A4D400-AN12-06

AC axial fan

sickled blades (S series)

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**A4D400-AN12-06**
Motor	**M4D094-FA**

Phase		3~	3~	3~	3~	3~
Nominal voltage	VAC	208	208	208	208	230
Connection		Δ	Y	Δ	Y	Δ
Frequency	Hz	50	50	60	60	60
Type of data definition		ml	ml	ml	ml	ml
Valid for approval / standard		CE	CE	CE	CE	CE
Speed	min^{-1}	1380	1140	1550	1110	1610
Power input	W	320	240	480	310	470
Current draw	A	1.38	0.75	1.65	0.98	1.45
Max. back pressure	Pa	100	70	125	65	135
Min. ambient temperature	°C	-40	-40	-40	-40	-40
Max. ambient temperature	°C	60	60	60	60	65

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

Data according to ErP directive

Installation category	A
Efficiency category	Static
Variable speed drive	No
Specific ratio*	1.00

* Specific ratio = 1 + p_{fs} / 100 000 Pa

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		30.5	26.5	30.5
Efficiency grade N		40	36	40
Power input P_e	kW	0.31		
Air flow q_v	m^3/h	3605		
Pressure increase p_{fs}	Pa	92		
Speed n	min^{-1}	1405		

Data definition with optimum efficiency.

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Technical features

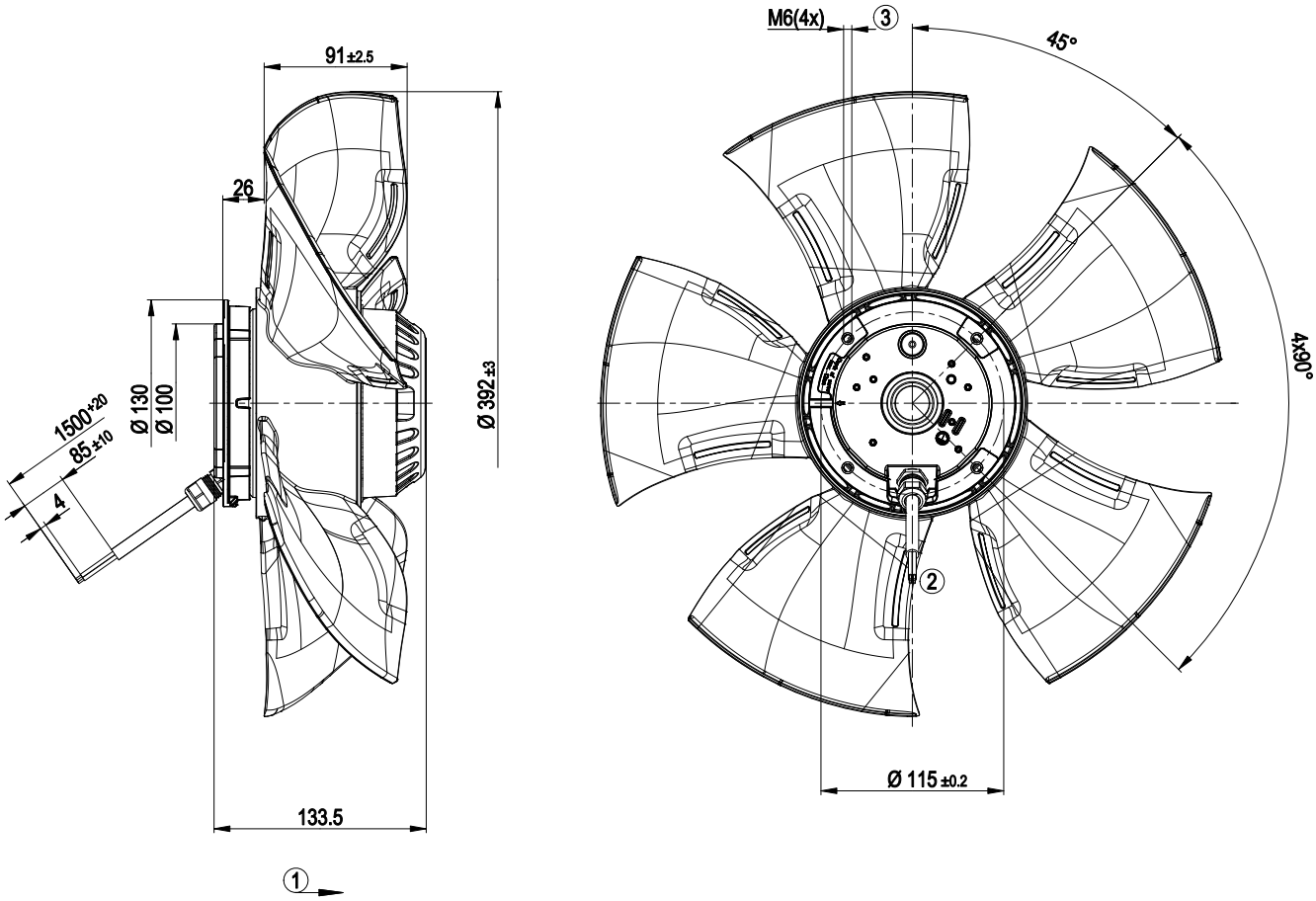
Mass	5.9 kg
Size	400 mm
Surface of rotor	Coated in black
Material of blades	PP-GF40 plastic
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"F"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Operation mode	S1
Motor bearing	Ball bearing with anti-freezing grease
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) brought out
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60034-1 (2004); CE
Approval	UL 1004-1; CSA C22.2 Nr.100

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Product drawing



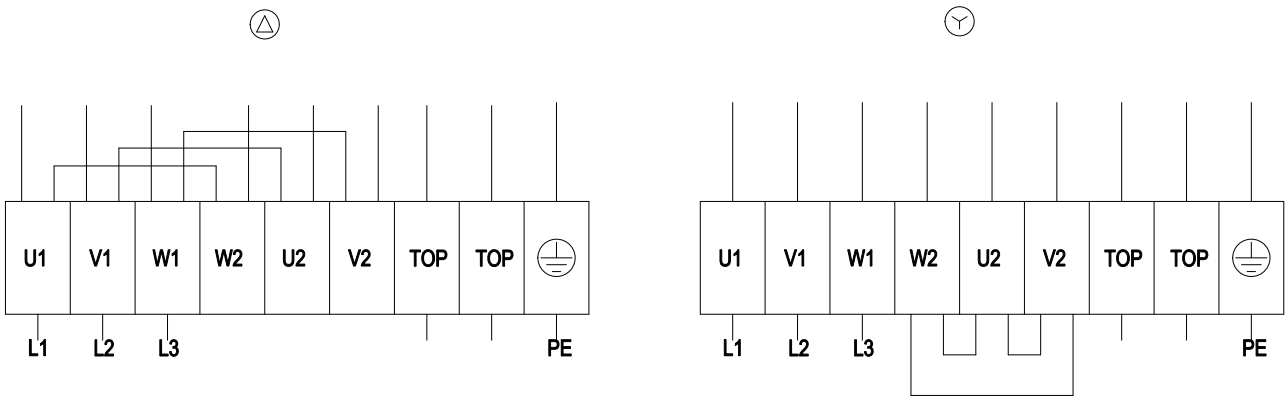
1	Direction of air flow "A"
2	Connection line silicone 9G 0.75 mm², 9x brass lead tips crimped
3	Depth of screw max. 12mm

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Connection screen



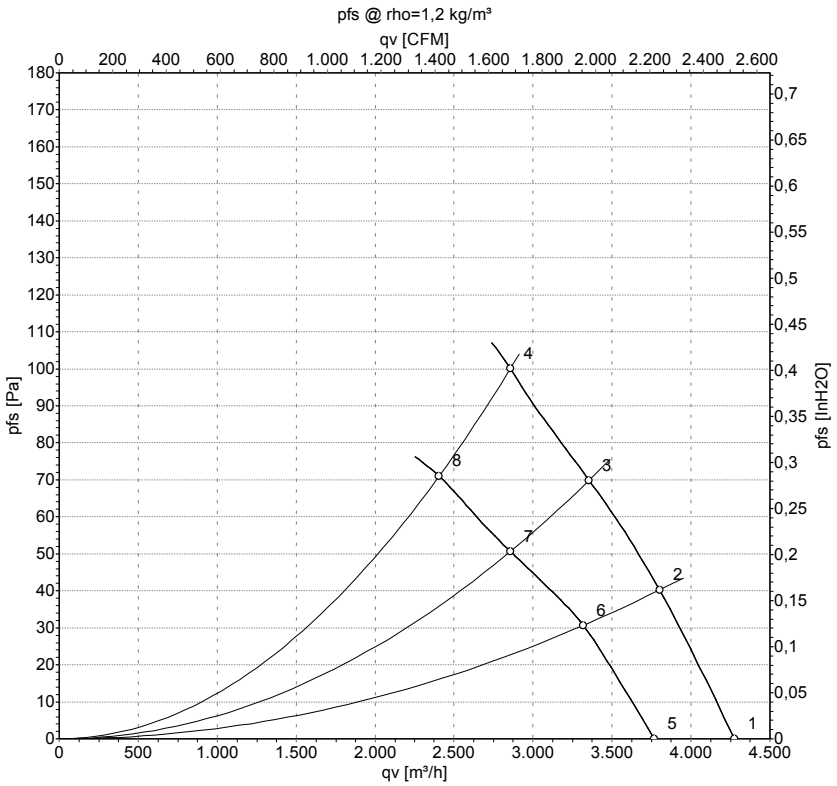
Δ	Delta-connection	Y	Star connection	L1	= U1 = black
L2	= V1 = blue	L3	= W1 = brown	W2	yellow
U2	green	V2	white	TOP	2 x grey
PE	green / yellow				

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AC axial fan

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Charts: Air flow 50 Hz



Measurement: LU-116624
Measurement: LU-116526

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	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Δ	208	50	1415	246	1.26	4275	0
2	Δ	208	50	1415	256	1.28	3800	40
3	Δ	208	50	1400	278	1.31	3355	70
4	Δ	208	50	1380	320	1.38	2855	100
5	Y	208	50	1245	193	0.61	3765	0
6	Y	208	50	1230	201	0.63	3315	31
7	Y	208	50	1200	214	0.68	2855	51
8	Y	208	50	1140	240	0.75	2405	72

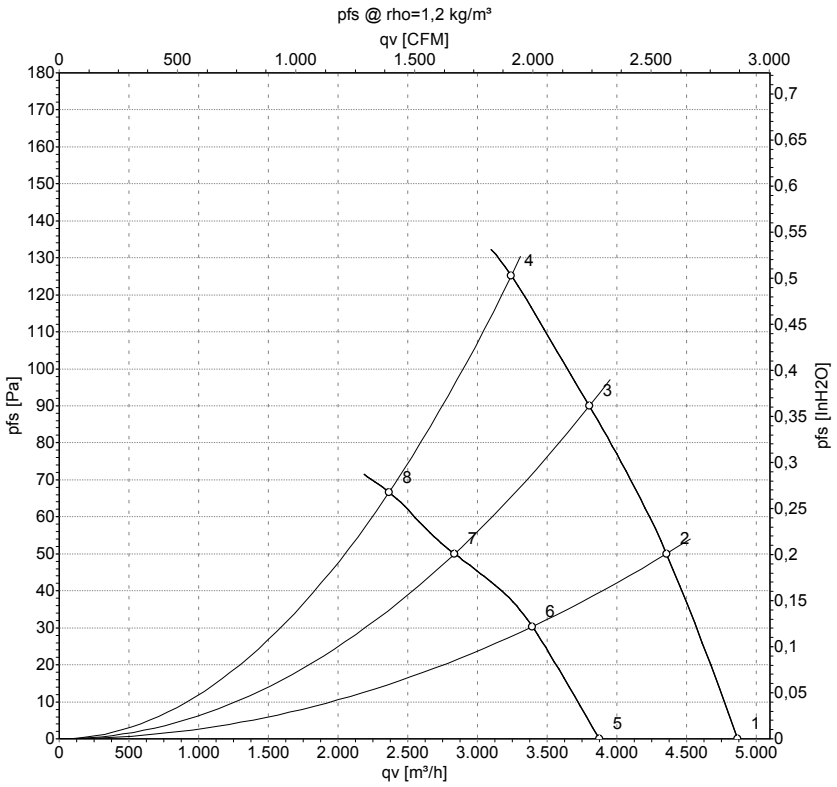
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



Measurement: LU-116637
Measurement: LU-116525

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	qv	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa
1	Δ	208	60	1630	368	1.34	4870	0
2	Δ	208	60	1620	382	1.38	4360	50
3	Δ	208	60	1600	419	1.48	3805	90
4	Δ	208	60	1550	480	1.65	3245	125
5	Y	208	60	1280	272	0.85	3875	0
6	Y	208	60	1250	277	0.87	3395	30
7	Y	208	60	1200	288	0.91	2835	50
8	Y	208	60	1110	310	0.98	2365	67

Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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