

AC axial fan

straight blades (A series), single-intake
with guard grille for short nozzle

S2E300-AC47-70 ebmpapst Datasheet
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Nominal data

Type	S2E300-AC47-70				
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 2111	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			S0 (CE)	UL	
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	55	50	50	50

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 (EN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	32.2	28.7	09 Power consumption P_e	kW	0.16
02 Measurement category		A		09 Air flow q_v	m ³ /h	1760
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	107
04 Efficiency grade N		43.5	40	10 Speed (rpm) n	min ⁻¹	2575
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = $1 + p_{fs} / 100\,000\text{ Pa}$

LU-199188



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Technical description

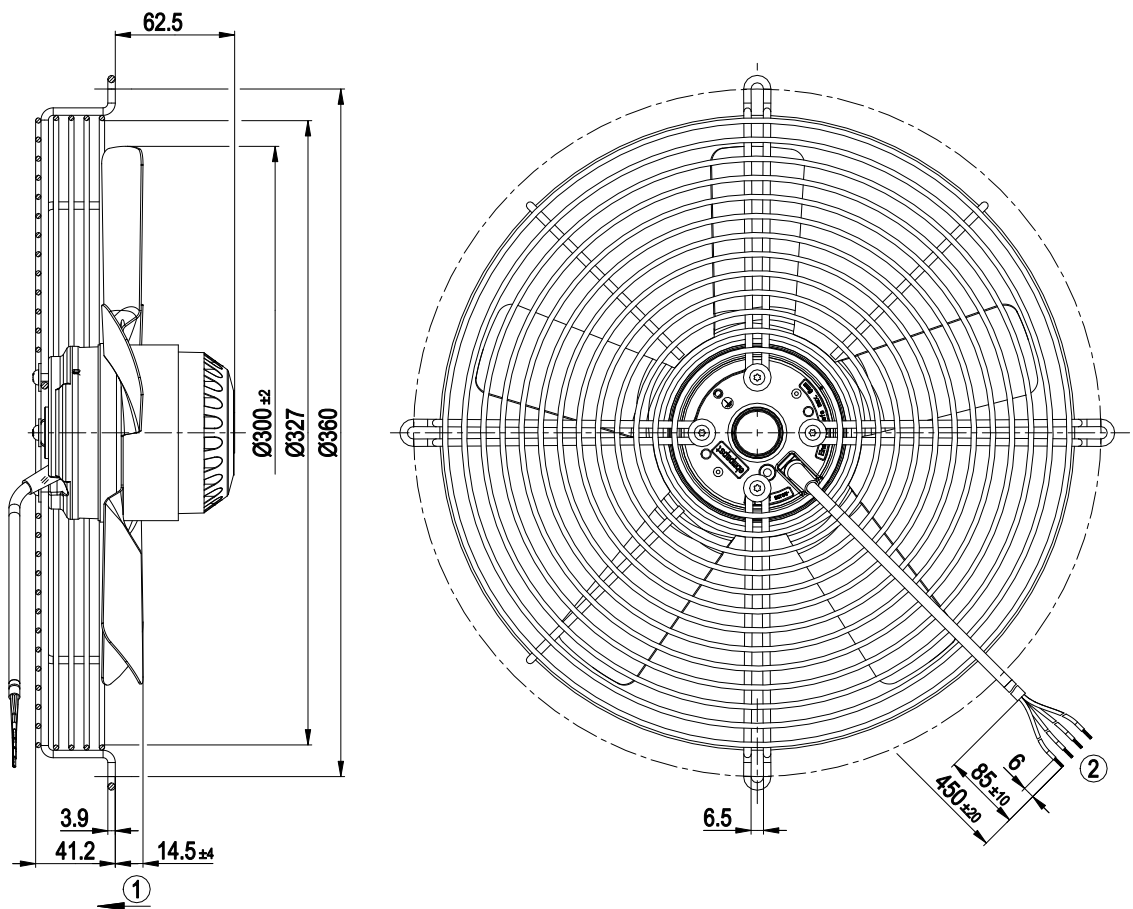
Weight	3.44 kg
Size	300 mm
Motor size	68
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
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 overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 77; UL 1004-3



AC axial fan

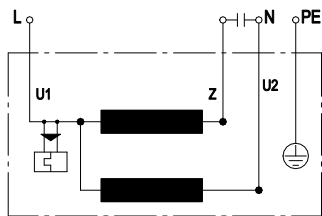
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Product drawing



1	Airflow direction "V"
2	Cable PVC AWG20
-	4x splice

Connection diagram

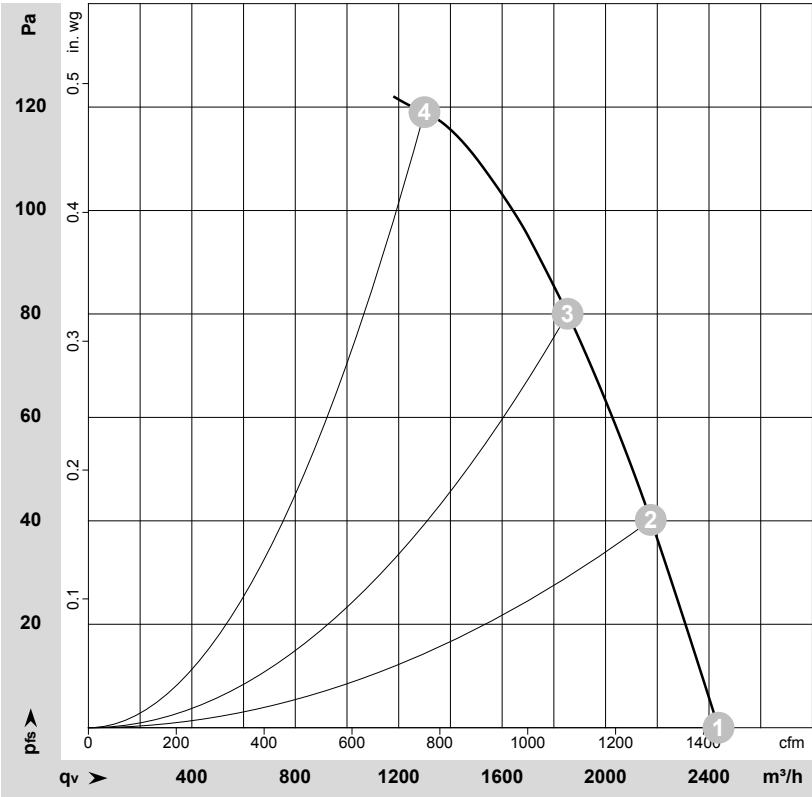


U1	blue	Z	brown	U2	black
PE	green/yellow				



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Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

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

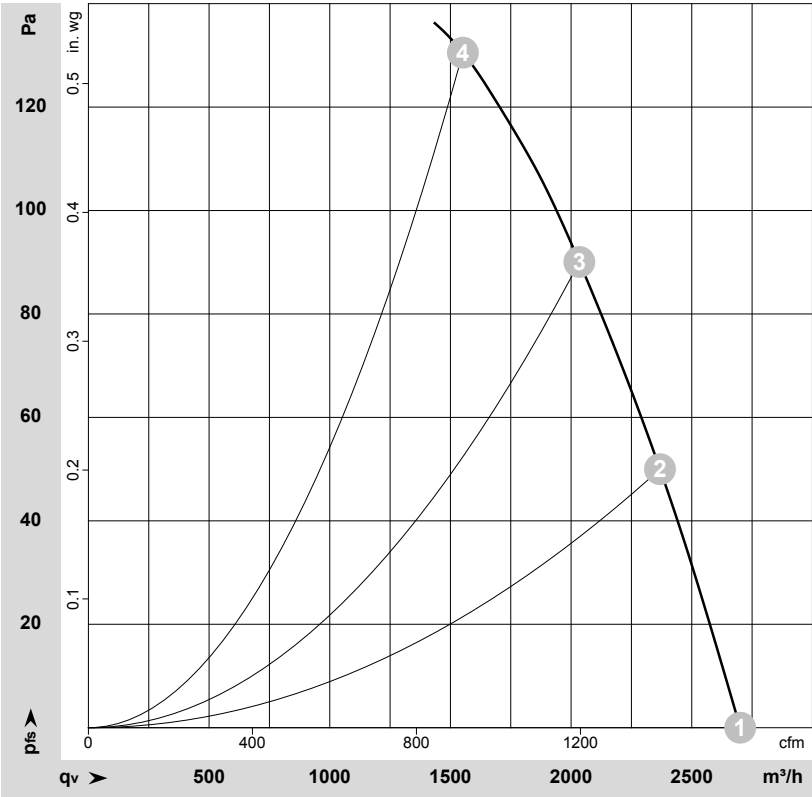
Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



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Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

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	m³/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

