S3G560-AP68-22

EC axial fan - HyBlade®

sickled blades (S series)

with guard grille for short nozzle

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County court Stuttgart · HRB 590142

ErP2015 EXCEEDS THE NORM

Nominal data

Type	**S3G560-AP68-22**
Motor	**M3G112-EA**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	1000
Power input	W	400
Current draw	A	1.8
Max. back pressure	Pa	100
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

Installation category	A
Efficiency category	Static
Variable speed drive integrated	Integrated
Specific ratio*	1,00

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

		Actual	Request 2013	Request 2015
Overall efficiency η_{es}		41,1	27,2	31,2
Efficiency grade N		49,9	36	40
Power input P_{ed}	kW	0,4		
Air flow q_v	m^3/h	5245		
Pressure increase p_{fs}	Pa	102		
Speed n	min^{-1}	995		

Data established at point of optimum efficiency

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Technical features

Mass	12.4 kg
Size	560 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium, coated in black
Material of blades	Aluminium sheet insert, sprayed with PP plastic
Material of guard grille	Steel, phosphated and coated in black plastic
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
Insulation class	"B"
Humidity class	F4-1
Max. permissible ambient motor temp. (transp./ storage)	Max. +80 °C
Min. permissible ambient motor temp. (transp./storage)	Min. -40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Over-temperature protected electronics / motor - Alarm relay - PFC, active - Motor current limit - Soft start - Line undervoltage / phase failure detection - Output 10 VDC, max. 10 mA - Control input 0-10 V
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 61000-6-4 (industrial environment)
EMC harmonics	Acc. to EN 61000-3-2/3
Leakage current	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)

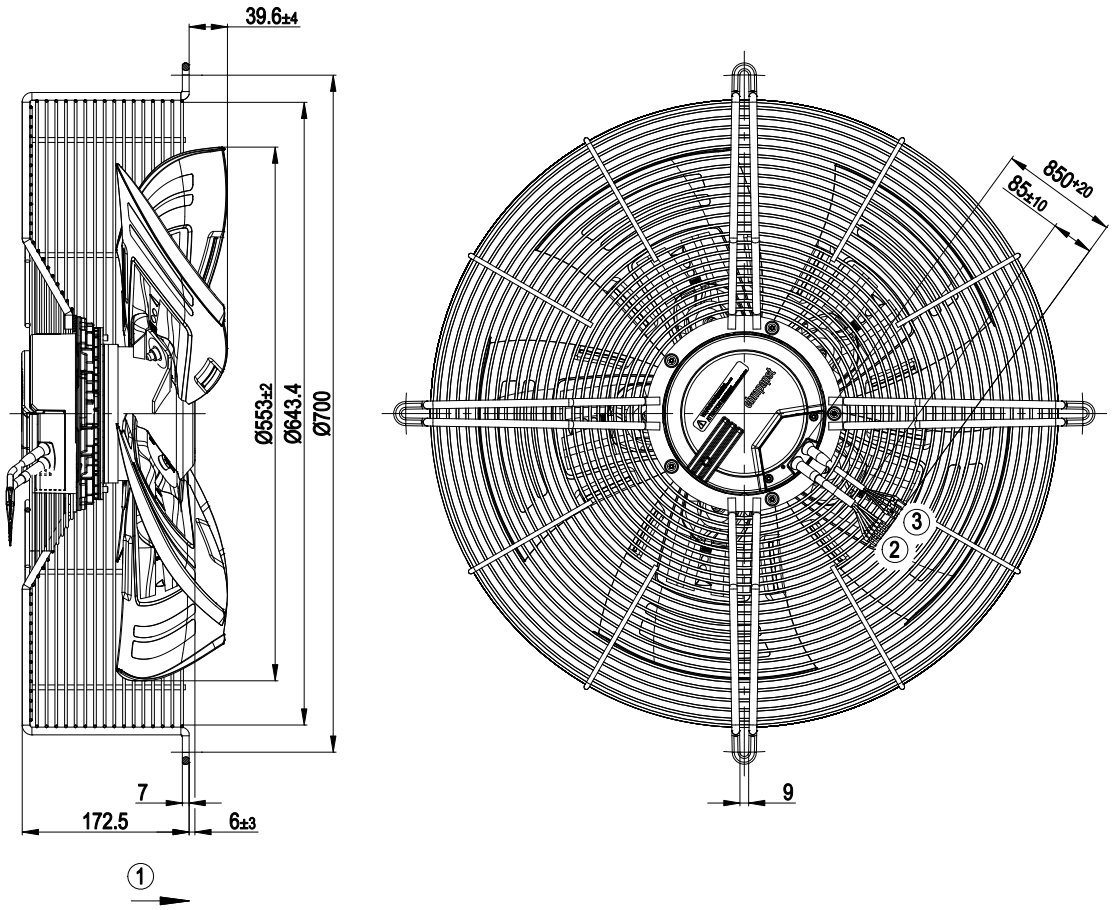
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Product drawing



1	Direction of air flow "A"
2	Connection line AWG18, 5 x crimped core-end sleeves
3	Connection line AWG22, 3 x crimped core-end sleeves

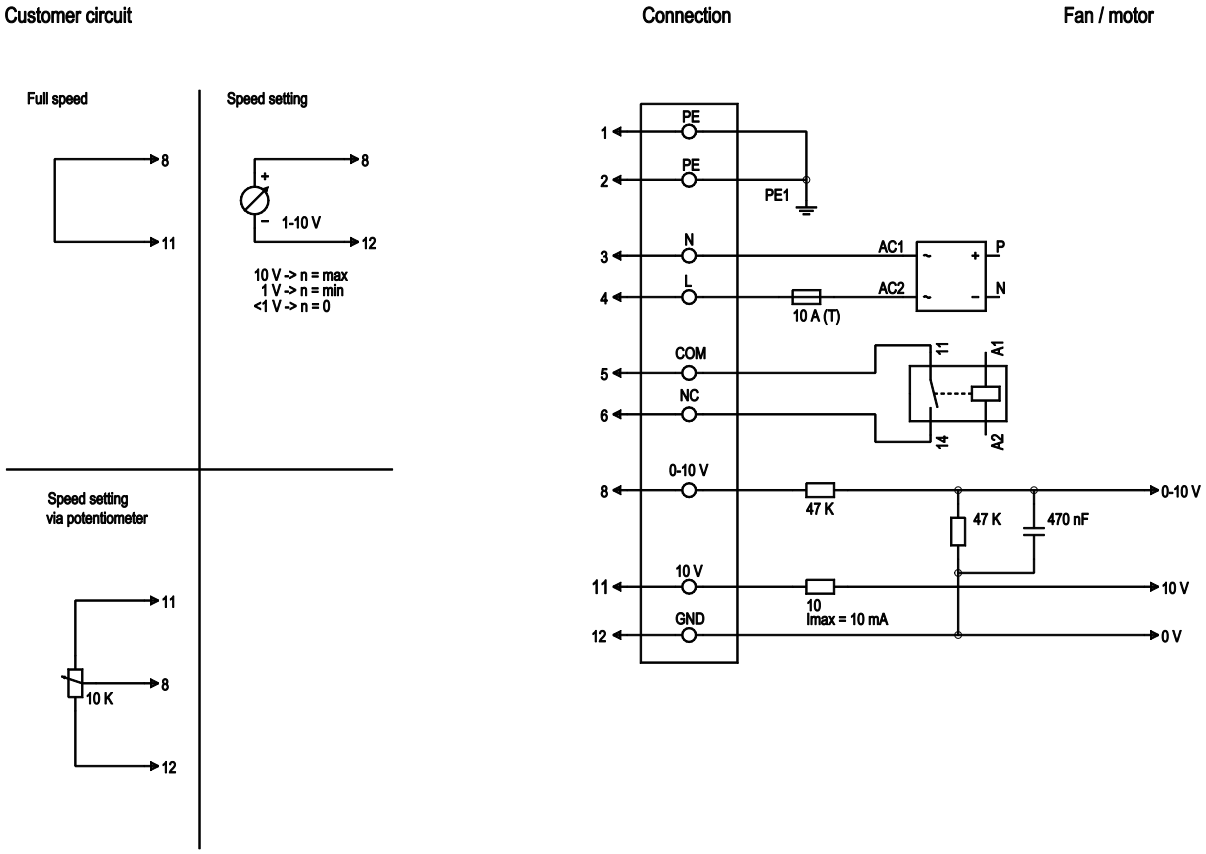
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Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1,2	PE	green/yellow	Protective earth
1	3	N	blue	Supply voltage, neutral conductor, 50/60 Hz
1	4	L	black	Supply voltage, phase, 50/60 Hz
1	5	COM	white 1	Floating status message contact, normally closed for error (2 A, max. 250 VAC, min. 10 mA, AC1)
1	6	NC	white 2	Floating status message contact, normally closed for error
2	8	0-10 V	yellow	Control input, set value 0-10 VDC, impedance 100 kΩ, SELV
2	11	10 VDC	red	Voltage output 10 VDC (+/-3%), max. 10 mA, supply voltage for external devices (e.g. potentiometer), SELV
2	12	GND	blue	Reference mass for control interface, SELV

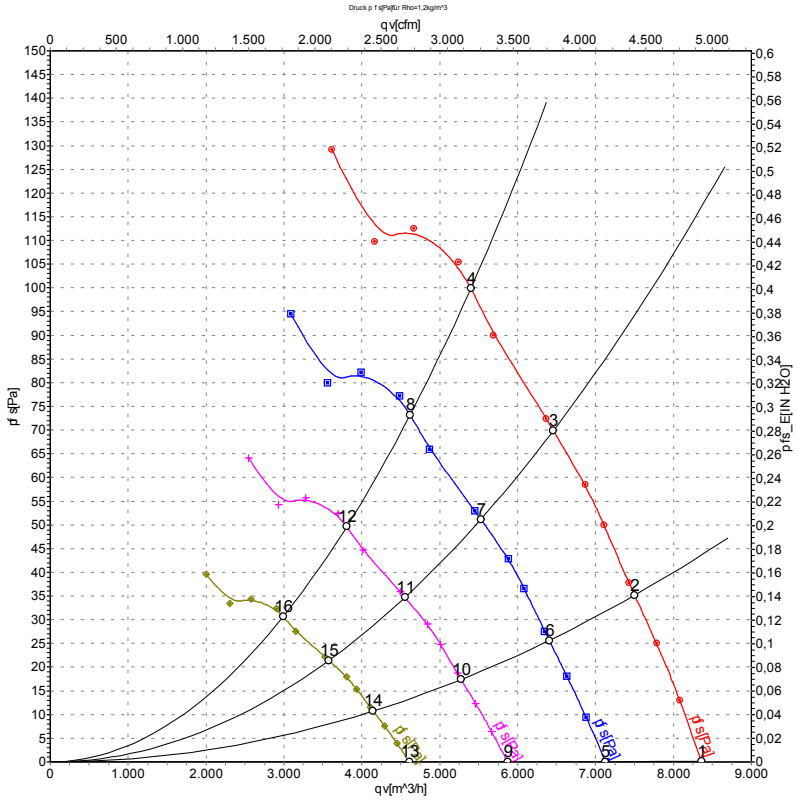
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Charts: Air flow 50 Hz



Measurement: LU-118048

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}	LwA_{out}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa
1	230	50	1000	293	1.29	60	67	67	8360	0
2	230	50	1000	336	1.48	59	66	66	7500	35
3	230	50	1000	369	1.61	60	67	66	6460	70
4	230	50	1000	400	1.80	62	69	68	5400	100
5	230	50	850	182	0.80	57	64	64	7130	0
6	230	50	850	209	0.92	56	63	62	6405	26
7	230	50	850	231	1.01	57	63	62	5530	51
8	230	50	850	249	1.09	59	65	65	4620	73
9	230	50	700	102	0.45	53	59	59	5870	0
10	230	50	700	117	0.51	52	58	58	5275	17
11	230	50	700	129	0.57	52	59	58	4550	35
12	230	50	700	139	0.61	55	61	61	3805	50
13	230	50	550	49	0.22	47	54	54	4610	0
14	230	50	550	57	0.25	46	53	53	4145	11
15	230	50	550	63	0.27	47	54	53	3575	21
16	230	50	550	68	0.30	49	56	55	2990	31

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