G3G160-AC50-17

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G160-AC50-17**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2390
Power consumption	W	170
Current draw	A	1.4
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

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Technical description

Weight	3.6 kg
Size	160 mm
Motor size	74
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
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	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Thermal overload protection for motor
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
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	Connector with cable
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	CE
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; UL 1004-7 + 60730-1

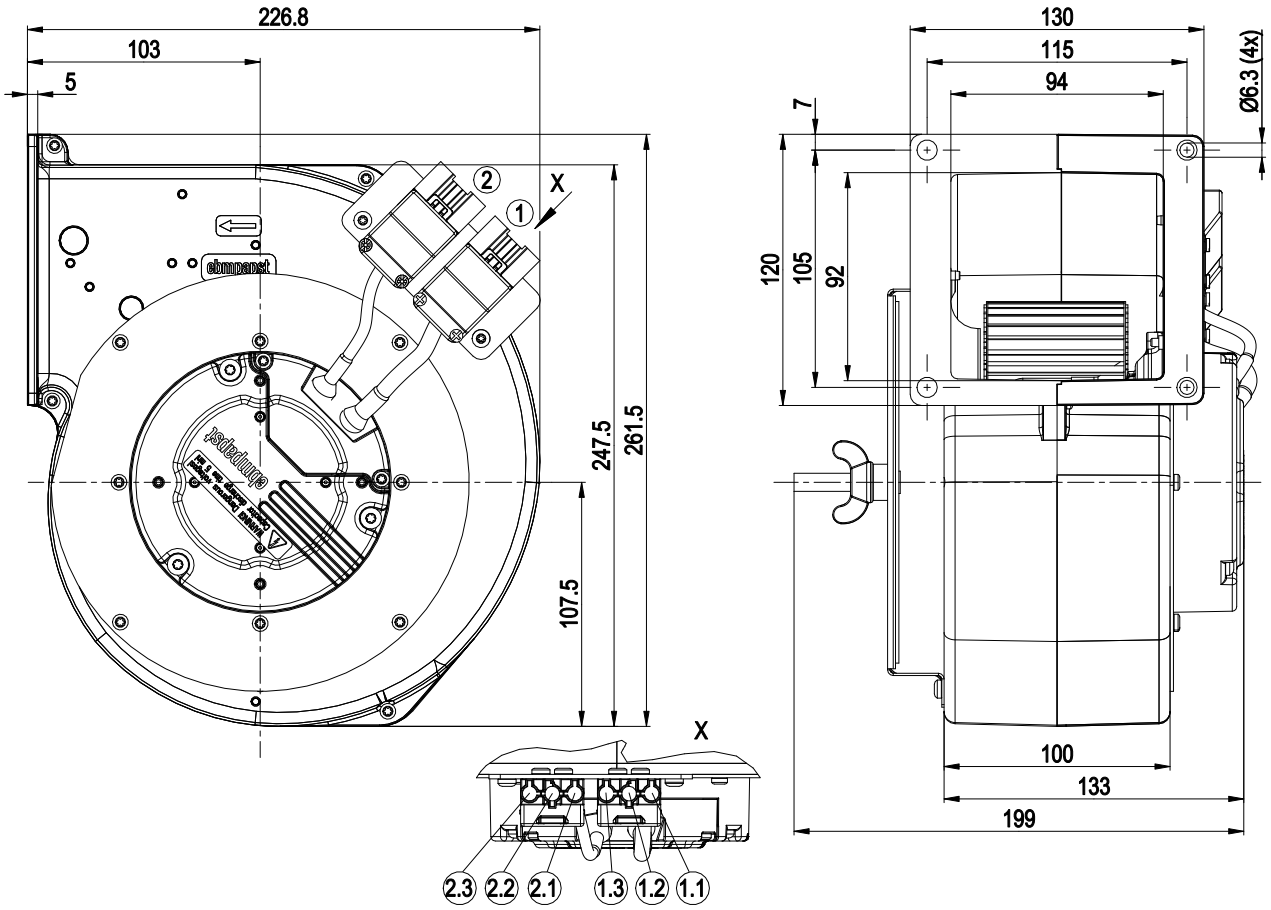
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Product drawing



1	3-pole connector housing Wieland 93.631.4257.0
1.1	L (black)
1.2	PE (green/yellow)
1.3	N (blue)
2	3-pole connector housing Wieland 93.631.4757.0
2.1	Tach (white)
2.2	GND (blue)
2.3	0-10 V/PWM (yellow)
	Mating connector included separately
	3-pole connector housing Wieland 93.832.4357.0
	3-pole connector housing Wieland 93.832.4757.0

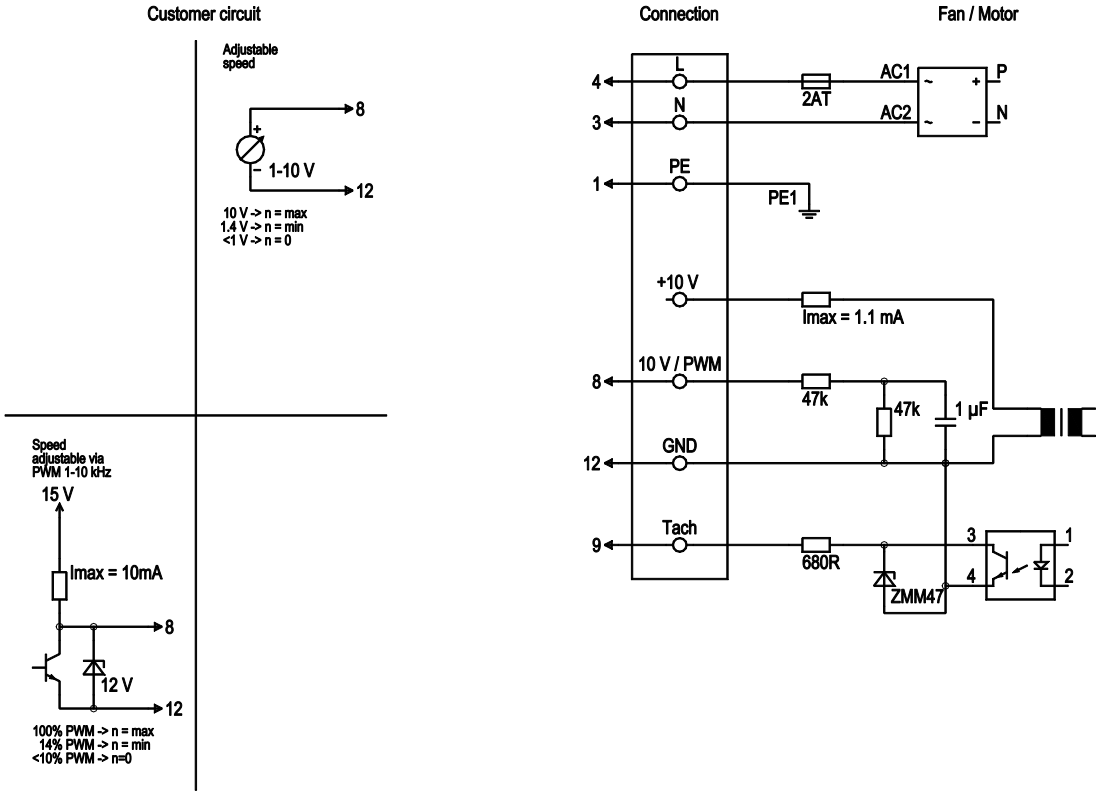
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	3	N	blue	Neutral conductor
	1	PE	green/yellow	Protective earth
	12	GND	blue	GND connection for control interface
	8	0- 10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	9	Tach	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated, Isink max = 10 mA

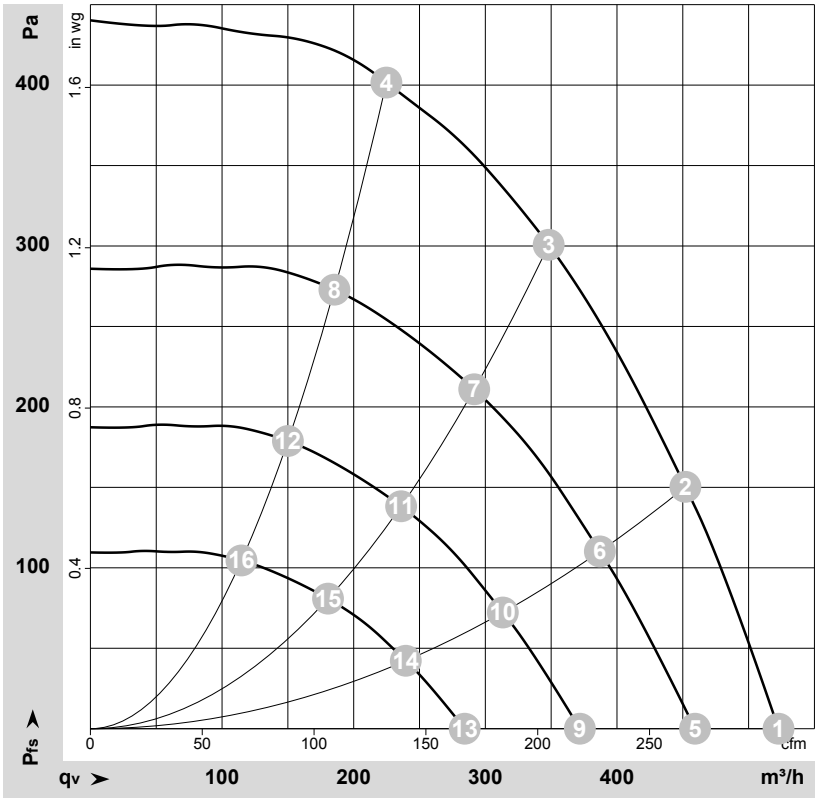
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-184204-1

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	Y	230	50	2390	170	1.40	77	86	525	0	310	0.00
2	Y	230	50	2450	150	1.21	74	82	450	150	265	0.60
3	Y	230	50	2505	118	0.98	69	77	350	300	205	1.20
4	Y	230	50	2545	87	0.74	65	73	225	400	130	1.61
5	Y	230	50	2100	120	0.95	74	82	460	0	270	0.00
6	Y	230	50	2100	94	0.76	70	78	385	110	230	0.44
7	Y	230	50	2100	69	0.57	64	73	290	211	170	0.85
8	Y	230	50	2100	49	0.41	60	68	185	273	110	1.10
9	Y	230	50	1700	64	0.50	69	77	370	0	220	0.00
10	Y	230	50	1700	50	0.40	65	73	315	72	185	0.29
11	Y	230	50	1700	37	0.30	59	67	235	138	140	0.55
12	Y	230	50	1700	26	0.22	55	63	150	179	90	0.72
13	Y	230	50	1300	29	0.23	62	70	285	0	165	0.00
14	Y	230	50	1300	22	0.18	58	66	240	42	140	0.17
15	Y	230	50	1300	16	0.14	52	61	180	81	105	0.33
16	Y	230	50	1300	12	0.10	48	56	115	105	70	0.42

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

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