S3G330-AA58-01

EC axial fan

sickle-shaped blades (S series)

with guard grille for short nozzle

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Nominal data

Type	**S3G330-AA58-01**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1630
Power consumption	W	130
Current draw	A	0.95
Min. ambient temperature	°C	-25
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

		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	

09 Power consumption P_{ed}	kW	0.15
09 Air flow q_v	m^3/h	1755
09 Pressure increase p_{fs}	Pa	112
10 Speed (rpm) n	min^{-1}	1570
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 Pa

LU-72859

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Technical description

Weight	2.9 kg
Size	330 mm
Motor size	74
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum
Impeller 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
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Min. permitted ambient temp. for motor (transport/storage)	+80 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
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 - Overvoltage detection - Thermal overload protection for motor
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-3 + 60730-1

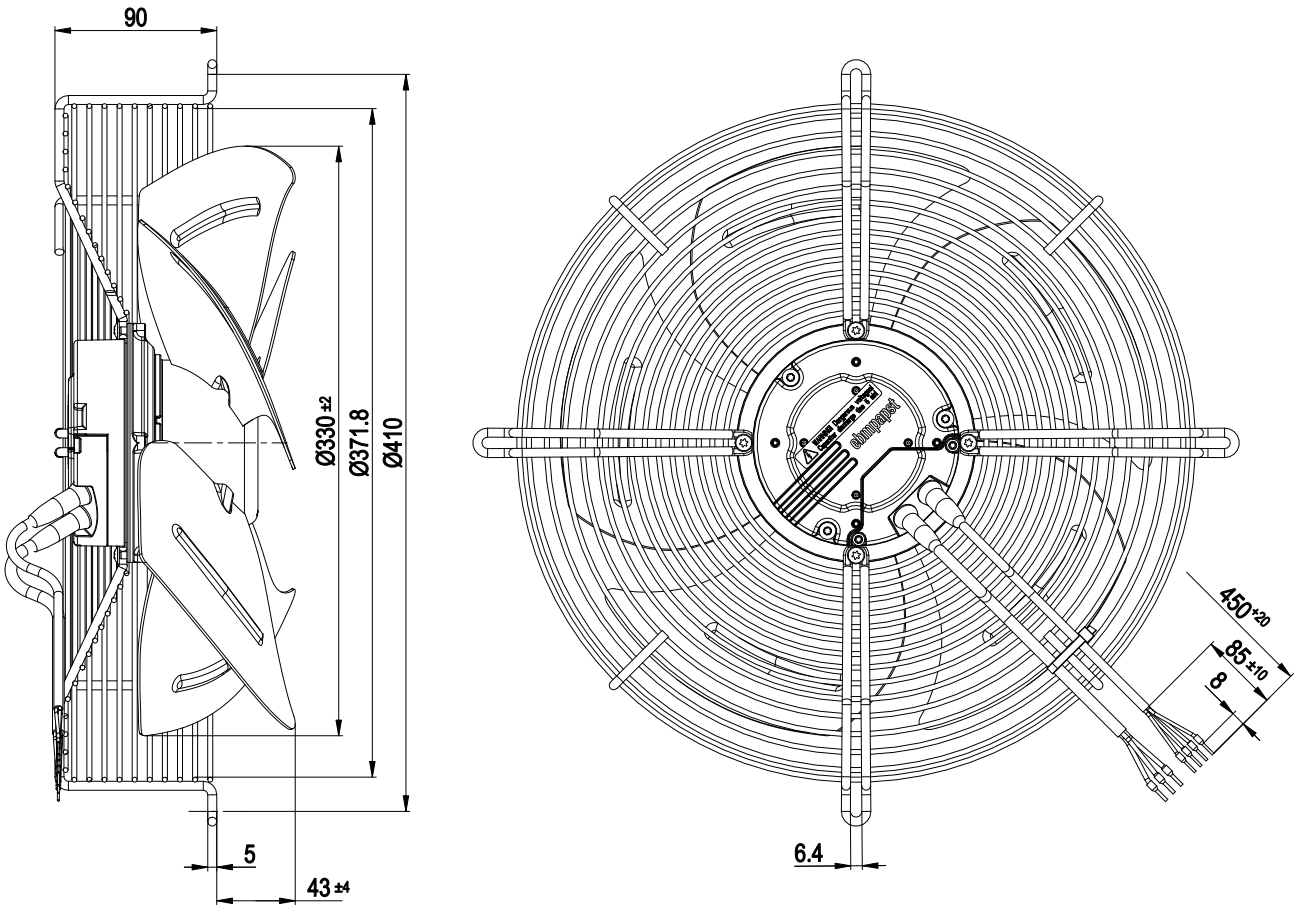
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Product drawing



1	Airflow direction "V"
2	Cable PVC AWG18
	3x splice
3	Cable PVC AWG22
	4x splice

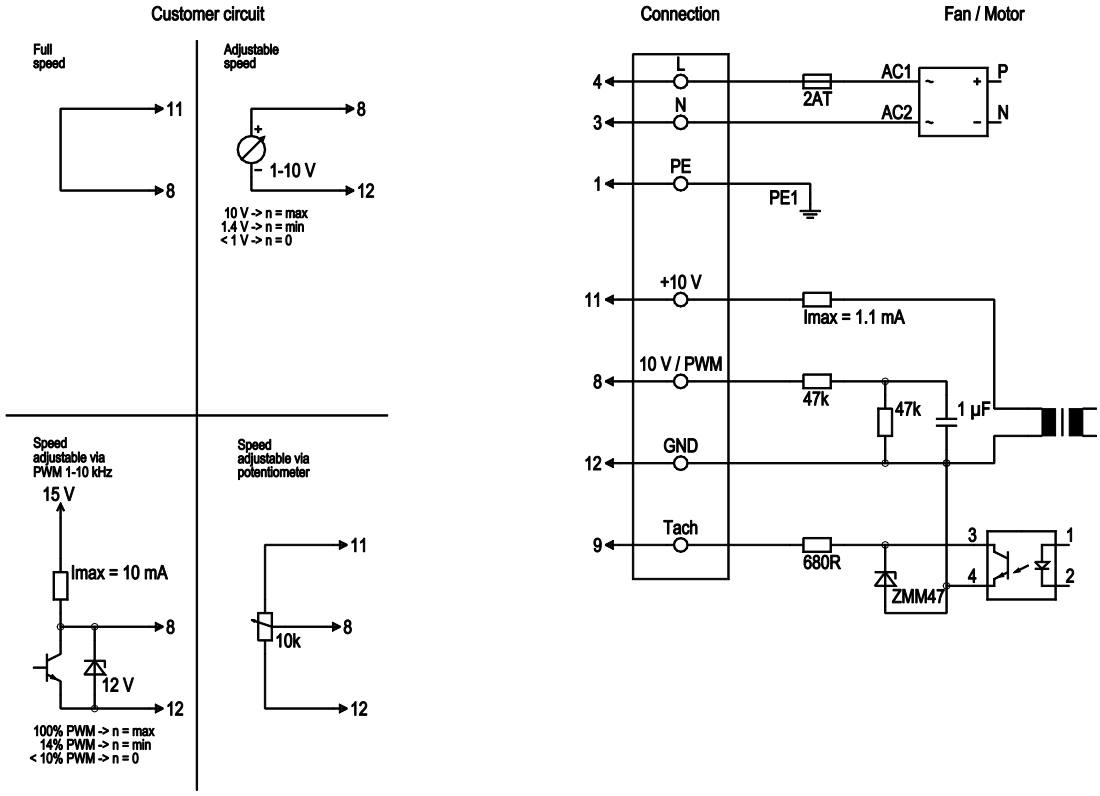
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Connection diagram



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

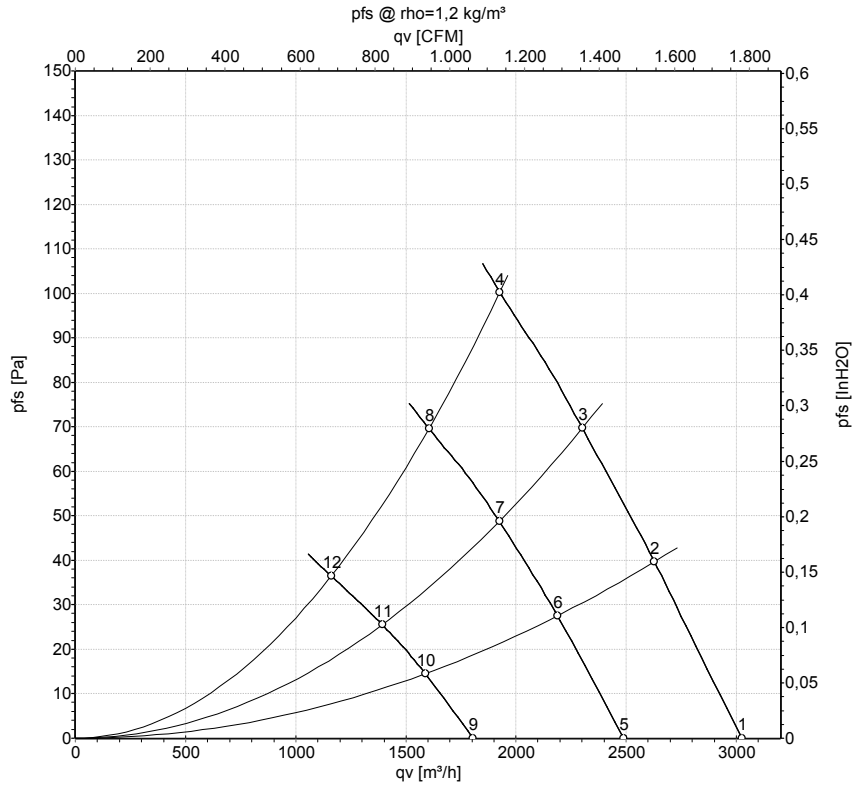
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Curves: Air performance 50 Hz



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

	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	230	50	1630	130	0.95	3025	0	1780	0.00
2	230	50	1600	139	1.03	2625	40	1545	0.16
3	230	50	1590	145	1.08	2300	70	1355	0.28
4	230	50	1580	149	1.11	1925	100	1135	0.40
5	230	50	1355	76	0.59	2485	0	1465	0.00
6	230	50	1335	82	0.61	2190	28	1290	0.11
7	230	50	1330	86	0.65	1925	49	1130	0.20
8	230	50	1320	91	0.69	1605	69	945	0.28
9	230	50	970	33	0.27	1805	0	1060	0.00
10	230	50	965	36	0.28	1590	15	935	0.06
11	230	50	960	37	0.29	1390	26	820	0.10
12	230	50	950	39	0.30	1160	36	685	0.14

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

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