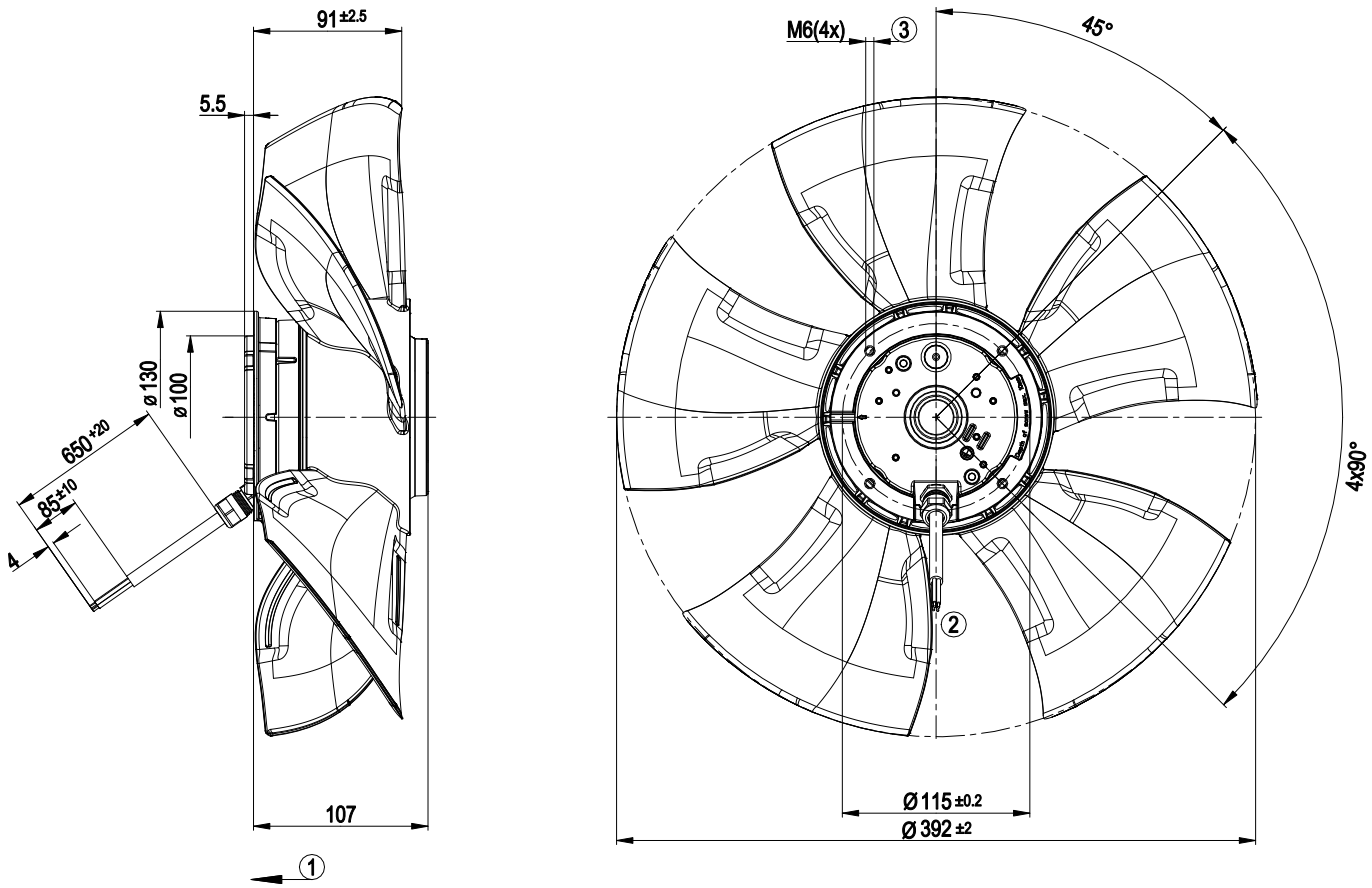
Weight	4.7 kg
Fan size	400 mm
Rotor surface	Painted black
Blade material	PP plastic
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	F4-1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1 (2010)
Approval	UL 1004-1; CSA C22.2 No. 100

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Product drawing



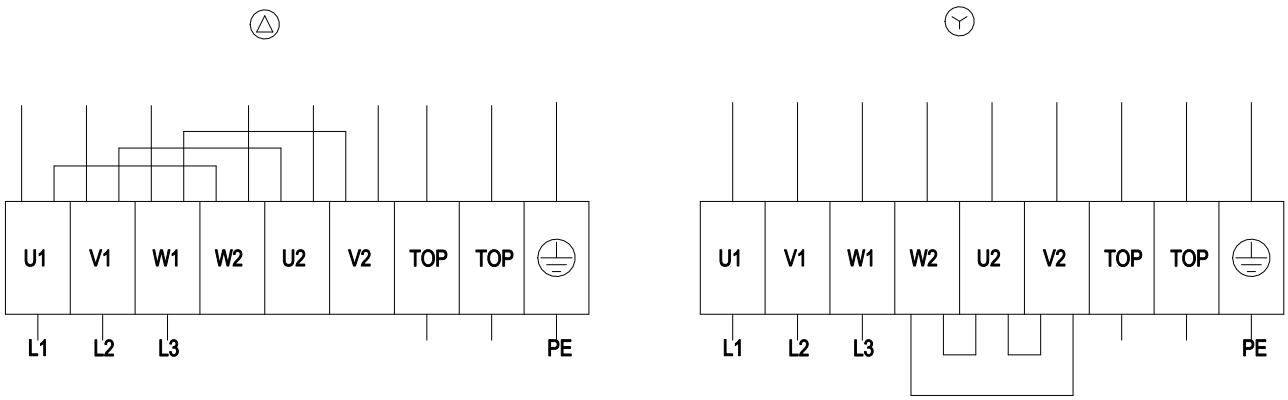
1	Airflow direction "V"
2	Cable silicone 9G 0.75 mm², 4mm stripped and untinned
3	Max. clearance for screw 10 mm

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Connection diagram



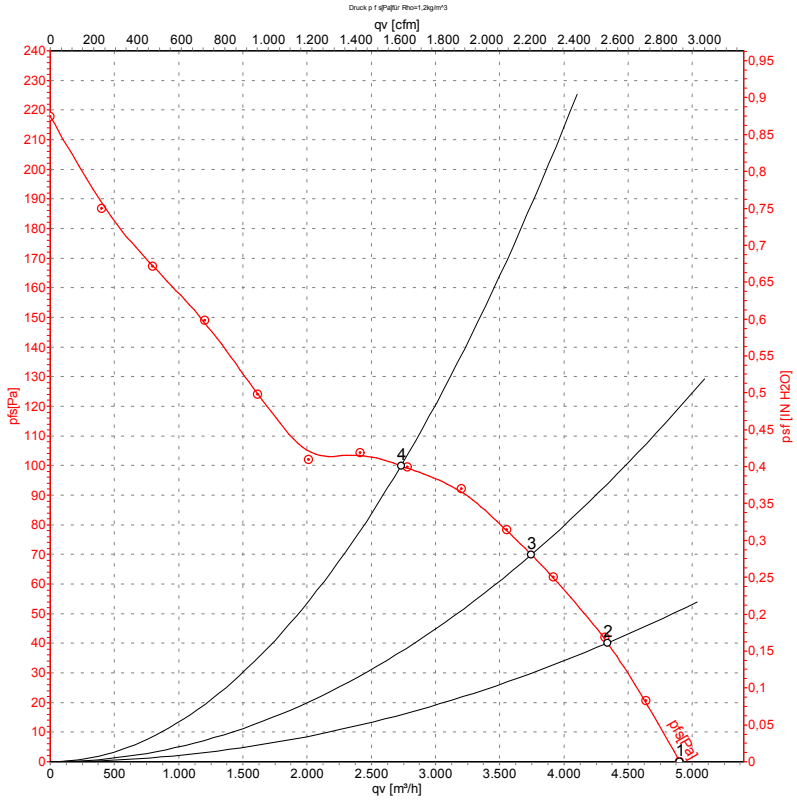
Δ	Delta connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2x gray
PE	green/yellow				

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Curves: Air performance 50 Hz



Measurement: LU-108985-1

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}	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	Y. AUS	400	50	1360	244	0.49	67	74	4900	0	2885	0.00
2	Y. AUS	400	50	1345	264	0.51	65	72	4340	40	2555	0.16
3	Y. AUS	400	50	1335	274	0.52	62	70	3745	70	2205	0.28
4	Y. AUS	400	50	1320	300	0.56	60	68	2730	100	1610	0.40

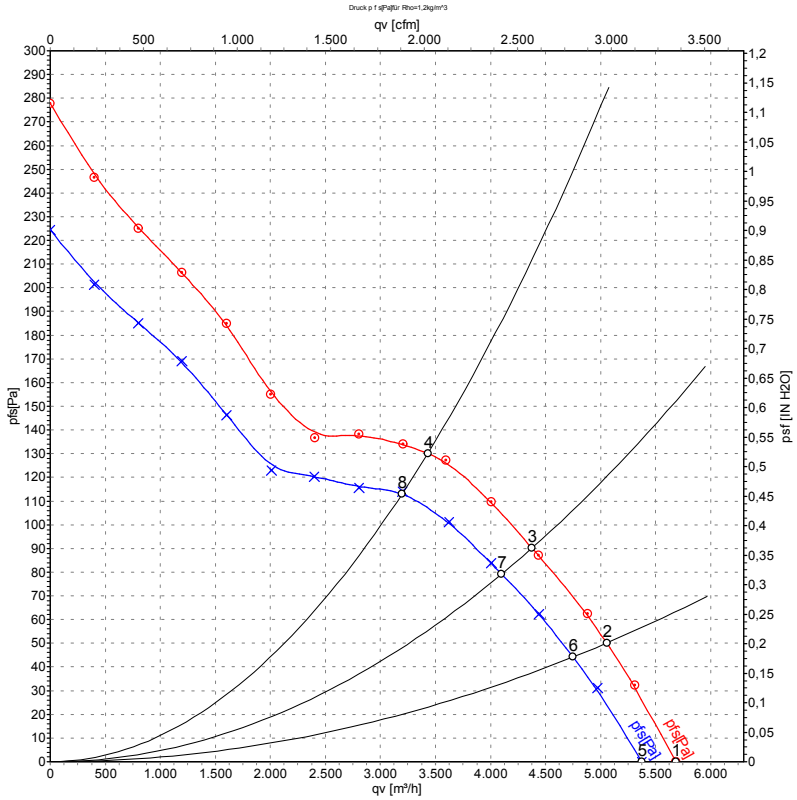
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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Curves: Air performance 60 Hz



Measurement: LU-108987-1
Measurement: LU-108986-1

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}	qv	p_{fs}	qv	p_{fs}
		V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	Y. AUS	480	60	1580	395	0.58	71	78	5685	0	3345	0.00
2	Y. AUS	480	60	1560	420	0.61	69	76	5055	50	2975	0.20
3	Y. AUS	480	60	1545	438	0.63	66	73	4375	90	2575	0.36
4	Y. AUS	480	60	1520	470	0.67	64	72	3430	130	2020	0.52
5	Y. AUS	400	60	1500	357	0.59			5375	0	3165	0.00
6	Y. AUS	400	60	1465	383	0.64			4750	44	2795	0.18
7	Y. AUS	400	60	1445	397	0.66			4100	79	2415	0.32
8	Y. AUS	400	60	1410	430	0.70			3195	114	1880	0.46

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

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