W3G630-GD03-A7

EC axial fan - HyBlade

sickle-shaped blades (S series)

Fan housing with guard grille

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ErP2015 EXCEEDS THE NORM

Nominal data

Type	**W3G630-GD03-A7**
Motor	**M3G084-GF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	750
Power consumption	W	225
Current draw	A	1.0
Max. back pressure	Pa	65
Max. back pressure	inH2O	0.26
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 ErP Directive

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	42.3	29.3
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		53	40
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.2
09 Air flow q_v	m^3/h	6130
09 Pressure increase p_{fs}	Pa	46
10 Speed (rpm) n	min^{-1}	755
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-153642

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Technical description

Weight	17.4 kg
Fan size	630 mm
Rotor surface	Painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Fan housing material	Sheet steel, pre-galvanized and coated with black plastic (RAL 9005)
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	IP54; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F3-1
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; (sealed)
Technical features	- Output 10 VDC, max. 10 mA - Alarm relay - Motor current limitation - PFC, active - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for electronics/motor - Line undervoltage / phase failure detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
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)
Conformity with standards	EN 61800-5-1; CE

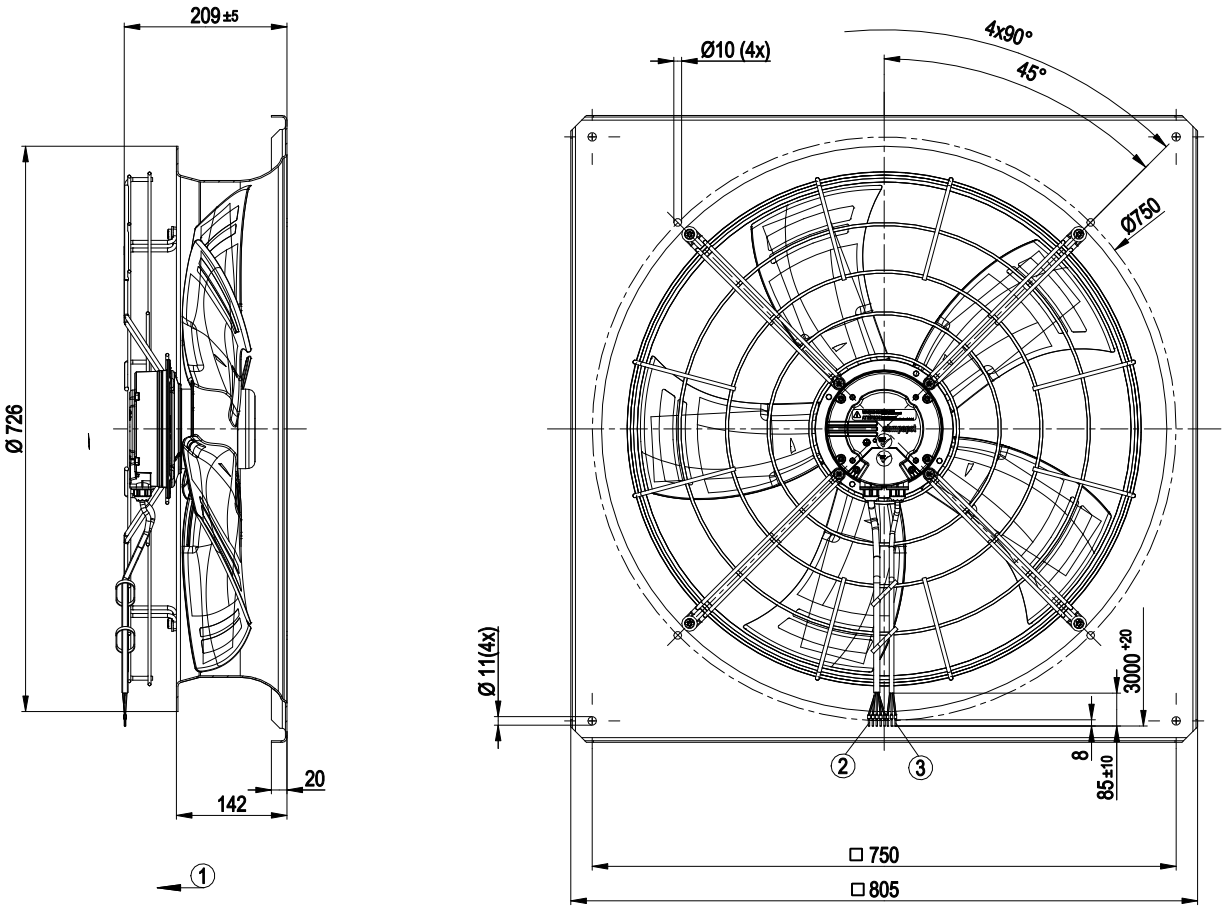
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Product drawing



1	Direction of air flow "V"
2	Cable halogen-silicone-free 5G 1.0 mm², 5x crimped ferrules
3	Cable halogen-silicone-free 3G 0.3 mm², 3x crimped ferrules

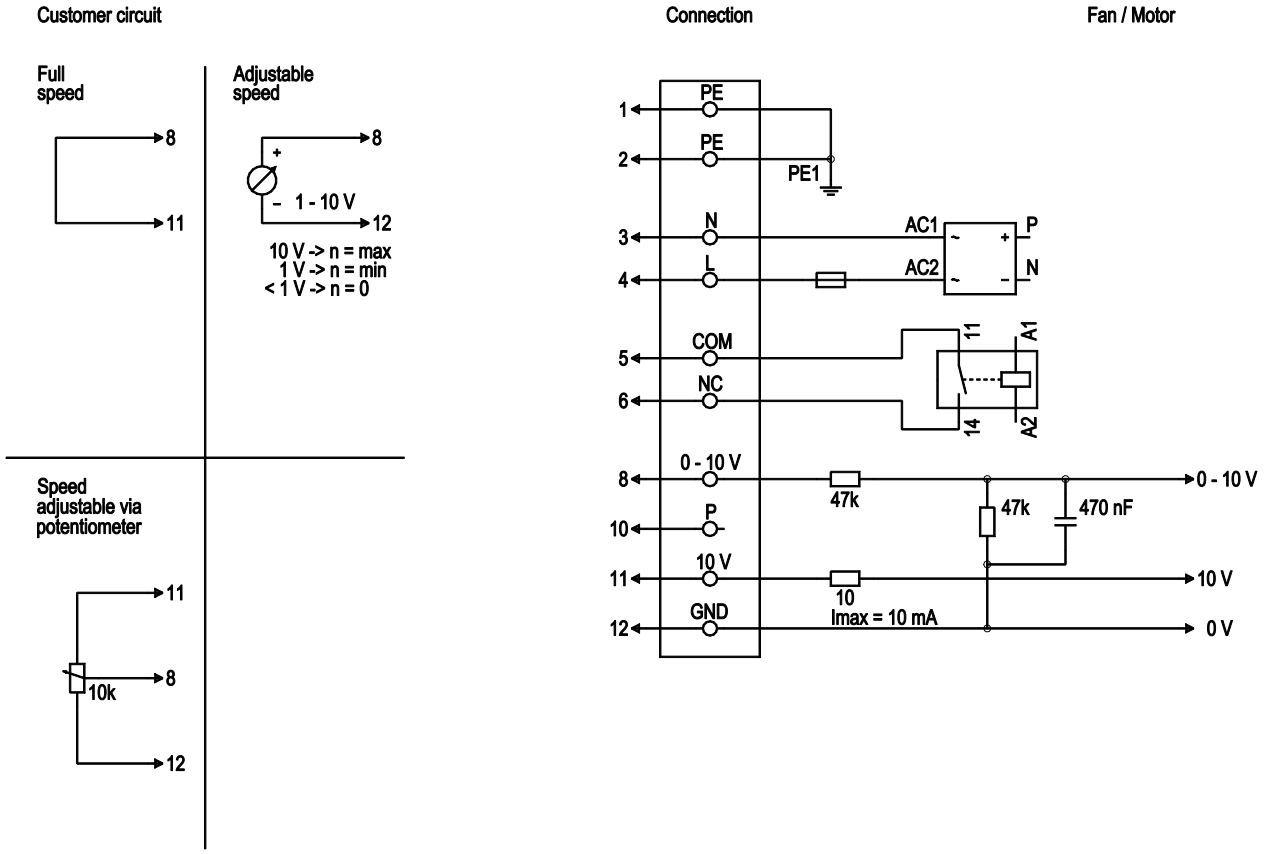
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1, 2	PE	green/yellow	Protective earth
1	3	N	blue	Power supply, neutral conductor, see nameplate for voltage range, 50/60 Hz
1	4	L	black	Power supply, phase, see nameplate for voltage range, 50/60 Hz
1	5	COM	white 1	Floating status contact, break for failure (2 A, max. 250 VAC, min. 10 mA)
1	6	NC	white 2	Floating status contact, break for failure
2	8	0 -10 V	yellow	Control input, set value 0-10 VDC, impedance 100 kOhm, SELV
2	10	P	orange	not used
2	11	10 VDC	red	Voltage output 10 VDC (±3%), max. 10 mA, power supply for external devices (e.g. potentiometers), SELV
2	12	GND	blue	Reference ground for control interface, SELV

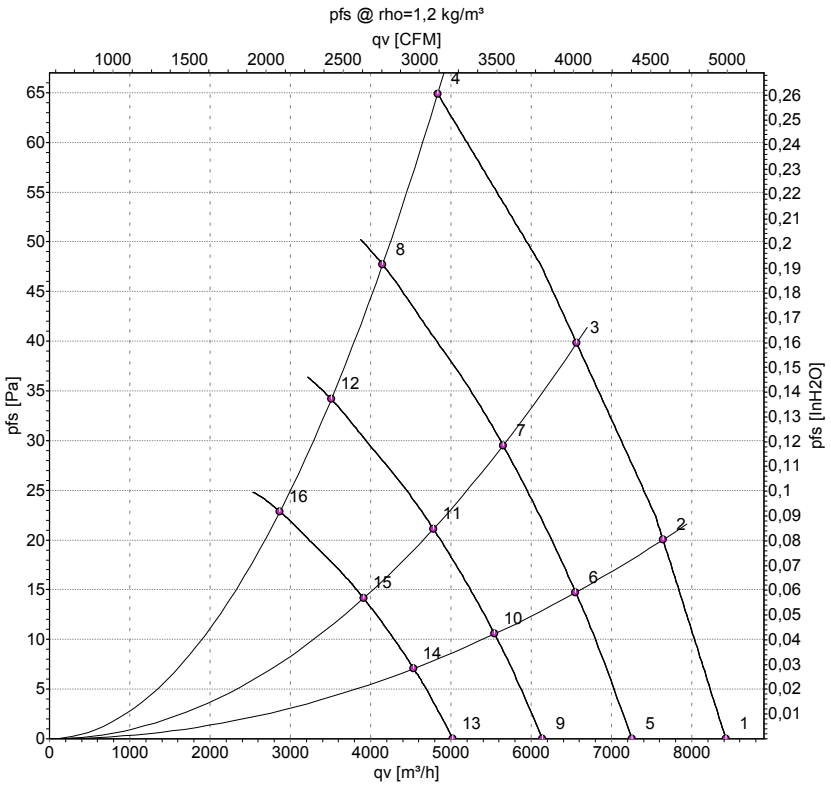
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Curves: Air performance 50 Hz



Measurement: LU-153642-1
Measurement: LU-126911-1

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	LpA_{in}	LwA_{in}	LwA_{out}	qv	p_{fs}	qv	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	0.63	55	61	61	8425	0	4960	0.00
2	230	50	750	171	0.76	55	61	60	7645	20	4500	0.08
3	230	50	750	195	0.87	56	62	61	6565	40	3865	0.16
4	230	50	750	225	1.00	58	65	65	4835	65	2845	0.26
5	230	50	650	89	0.40	51	57	57	7255	0	4270	0.00
6	230	50	650	109	0.48	52	57	57	6555	15	3860	0.06
7	230	50	650	126	0.56	52	57	57	5650	30	3325	0.12
8	230	50	650	144	0.63	54	61	61	4150	48	2440	0.19
9	230	50	550	54	0.24	47	53	53	6140	0	3615	0.00
10	230	50	550	66	0.29	47	53	53	5545	11	3265	0.04
11	230	50	550	76	0.34	47	53	52	4785	21	2815	0.08
12	230	50	550	87	0.38	50	57	57	3510	34	2065	0.14
13	230	50	450	30	0.13	42	48	48	5025	0	2955	0.00
14	230	50	450	36	0.16	42	48	48	4540	7	2670	0.03
15	230	50	450	42	0.18	42	48	47	3915	14	2305	0.06
16	230	50	450	48	0.21	45	52	52	2870	23	1690	0.09

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · qv = Air flow · p_{fs} = Pressure increase

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