A2D300-AP02-27

AC axial fan

sickled blades (S series), single inlet

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Nominal data

Type	**A2D300-AP02-27**
Motor	**M2D074-DF**

Phase		3~	3~	3~	3~	3~
Nominal voltage	VAC	230	230	400	400	460
Connection		Δ	Δ	Y	Y	Y
Frequency	Hz	50	60	50	60	60
Type of data definition		fa	fa	fa	fa	fa
Valid for approval / standard		CE	CE	CE	CE	UL
Speed (rpm)	min^{-1}	2580	2750	2580	2750	2900
Power input	W	210	300	210	300	340
Current draw	A	0.62	0.84	0.36	0.48	0.51
Max. back pressure	Pa	200	125	200	125	125
Min. ambient temperature	°C	-25	-25	-25	-25	-25
Max. ambient temperature	°C	75	40	75	40	45
Starting current	A	2.0	1.9	1.16	1.1	

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

Data in accordance with ecodesign regulation EU 327/2011

		Actual	Request 2015
01 Overall efficiency η_{es}	%	32	29.8
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		42.2	40
05 Variable speed drive		No	

09 Power input P_e	kW	0.24
09 Air flow q_v	m^3/h	2255
09 Pressure increase p_{fs}	Pa	127
10 Speed (rpm) n	min^{-1}	2485
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-189127

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Technical features

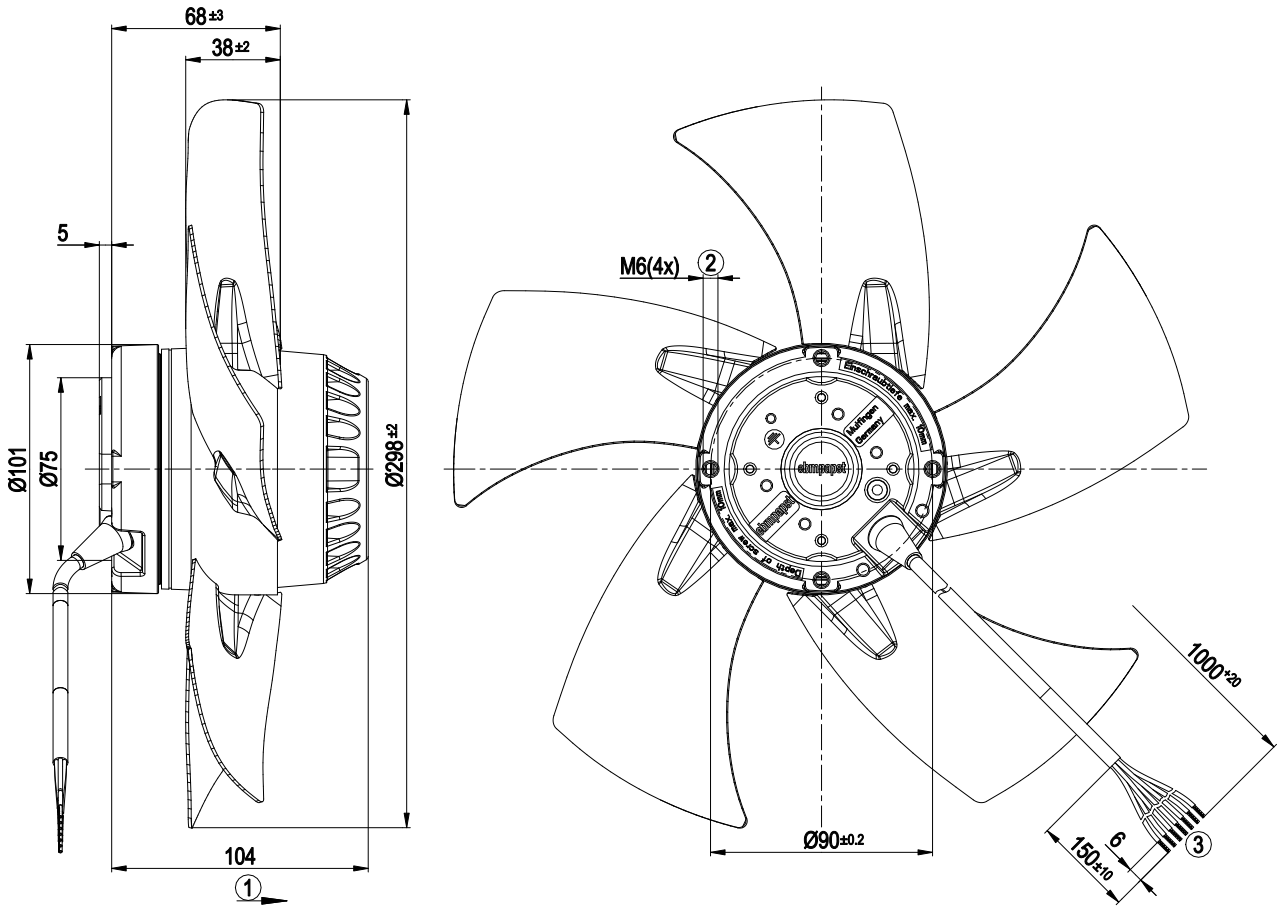
Mass	3.1 kg
Size	300 mm
Motor size	74
Surface of rotor	Coated in black
Material of blades	Sheet steel, coated in black
Number of blades	5
Direction of air flow	A
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP44; Depending on installation and position as per EN 60034-5
Insulation class	"F"
Humidity (F) / environmental protection class (H)	H1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	< 0.75 mA
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1, motor does not have factory-installed overheating protection; CE
Approval	UL 1004-1; CSA C22.2 no. 100

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Product drawing



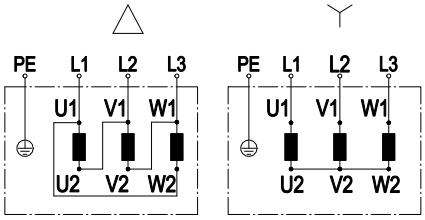
1	Direction of air flow "A"
2	Thread reach max. 10 mm
3	Connection line PFA AWG20 (green/yellow AWG18), 7x lead tips crimped

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Connection screen



Change direction of rotation by reversing two phases

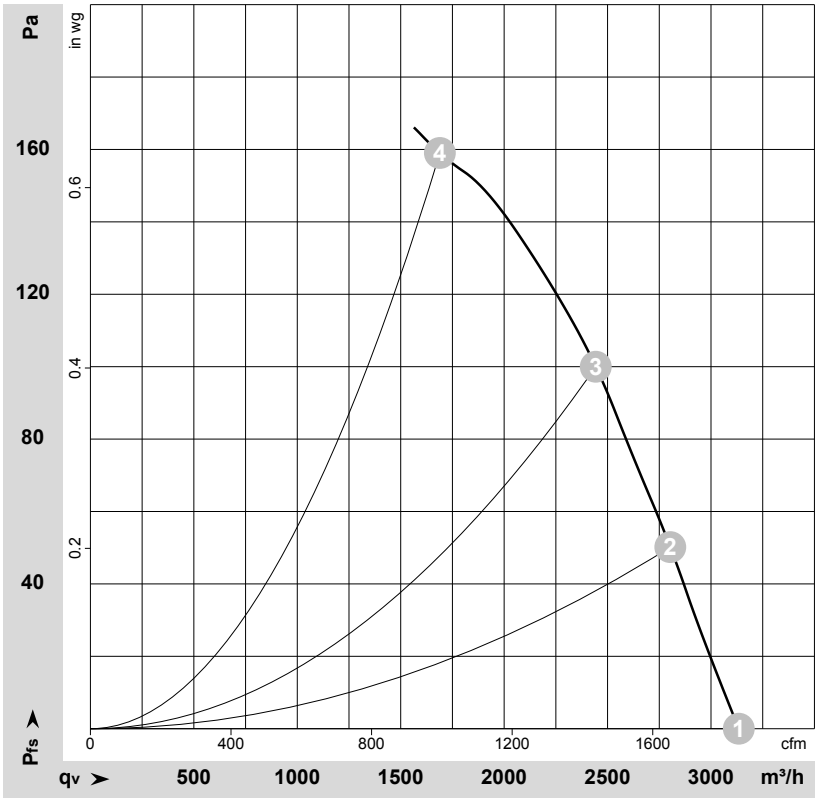
	Three-phase motor	Δ	Delta connection	Y	Star connection
L1	= U1 = black	L2	= V1 = blue	L3	= W1 = brown
U2	green	V2	white	W2	yellow
PE	green/yellow				

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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-62732-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	Y	400	50	2580	210	0.36	3135	0	1845	0.00
2	Y	400	50	2540	228	0.36	2805	50	1650	0.20
3	Y	400	50	2490	244	0.39	2445	100	1440	0.40
4	Y	400	50	2385	281	0.44	1690	160	995	0.64

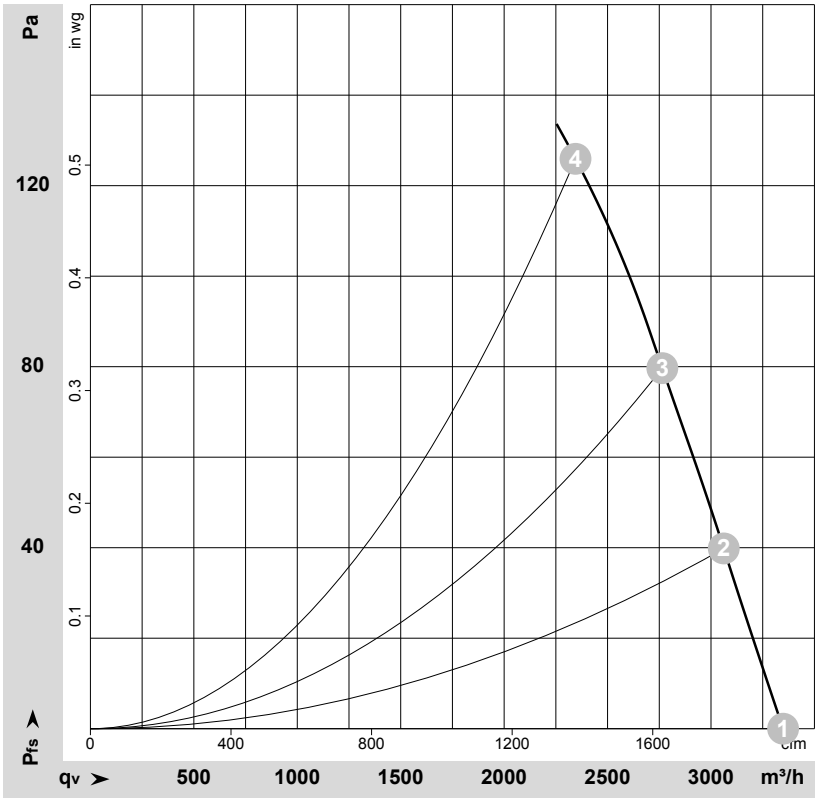
Conn. = Connection · U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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Charts: Air flow 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-62733-1

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

	U	f	n	P_e	I	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	400	60	2750	300	0.48	3350	0	1970	0.00
2	400	60	2685	316	0.48	3060	40	1800	0.16
3	400	60	2625	331	0.50	2765	80	1625	0.32
4	400	60	2540	349	0.53	2345	125	1380	0.50

U = Supply voltage · f = Frequency · n = Speed (rpm) · P_e = Power input · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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