

S3G300-AN02-50

EC axial fan - HyBlade®

sickled blades (S series)
with guard grille for short nozzle

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Nominal data

Type	S3G300-AN02-50	
Motor	M3G074-CF	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		ml
State		prelim.
Speed	min ⁻¹	2020
Power input	W	170
Current draw	A	1.35
Max. back pressure	Pa	140
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	+60

ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations

Data according to ErP directive

		Actual	Request 2013	Request 2015
Installation category	A			
Efficiency category	Static			
Variable speed drive	Yes			
Specific ratio*	1.00			
Overall efficiency η_{es}		43.1	24.6	28.6
Efficiency grade N		54.5	36	40
Power input P_{ed}	kW	0.16		
Air flow q_v	m ³ /h	1795		
Pressure increase p_{fs}	Pa	128		
Speed n	min ⁻¹	2060		

Data established at point of optimum efficiency

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



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Technical features

Size	300 mm
Material of terminal box	ABS plastic, black
Material of blades	PP-GF40 plastic
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	5
Direction of air flow	"V"
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Condensate discharge holes	None, open rotor
Cooling bore / aperture	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> - Motor current limit - Soft start - Over-temperature protected electronics / motor
Speed steps	2
Electrical leads	Via terminal box
Motor protection	PTC resistor
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)



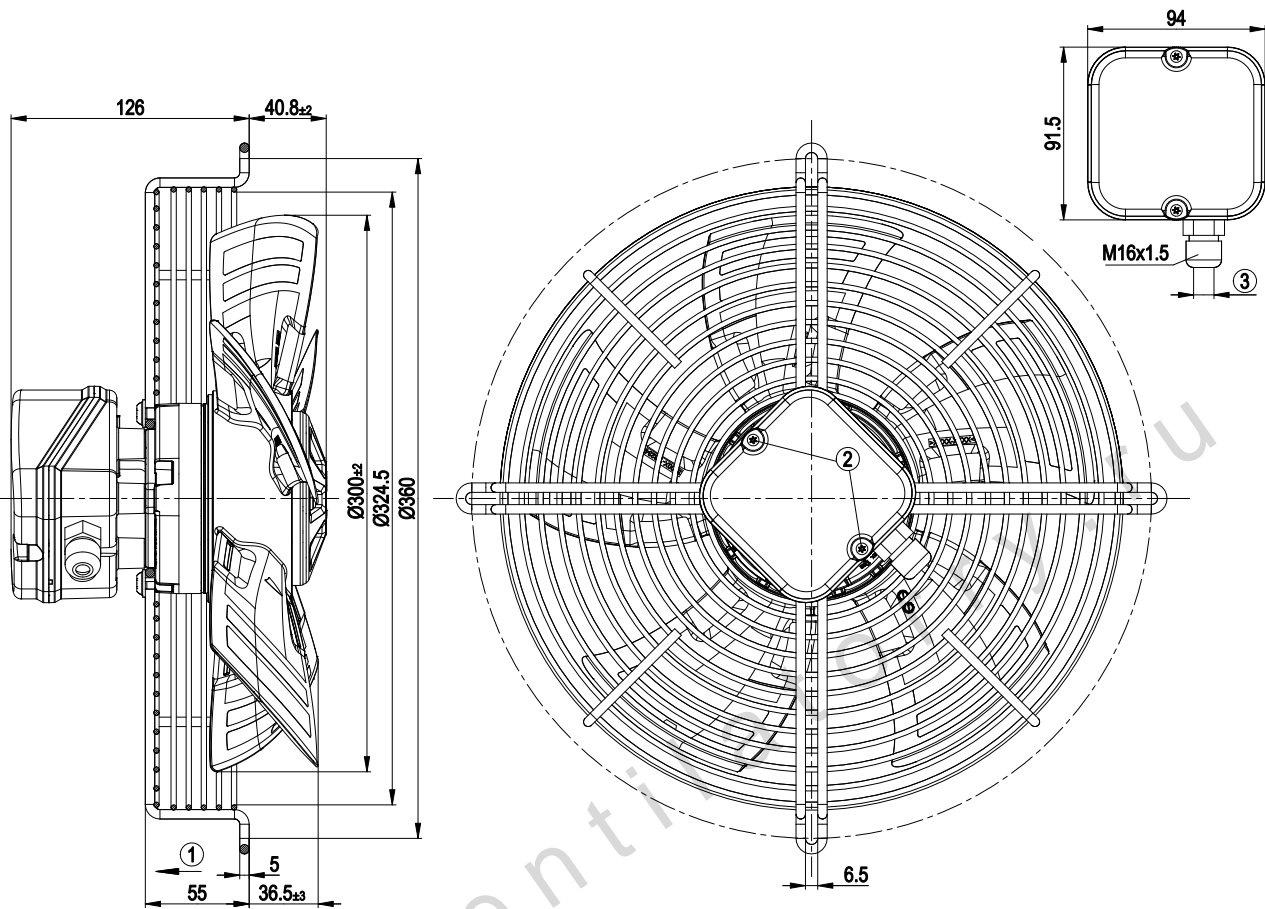
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Product drawing



1	Direction of air flow "V"
2	Tightening torque 0.8±0.15 Nm
3	Cable diameter: max. 7.5 mm; tightening torque 2±0.3 Nm

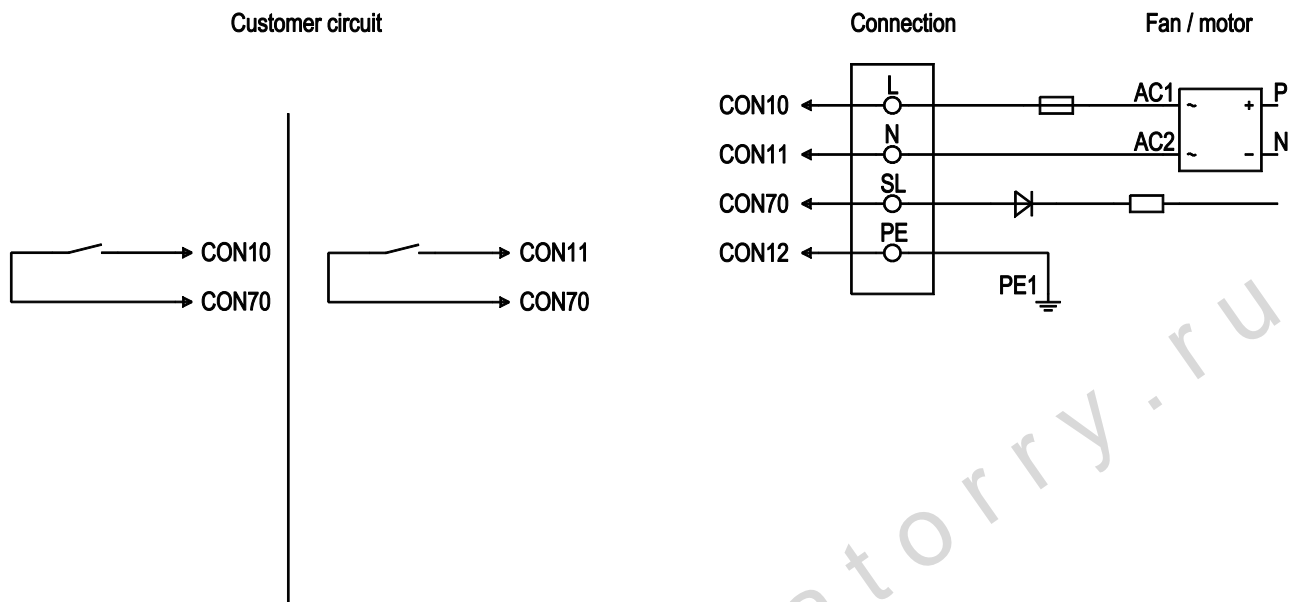
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Connection screen



Line	No.	Signal	Colour	Function / assignment
	CON 10	L	black	Power supply 230 VAC, 50 - 60 Hz, see type plate for voltage range
	CON 11	N	blue	Neutral conductor
	CON 12	PE	green/yellow	Protective earth
	CON 70	SL	brown	Speed selection: switch open = speed 1; switch closed = speed 2

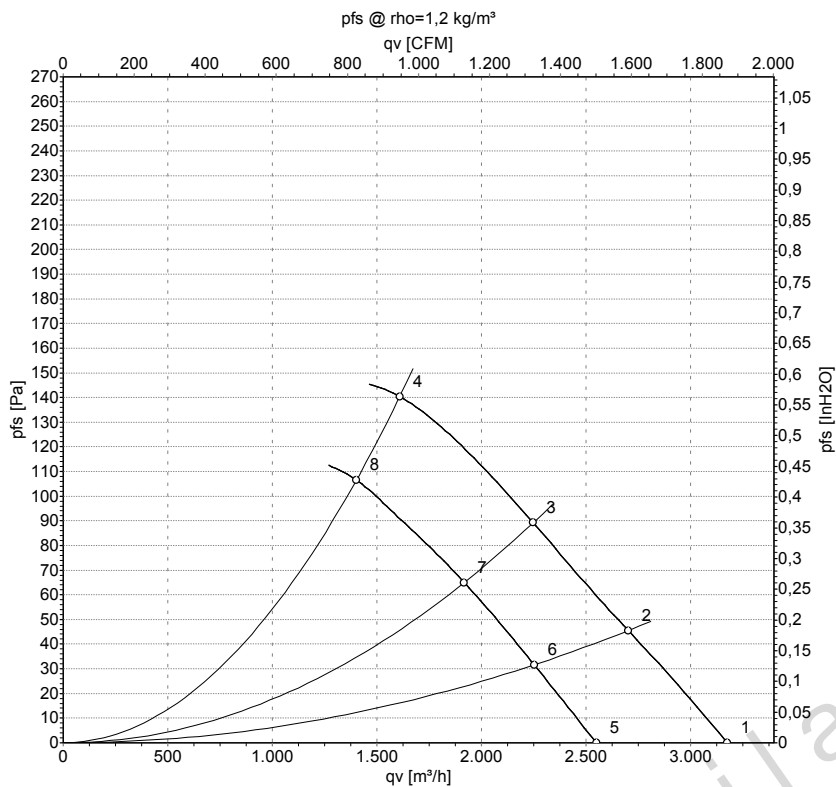
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Charts: Air flow 50 Hz



Measurement: LU-138597
Measurement: LU-138598

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P _{ed}	I	LpA _{in}	LwA _{in}	qv	p _{fs}
	V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa
1	230	50	2390	168	1.30	64	71	3175	0
2	230	50	2245	167	1.35	64	71	2705	45
3	230	50	2145	168	1.35	62	69	2250	90
4	230	50	2020	170	1.35	62	69	1610	140
5	230	50	1910	88	0.75	59	66	2550	0
6	230	50	1865	98	0.81	59	66	2255	32
7	230	50	1830	105	0.85	58	65	1920	65
8	230	50	1780	114	0.93	59	66	1400	108

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

