S3G630-CD02-50

EC axial fan - HyBlade

sickled blades (S series)

with guard grille for full nozzle

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Nominal data

Type	**S3G630-CD02-50**	
Motor	**M3G084-GF**	
Phase		1~
Nominal voltage	VAC	230
Frequency	Hz	50/60
Type of data definition		ml
Speed (rpm)	min^{-1}	750
Power input	W	250
Current draw	A	1.6
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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 2015
01 Overall efficiency η_{es}	%	45.5	29.1
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		56.4	40
05 Variable speed drive		Yes	

09 Power input P_{ed}	kW	0.19
09 Air flow q_v	m^3/h	6220
09 Pressure increase p_{fs}	Pa	46
10 Speed (rpm) n	min^{-1}	755
11 Specific ratio*		1.00

Data definition with optimum efficiency.
The ErP data is determined using a motor-impeller combination in a standardised measurement configuration.

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

LU-119952

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Technical features

Mass	9.3 kg
Size	630 mm
Surface of rotor	Coated in black
Material of electronics housing	Die-cast aluminium
Material of blades	Press-fitted sheet steel blank, sprayed with PP plastic
Material of guard grille	Steel, coated in black plastic (RAL9005)
Number of blades	5
Direction of air flow	"A"
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54; Depending on installation and position
Insulation class	"B"
Humidity (F)/environmental protection class (H)	H2
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-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; (sealed)
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limit - PFC, passive - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected electronics / motor - Line undervoltage detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE

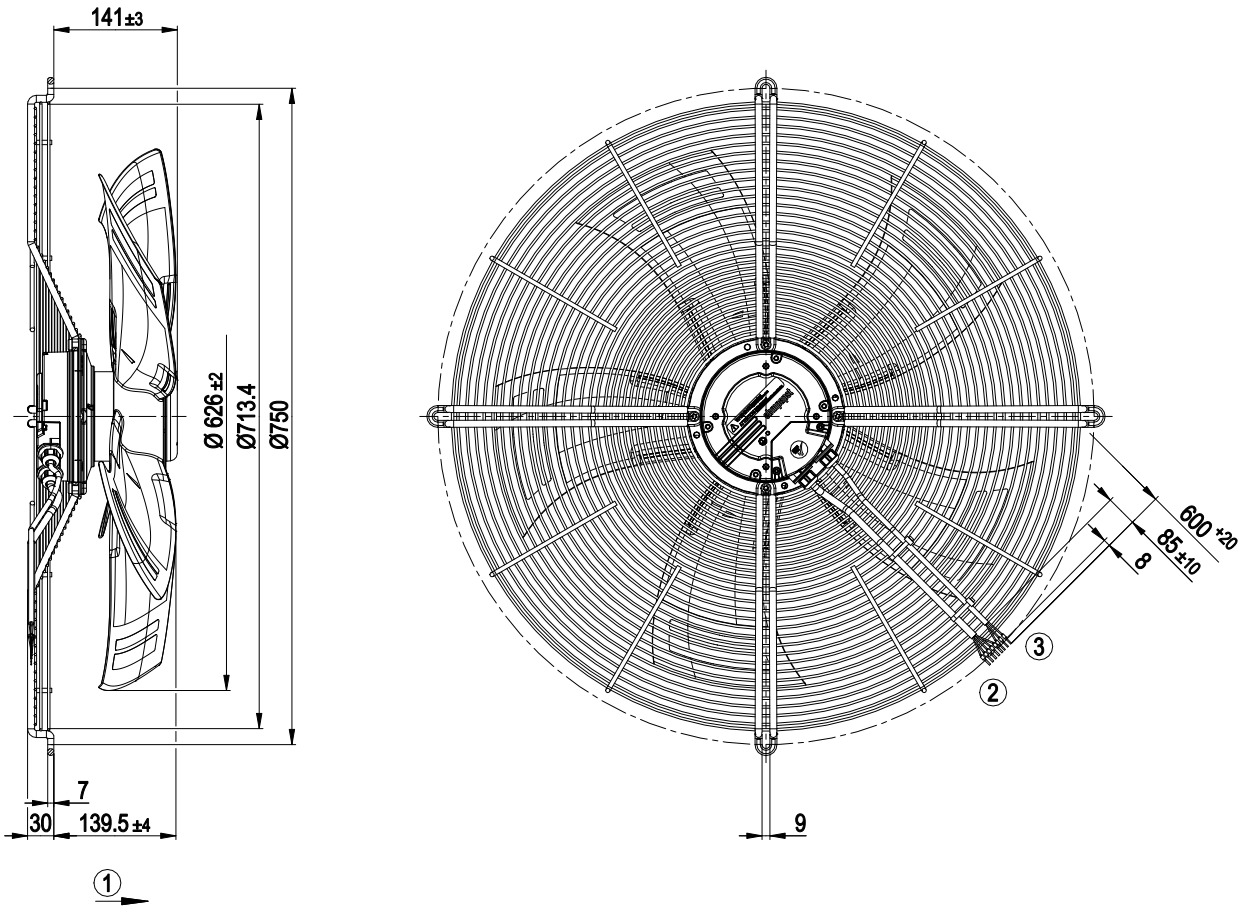
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Product drawing



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

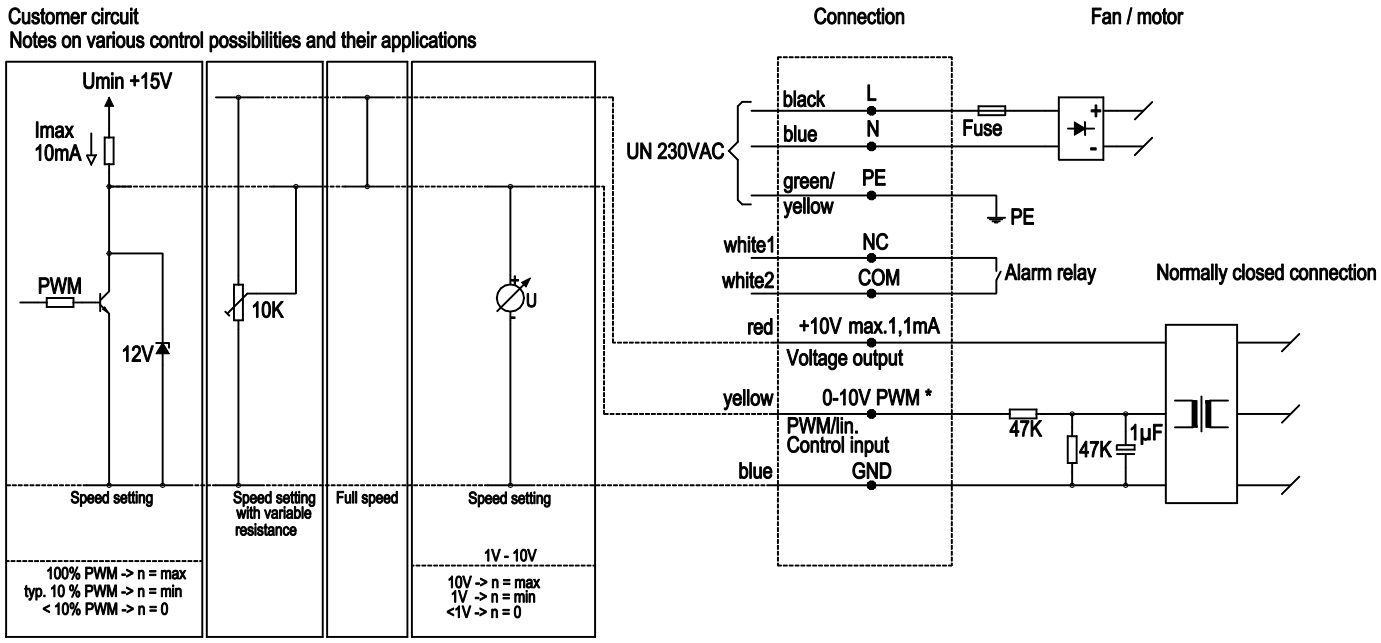
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Connection screen



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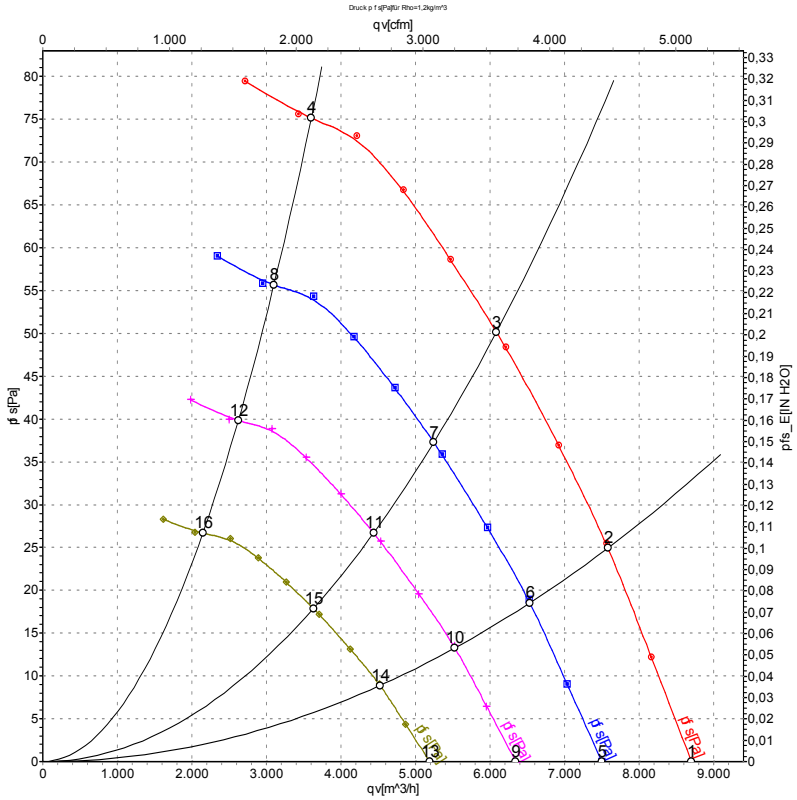
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Charts: Air flow 50 Hz



Measurement: LU-119952-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	750	139	0.90	55	62	62	8700	0	5120	0.00
2	230	50	750	177	1.12	56	62	62	7580	25	4460	0.10
3	230	50	750	201	1.26	56	63	62	6085	50	3580	0.20
4	230	50	750	250	1.60	64	71	71	3600	75	2120	0.30
5	230	50	650	89	0.58	52	59	59	7500	0	4415	0.00
6	230	50	650	113	0.72	53	59	59	6535	19	3845	0.08
7	230	50	650	129	0.81	53	59	59	5245	37	3085	0.15
8	230	50	650	149	0.93	60	68	68	3100	56	1825	0.22
9	230	50	550	54	0.35	49	55	55	6345	0	3735	0.00
10	230	50	550	69	0.44	49	55	55	5530	14	3255	0.06
11	230	50	550	78	0.49	49	56	56	4440	27	2610	0.11
12	230	50	550	90	0.56	57	65	65	2625	40	1545	0.16
13	230	50	450	30	0.19	44	51	51	5190	0	3055	0.00
14	230	50	450	38	0.24	45	51	51	4525	9	2660	0.04
15	230	50	450	43	0.27	45	51	51	3630	18	2135	0.07
16	230	50	450	49	0.31	52	60	60	2145	27	1265	0.11

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

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