

AC axial panel fan

sickle-shaped blades (S series)

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Nominal data

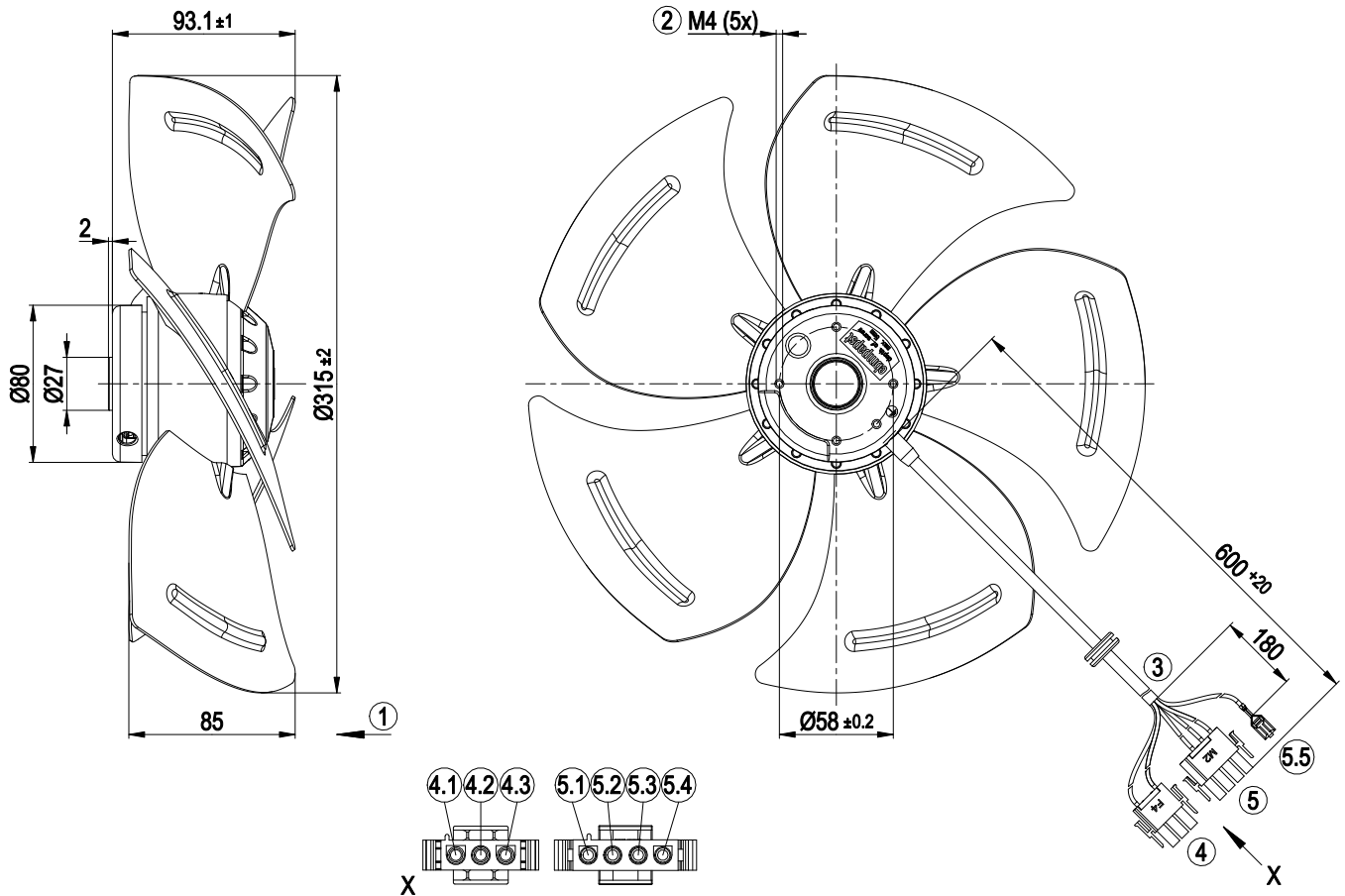
Type	A4D315-AP30-12			
Motor	M4D068-DF			
Phase		3~	3~	3~
Nominal voltage	VAC	400	400	460
Wiring		Y	Y	Y
Frequency	Hz	50	60	60
Method of obtaining data		fa	fa	fa
Valid for approval/standard		CE	CE	CE
Speed (rpm)	min ⁻¹	1420	1630	1650
Power consumption	W	82	102	125
Current draw	A	0.25	0.22	0.24
Max. back pressure	Pa	120	120	130
Max. back pressure	in. wg	0.48	0.48	0.52
Min. ambient temperature	°C	-25	-25	-25
Max. ambient temperature	°C	60	60	55
Starting current	A	0.38	0.37	0.38

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

Technical description

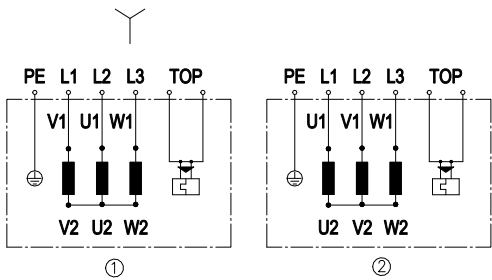
Weight	2.46 kg
Size	315 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1+
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	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Motor protection	Thermal switch auto reset, lead out, with basic insulation
With cable	Lateral
Protection class assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Comment on CE	Ecodesign Directive 2009/125/EC + Fan Directive (EC) No. 327/2011 does not apply, as power consumption <125W.
Approval	CSA C22.2 No. 100; UL 1004-1

Product drawing



1	Airflow direction "V"
2	Max. clearance for screw 5 mm
3	Cable PFA AWG20 (green/yellow AWG18)
4	3-pole connector housing TE 2178473-3, 2x plug pin TE 926885-1
4.1	TOP
4.2	not used
4.3	TOP
5	4-pole connector housing TE 350779-5, 3x plug pin TE 926885-1
5.1	not used
5.2	W1
5.3	V1
5.4	U1
5.5	PE

Connection diagram



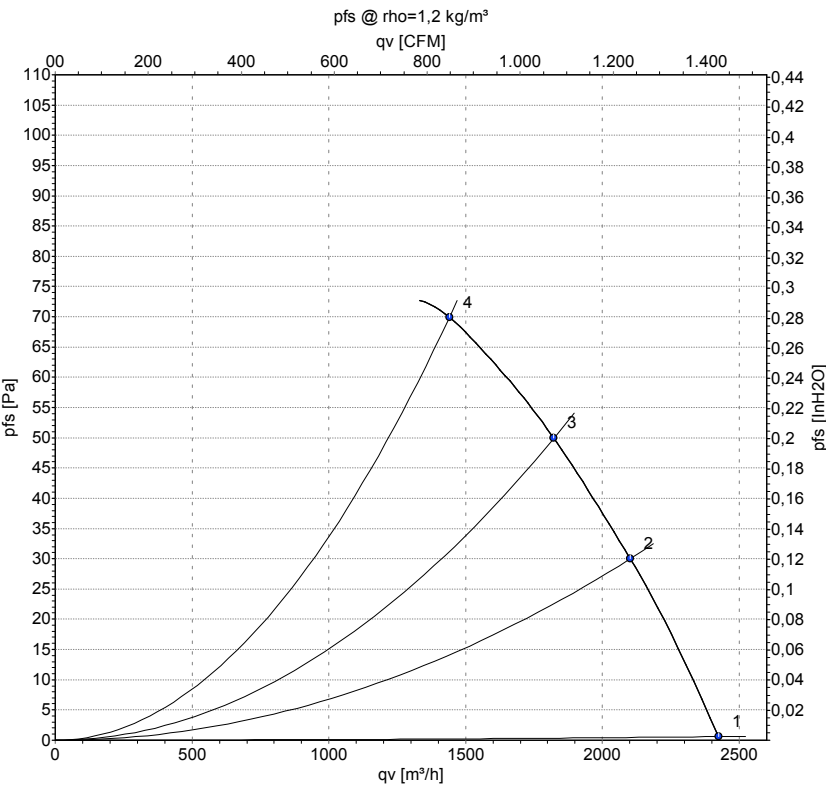
Change of rotation direction by reversing two phases

Y	Star connection
1	Counterclockwise operation
L1	= V1 = blue
L2	= U1 = black
L3	= W1 = brown
2	Clockwise operation
L1	= U1 = black
L2	= V1 = blue
L3	= W1 = brown
PE	green/yellow
TOP	2x gray
	Three-phase motor

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Curves: Air performance 50 Hz



Measurement: LU-55176-1
Date: 2002-07-05
Housing: 09558-2-4037

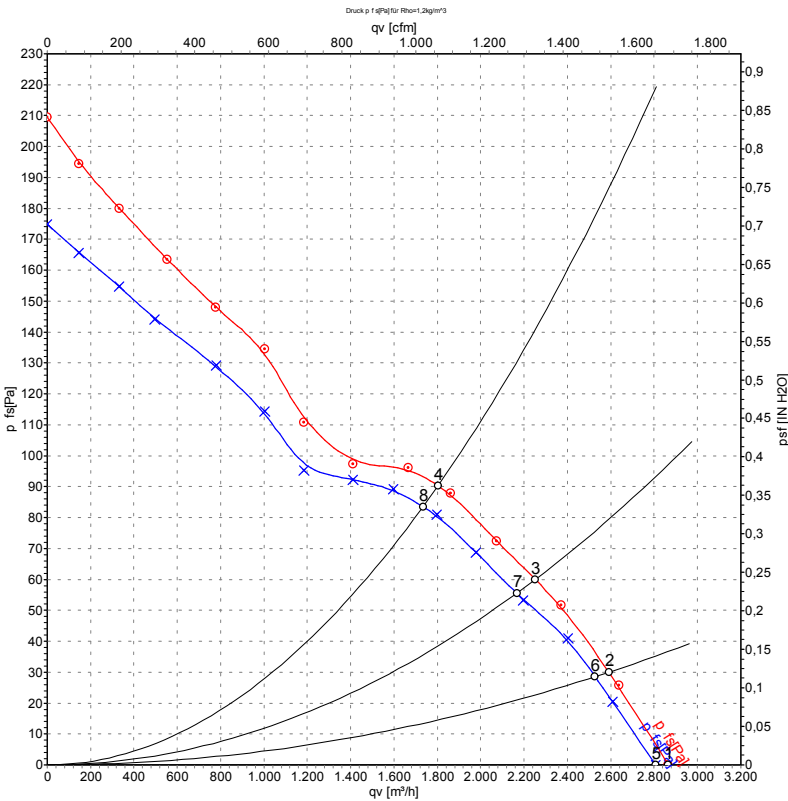
Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the 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	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	Y	400	50	1420	82	0.25	2425	0	1425	0.00
2	Y	400	50	1400	91	0.25	2100	30	1235	0.12
3	Y	400	50	1390	99	0.26	1820	50	1070	0.20
4	Y	400	50	1370	107	0.26	1440	70	850	0.28

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase

Curves: Air performance 60 Hz



Measurement: LU-55185-1
Date: 2002-07-08
Housing: 09558-2-4037
Measurement: LU-55182-1
Date: 2002-07-08
Housing: 09558-2-4037

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

	U	f	n	P _e	I	q _v	p _{fs}	q _v	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	Pa	cfm	in. wg
1	460	60	1650	125	0.24	2865	0	1685	0.00
2	460	60	1645	128	0.25	2590	30	1525	0.12
3	460	60	1625	140	0.26	2250	60	1325	0.24
4	460	60	1600	155	0.27	1800	90	1060	0.36
5	400	60	1630	102	0.22	2805	0	1650	0.00
6	400	60	1605	116	0.23	2525	29	1485	0.12
7	400	60	1575	129	0.24	2165	55	1275	0.22
8	400	60	1545	142	0.26	1735	84	1020	0.34

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase