S2E300-DC47-08

AC axial fan

straight blades (A series)

with support ring

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Amtsgericht (court of registration) Stuttgart · HRA 590344

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Nominal data

Type	**S2E300-DC47-08**
Motor	**M2E068-EC**

Phase		1~	1~	1~	1~
Nominal voltage	VAC	230	230	230	230
Frequency	Hz	50	60	60	60
Method of obtaining data		fa	fa	fa	fa
Valid for approval/standard		CE	UL	CSA	CE
Speed (rpm)	min^{-1}	2650	2900	2900	2900
Power consumption	W	140	200	200	190
Current draw	A	0.62	0.88	0.88	0.83
Capacitor	µF	5	5	5	5
Capacitor voltage	VDB	400	400	400	400
Capacitor standard		S2 (CE)	UL	UL	S2 (CE)
Max. back pressure	Pa	150	150	150	150
Max. back pressure	in. wg	0.6	0.6	0.6	0.6
Min. ambient temperature	°C	-25	-25	-25	-25
Max. ambient temperature	°C	75	70	70	70

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

Data according to Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	32.2	28.7
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		43.5	40
05 Variable speed drive		No	

09 Power consumption P_e	kW	0.16
09 Air flow q_v	m^3/h	1760
09 Pressure increase p_{fs}	Pa	107
10 Speed (rpm) n	min^{-1}	2575
11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

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

LU-199188

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.

The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).

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Technical description

Weight	2.8 kg
Size	300 mm
Motor size	68
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized and painted black
Support ring material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
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	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)	< 0.75 mA
Motor protection	Thermal switch auto reset, lead out, with basic insulation
With cable	Variable
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.
Motor capacitor according to EN 60252-1 in safety protection class	S2
Conformity with standards	EN 60335-1; EN 60034-1; EN 60204-1; CE

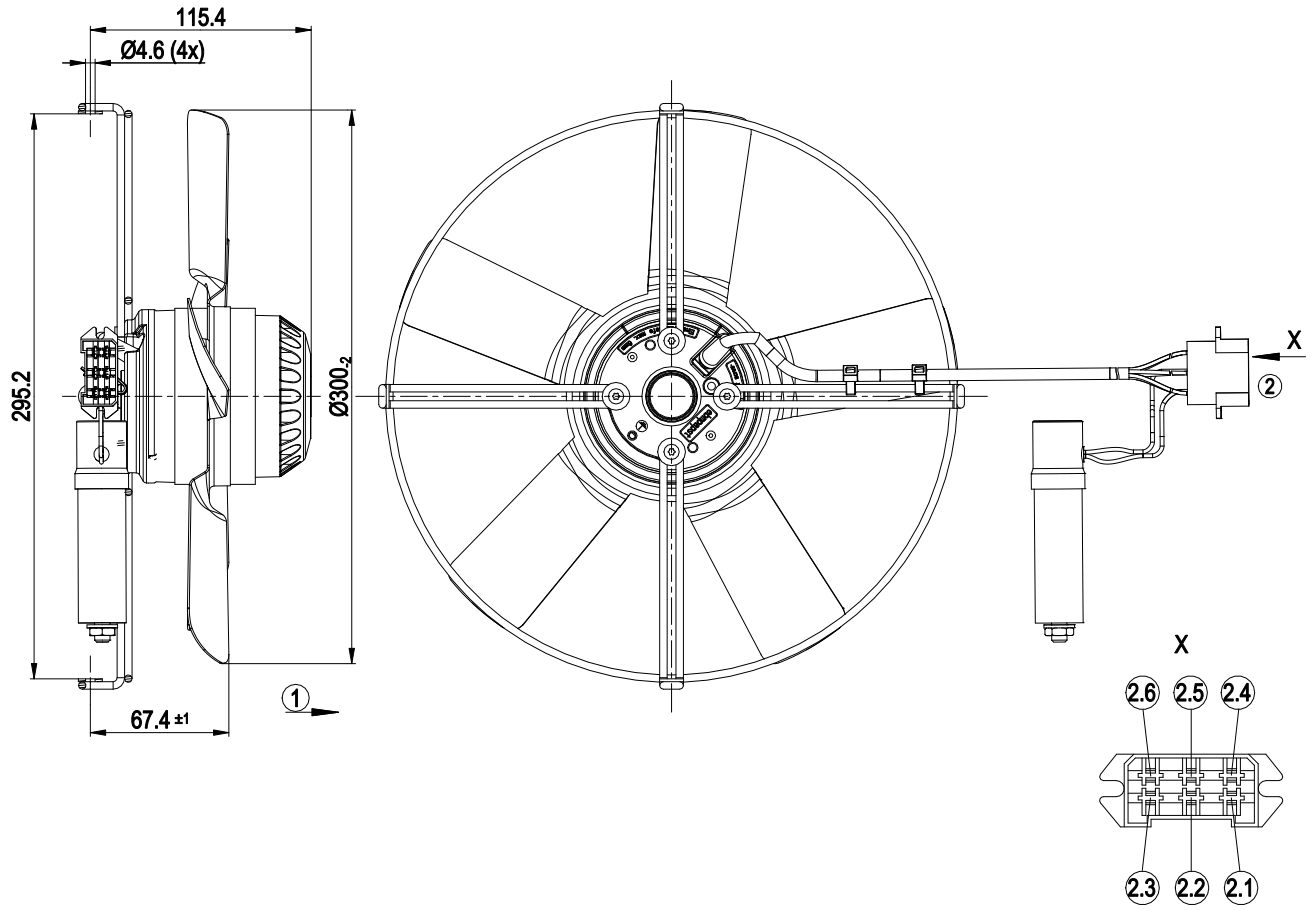
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Product drawing



1	Direction of air flow "A"
2	Cable silicone 6G 0.5 mm²
	6-pole connector housing Weco 411-S/06, 6x flat plug TE 60294-2
2.1	Capacitor
2.2	L
2.3	TOP
2.4	TOP
2.5	N + capacitor
2.6	PE

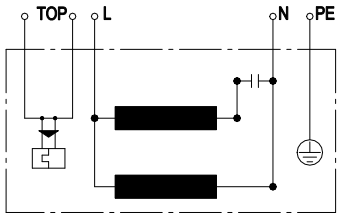
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Connection diagram



L	blue	N	black	PE	green/yellow
TOP	2x gray				

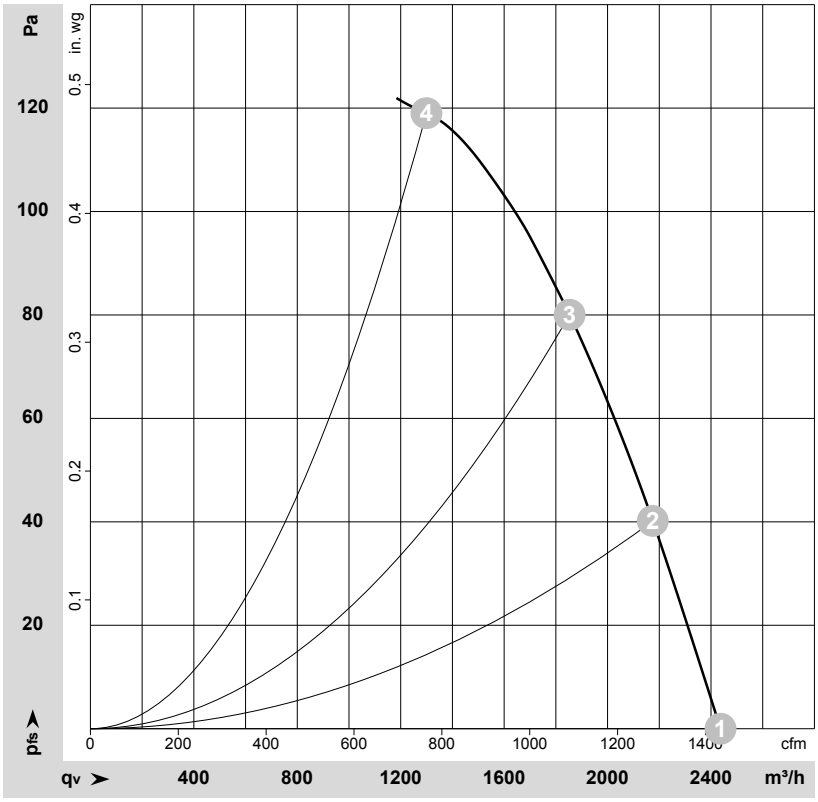
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-66600-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1~	230	50	2650	140	0.62	2435	0	1435	0.00
2	1~	230	50	2610	151	0.66	2175	40	1280	0.16
3	1~	230	50	2580	158	0.69	1855	80	1090	0.32
4	1~	230	50	2565	161	0.70	1300	120	765	0.48

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

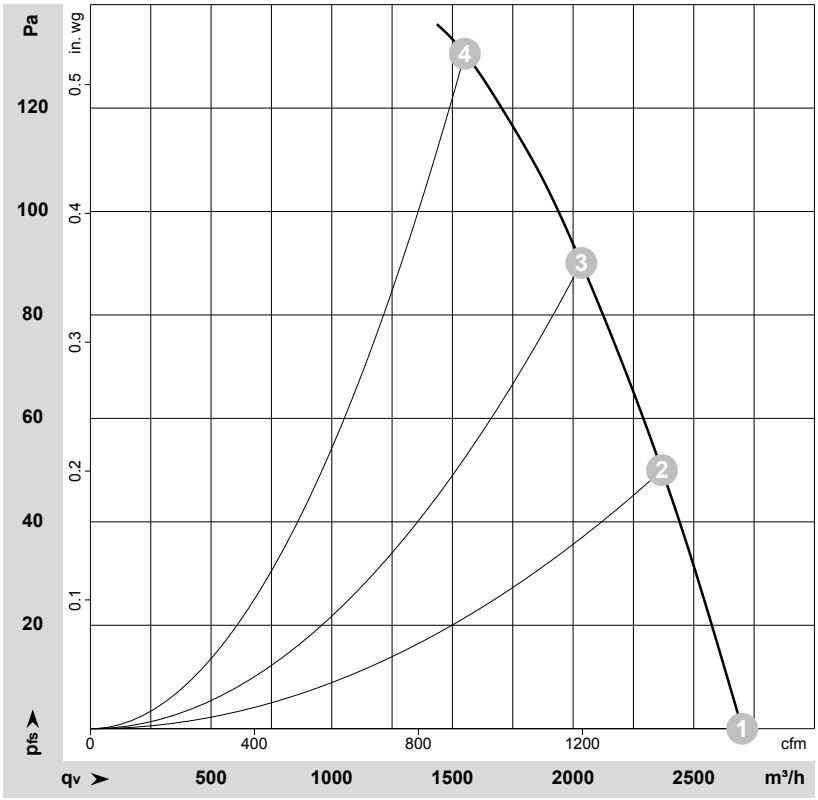
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Curves: Air performance 60 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-66601-1

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	q_V	p_{fs}	q_V	p_{fs}
		V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	1~	230	60	2900	190	0.83	2700	0	1590	0.00
2	1~	230	60	2860	205	0.90	2370	50	1395	0.20
3	1~	230	60	2800	213	0.93	2035	90	1195	0.36
4	1~	230	60	2750	218	0.95	1550	130	915	0.52

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

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