W3G630-GC03-57

EC axial fan

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Nominal data

Type	**W3G630-GC03-57**
Motor	**M3G084-FA**

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}	760
Power consumption	W	240
Current draw	A	1.6
Max. back pressure	Pa	65
Max. back pressure	in. wg	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 Commission Regulation (EU) 327/2011

		Actual	Req. 2015
01 Overall efficiency η_{es}	%	46.1	29.6
02 Measurement category		A	
03 Efficiency category		Static	
04 Efficiency grade N		56.5	40
05 Variable speed drive		Yes	

09 Power consumption P_{ed}	kW	0.23
09 Air flow q_v	m^3/h	5700
09 Pressure increase p_{fs}	Pa	62
10 Speed (rpm) n	min^{-1}	765
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-177072

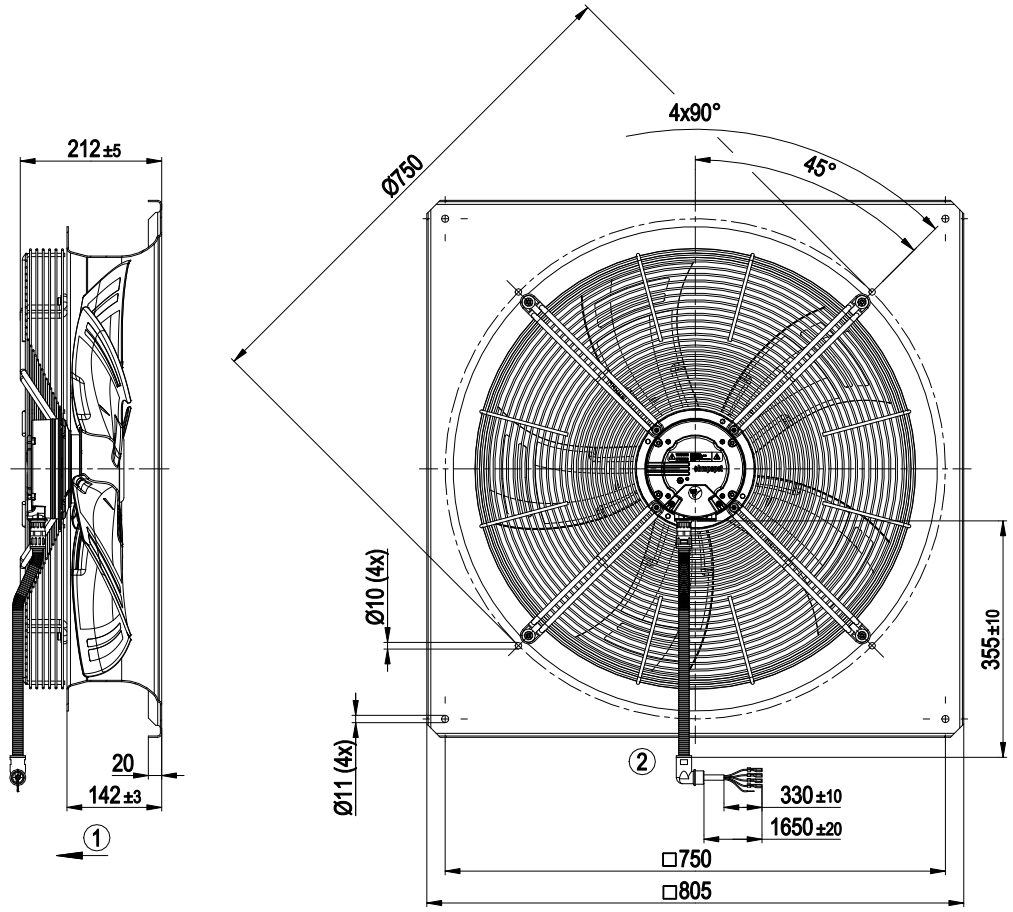
Technical description

Weight	20 kg
Size	630 mm
Motor size	84
Rotor surface	Painted black
Electronics housing material	Die-cast aluminum, painted black
Blade material	Press-fitted sheet steel blank, sprayed with PP plastic
Fan housing material	Sheet steel, 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
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H2
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
Technical features	- Output 10 VDC, max. 1.1 mA - Alarm relay - Motor current limitation - PFC, passive - 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 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
Approval	UL 1004-3; EAC; CSA C22.2 No. 77

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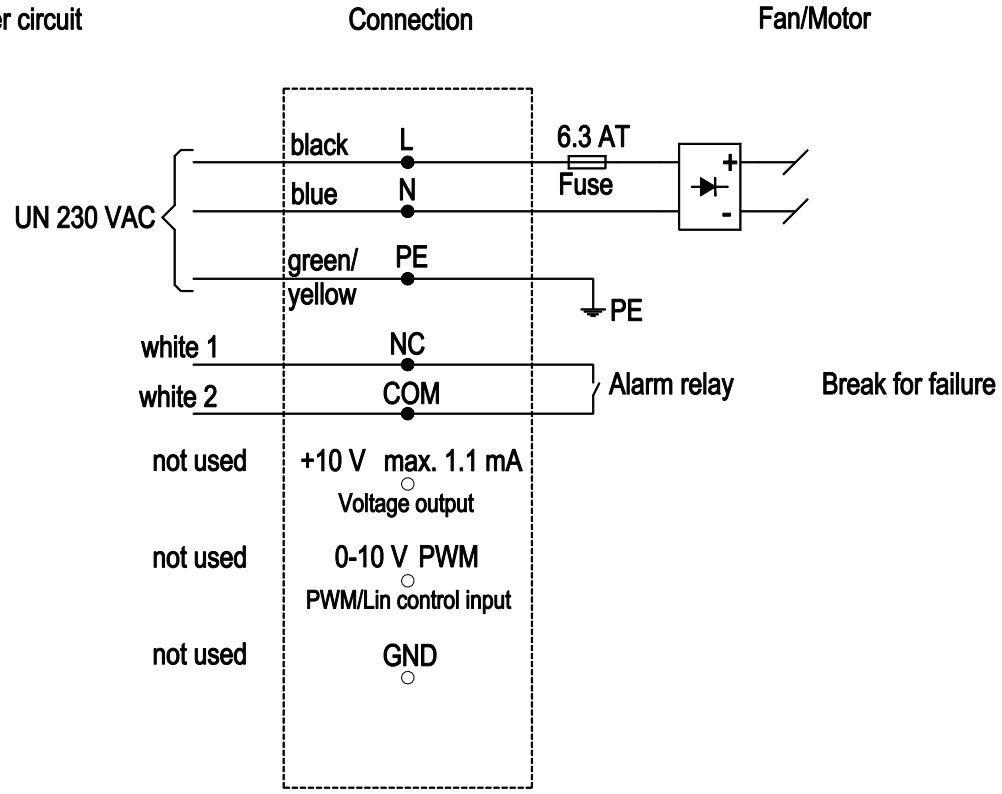
Product drawing



1	Airflow direction "V"
2	Cable PVC AWG18 5G, 4x TE flat push-on receptacle 2-520183-4 and 1x crimped splice

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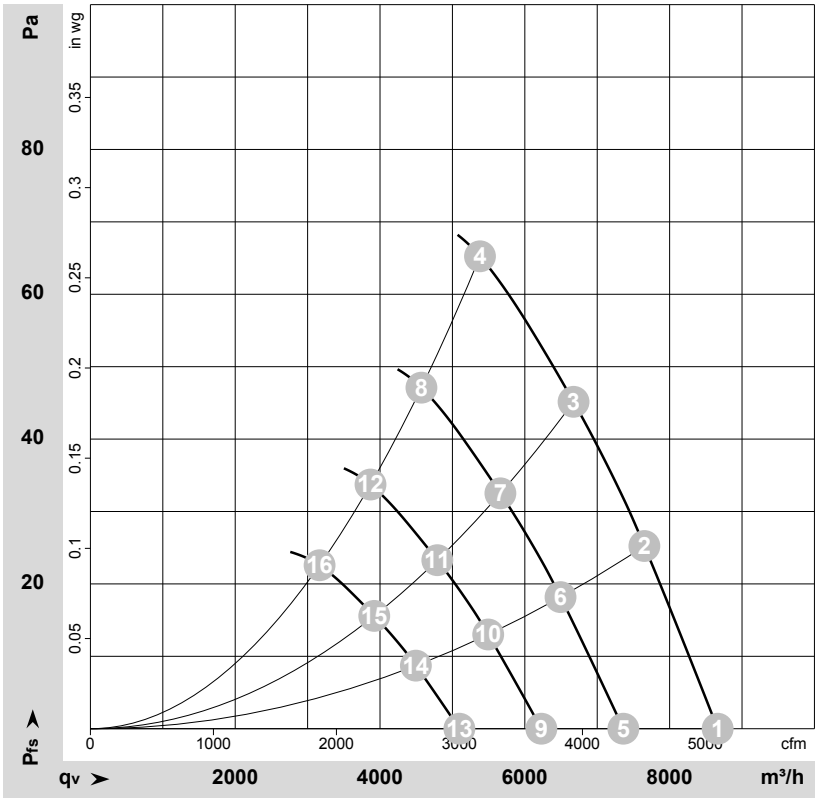
Connection diagram



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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-177072-1

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}	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	in. wg
1	230	50	760	161	1.12	55	62	61	8665	0	5100	0.00
2	230	50	760	198	1.35	56	62	61	7650	26	4505	0.10
3	230	50	760	220	1.49	55	61	61	6675	45	3930	0.18
4	230	50	760	240	1.60	57	63	63	5380	65	3165	0.26
5	230	50	650	99	0.68	51	58	57	7360	0	4335	0.00
6	230	50	650	121	0.82	52	58	57	6495	18	3820	0.07
7	230	50	650	135	0.91	51	57	56	5665	33	3335	0.13
8	230	50	650	149	1.00	52	59	59	4570	47	2690	0.19
9	230	50	550	60	0.41	47	53	53	6230	0	3665	0.00
10	230	50	550	73	0.50	48	53	53	5495	13	3235	0.05
11	230	50	550	82	0.55	47	53	52	4790	23	2820	0.09
12	230	50	550	90	0.61	48	55	55	3870	34	2275	0.14
13	230	50	450	33	0.23	42	48	48	5095	0	3000	0.00
14	230	50	450	40	0.27	43	48	48	4495	9	2645	0.04
15	230	50	450	45	0.30	42	48	47	3920	16	2305	0.06
16	230	50	450	49	0.33	43	50	50	3165	23	1865	0.09

U = Voltage · 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 · q_V = Air flow · p_{fs} = Pressure increase

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