

with inlet ring and guard grill

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Nominal data

Type	W3G300-XG06-01	
Motor	M3G074-DF	

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	2400
Power consumption	W	320
Current draw	A	1.4
Max. back pressure	Pa	310
Max. back pressure	in. wg	1.24
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 (EN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	48.3	30.5	09 Power consumption P_{ed}	kW	0.31
02 Measurement category		A		09 Air flow q_v	m ³ /h	2310
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	214
04 Efficiency grade N		57.8	40	10 Speed (rpm) n	min ⁻¹	2400
05 Variable speed drive		Yes		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

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

LU-205320

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).



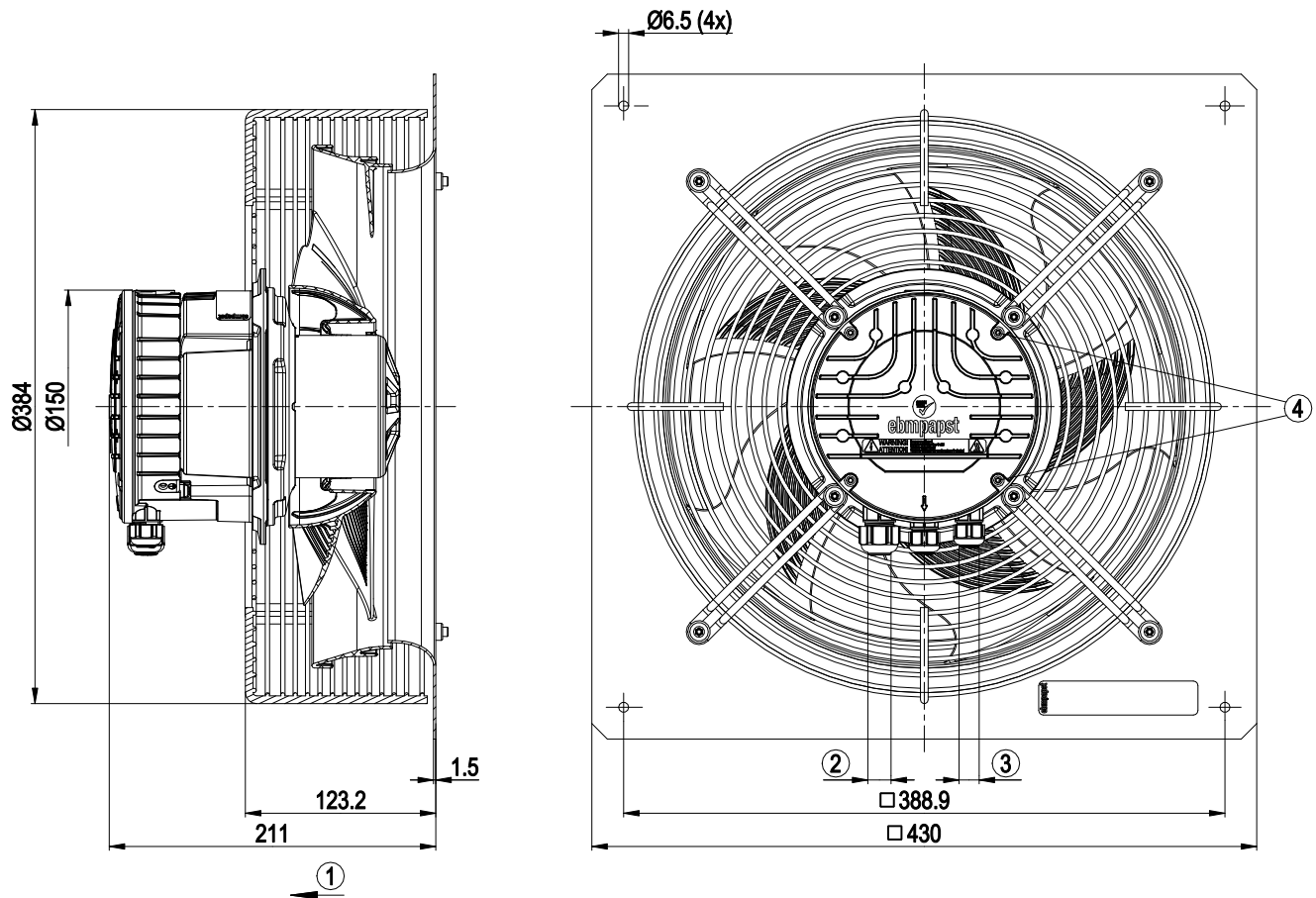
Technical description

Size	300 mm
Motor size	74
Rotor surface	Thick-film passivated
Terminal box material	PP plastic
Impeller material	PP plastic
Inlet ring material	Sheet steel, galvanized and coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Operation and alarm display - Alarm relay - Integrated PID controller - Power limiter - Motor current limitation - PFC, active - RS-485 MODBUS-RTU - 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 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	UL 1004-7 + 60730-1; EAC; CSA C22.2 No. 77 + CAN/CSA-E60730-1



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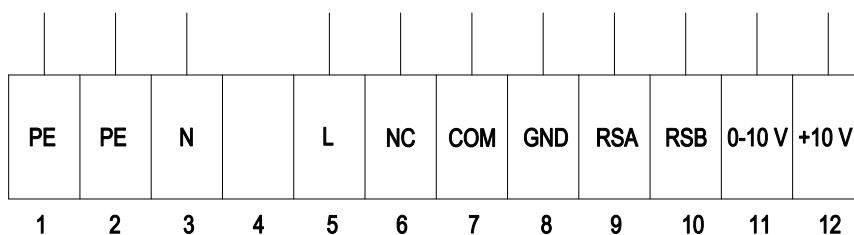
Product drawing



1	Airflow direction "V"
2	Cable diameter min. 8 mm, max. 12 mm, tightening torque 1.8 ± 0.3 Nm (use must be made of seal provided) Cable diameter min. 4 mm, max. 10 mm, tightening torque 1.8 ± 0.3 Nm
3	Cable diameter min. 6 mm, max. 10 mm, tightening torque 1.8 ± 0.3 Nm (use must be made of seal provided) Cable diameter min. 4 mm, max. 7 mm, tightening torque 1.8 ± 0.3 Nm
4	Tightening torque 1.5 ± 0.2 Nm



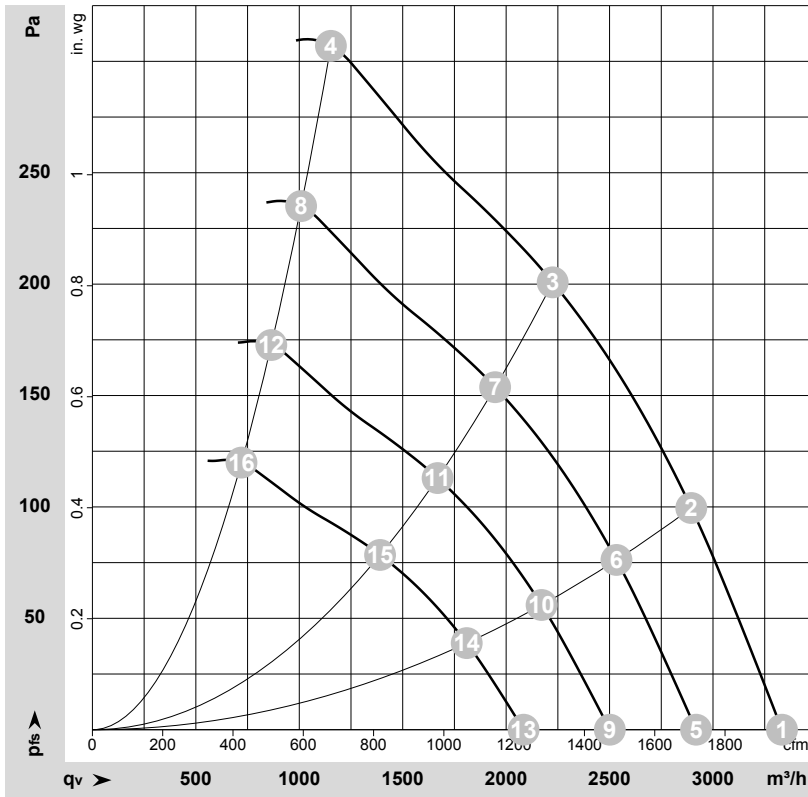
Connection diagram



No.	Conn.	Designation	Function/assignment
1	PE	PE	Protective earth
2	PE	PE	Protective earth
3	N	N	Power supply, neutral conductor
4	-	-	not used
5	L	L	Power supply, phase
6	NC	NC	Status relay, floating status contact, break for failure, contact rating 250 VAC / 2 A (AC1) / min. 10 mA; basic insulation on supply side and reinforced insulation on control interface side
7	COM	COM	Status relay, floating status contact, common connection, contact rating 250 VAC / 2 A (AC1) / min. 10 mA; basic insulation on supply side and reinforced insulation on control interface side
8	GND	GND	Reference ground for control interface, SELV
9	RSA	RSA	RS485 interface for MODBUS, RSA; SELV
10	RSB	RSB	RS485 interface for MODBUS, RSB; SELV
11	0-10 V	0-10 V	Analog input (set value) SELV, 0-10 V, Ri = 100 kΩ, adjustable curve
12	+10 V	+10 V	Fixed voltage output 10 VDC, SELV, +10 V ±3%, max. 10 mA, short-circuit-proof, power supply for external devices (e.g. pot)

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Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-210370-1

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

	Wired	U	f	n	P _{ed}	I	LpA _{in}	LwA _{in}	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	1~	230	50	2400	245	1.09	70	76	3335	0	1960	0.00
2	1~	230	50	2400	281	1.25	67	73	2895	100	1705	0.40
3	1~	230	50	2400	305	1.35	65	72	2225	200	1310	0.80
4	1~	230	50	2400	320	1.40	72	78	1155	310	680	1.24
5	1~	230	50	2100	164	0.73	67	73	2920	0	1715	0.00
6	1~	230	50	2100	188	0.84	64	69	2535	77	1490	0.31
7	1~	230	50	2100	205	0.91	62	68	1945	155	1145	0.62
8	1~	230	50	2100	217	0.96	68	75	1010	237	595	0.95
9	1~	230	50	1800	103	0.46	63	69	2500	0	1470	0.00
10	1~	230	50	1800	119	0.53	60	66	2170	57	1280	0.23
11	1~	230	50	1800	129	0.57	58	65	1670	114	980	0.46
12	1~	230	50	1800	136	0.60	64	71	865	174	510	0.70
13	1~	230	50	1500	60	0.27	59	64	2085	0	1225	0.00
14	1~	230	50	1500	69	0.30	55	61	1810	39	1065	0.16
15	1~	230	50	1500	75	0.33	54	60	1390	79	820	0.32
16	1~	230	50	1500	79	0.35	60	66	720	121	425	0.49

Wired = Wiring · 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
q_v = Air flow · p_{fs} = Pressure increase

