

EC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle

S3G330-DA58-32 ebmpapst Datasheet
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Nominal data

Type	S3G330-DA58-32	
Motor	M3G074-CF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Speed (rpm)	min ⁻¹	1630
Power consumption	W	130
Current draw	A	0.95
Max. ambient temperature	°C	60

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}	%	38.9	28.5
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		50.4	40
05 Variable speed drive		Yes	

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

09 Power consumption P_{ed}	kW	0.15
09 Air flow q_v	m³/h	1755
09 Pressure increase p_{fs}	Pa	112
10 Speed (rpm) n	min ⁻¹	1570
11 Specific ratio*		1.00

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

LU-72859



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Technical description

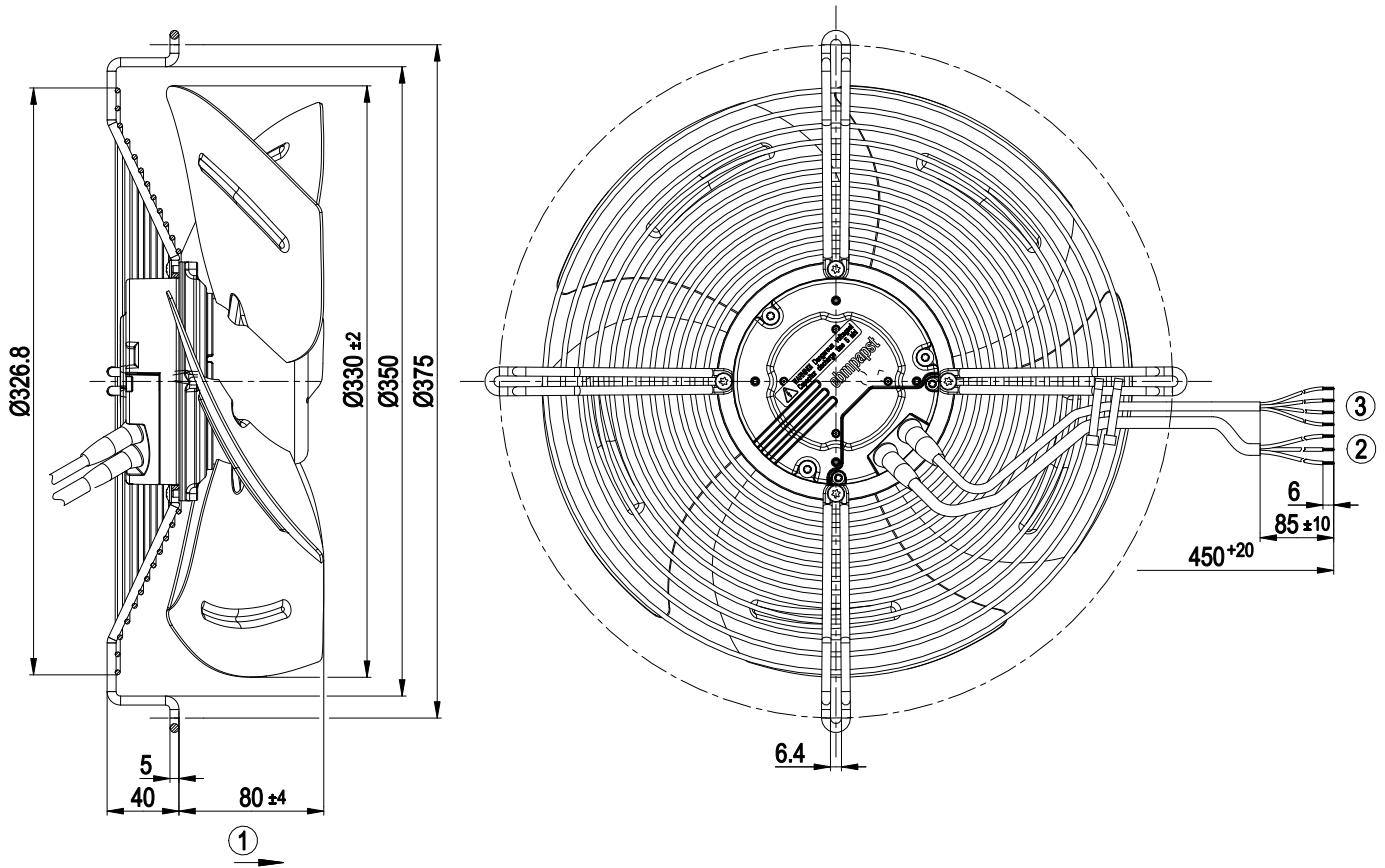
Weight	3.5 kg
Size	330 mm
Motor size	74
Rotor surface	Painted black
Blade material	Sheet steel, painted black
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	A
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- 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	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1
Approval	CSA C22.2 No. 77



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Product drawing



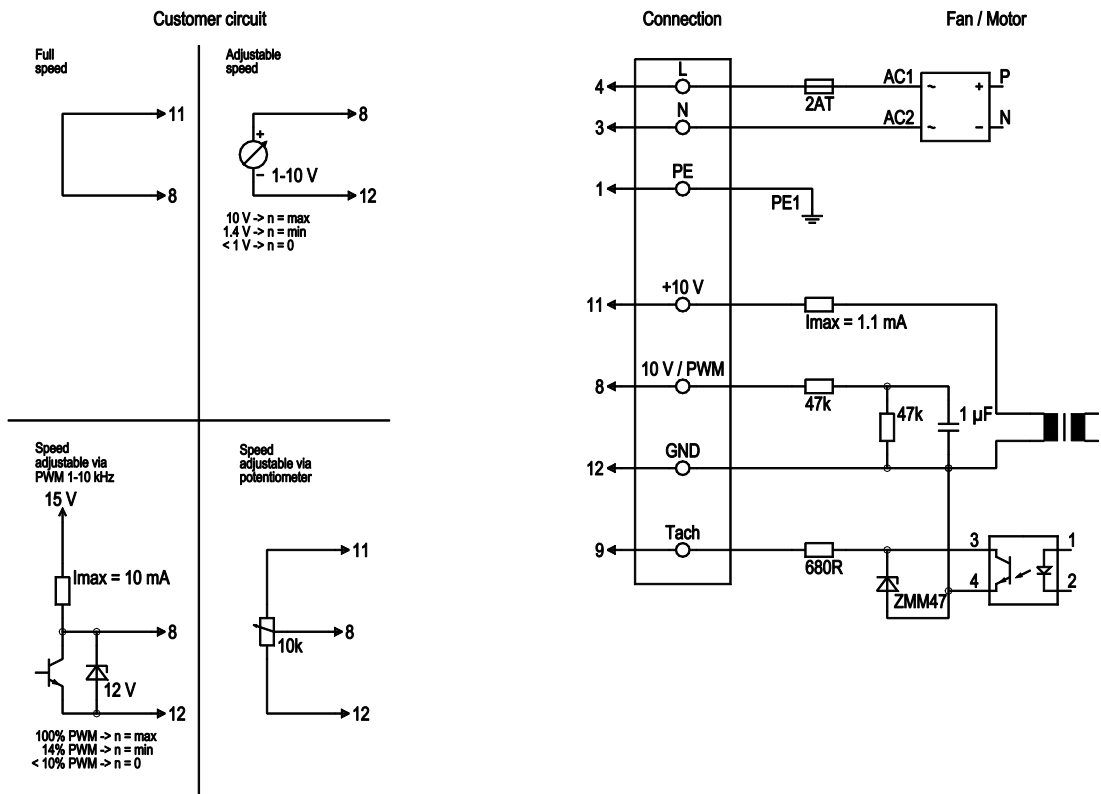
1	Direction of air flow "A"
2	Cable PVC AWG18
	3x splice
3	Cable PVC AWG22
	4x splice



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Connection diagram



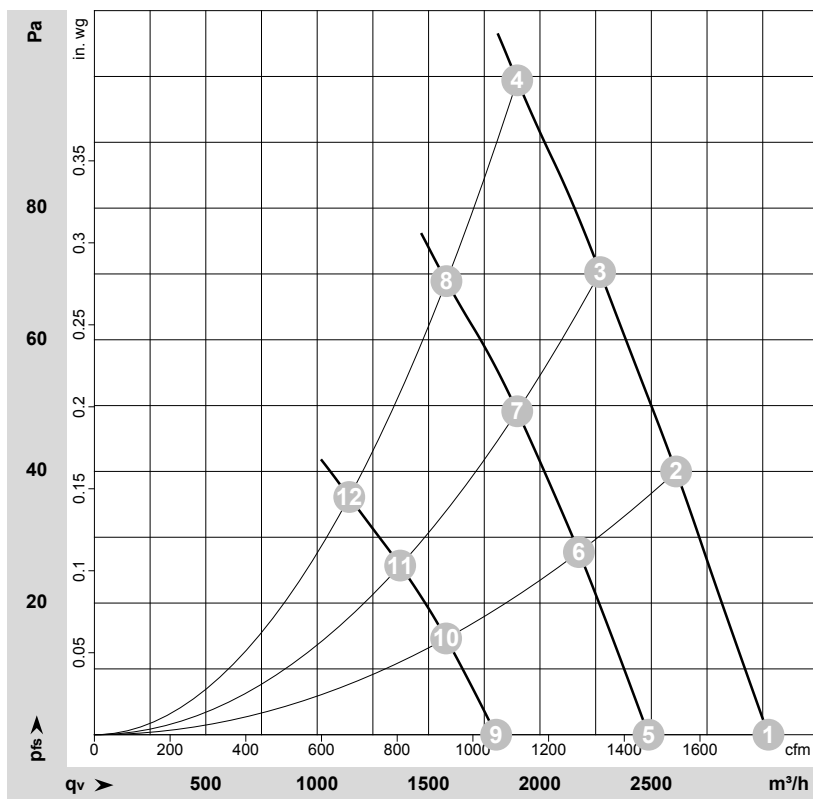
No.	Conn.	Designation	Color	Function/assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	8	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V/max. 1.1 mA, electrically isolated
	12	GND	blue	GND connection for control interface



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Curves: Air performance 50 Hz



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

Measurement: LU-72859-1
Measurement: LU-72864-1
Measurement: LU-72865-1

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 _{ed}	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	1630	130	0.95	3025	0	1780	0.00
2	1~	230	50	1600	139	1.03	2610	40	1535	0.16
3	1~	230	50	1590	145	1.08	2270	70	1335	0.28
4	1~	230	50	1580	150	1.11	1900	100	1115	0.40
5	1~	230	50	1355	76	0.59	2485	0	1465	0.00
6	1~	230	50	1335	82	0.62	2175	28	1280	0.11
7	1~	230	50	1330	86	0.65	1900	49	1115	0.20
8	1~	230	50	1320	92	0.69	1580	69	930	0.28
9	1~	230	50	970	33	0.27	1805	0	1060	0.00
10	1~	230	50	965	36	0.29	1580	15	930	0.06
11	1~	230	50	960	37	0.29	1375	26	810	0.10
12	1~	230	50	950	39	0.31	1145	36	675	0.14

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

