G3G180-EU61-12

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G180-EU61-12**
Motor	**M3G074-CF**

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}	1320
Power consumption	W	175
Current draw	A	1.4
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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	5.5 kg
Fan size	180 mm
Rotor surface	Painted black
Impeller material	Sheet steel, hot-dip galvanized
Housing material	Sheet steel, hot-dip galvanized
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44; 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	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - 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
Motor protection	Thermal overload protector (TOP) internally connected
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1
Approval	CSA C22.2 No. 77; UL 2111

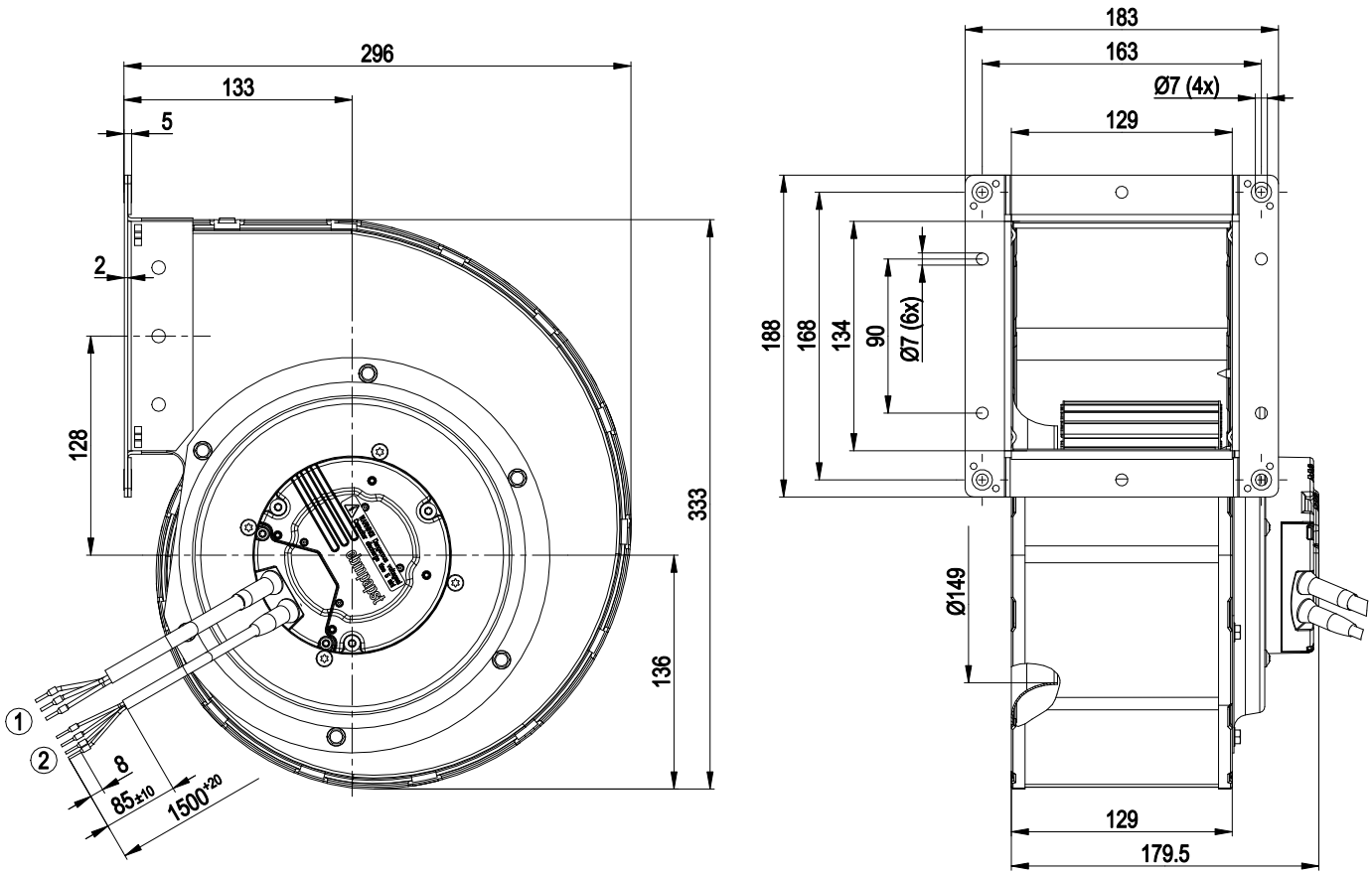
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Product drawing



1	Cable PVC 3G AWG 18, 3x crimped ferrules
2	Cable PVC 4x AWG 22, 4x crimped ferrules

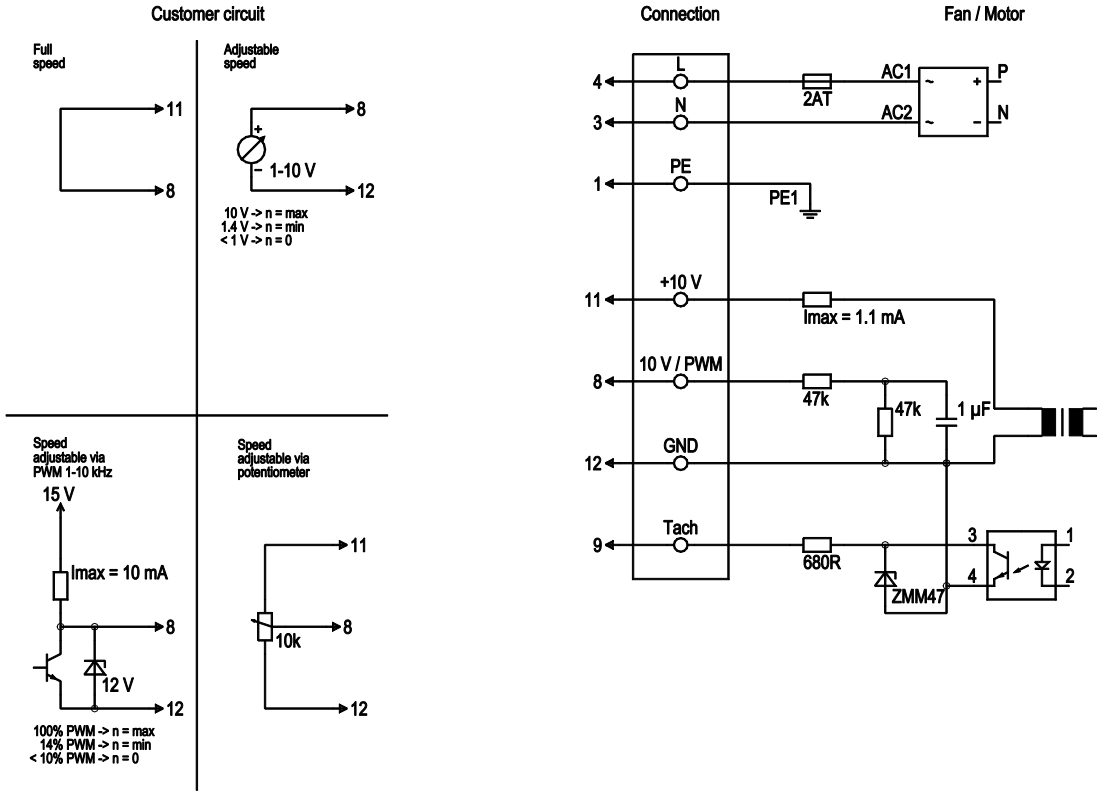
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Connection diagram



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
	8	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	9	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated
	11	10V / max 1.1 mA	red	Voltage output 10 V/max. 1.1 mA, electrically isolated
	12	GND	blue	GND connection for control interface

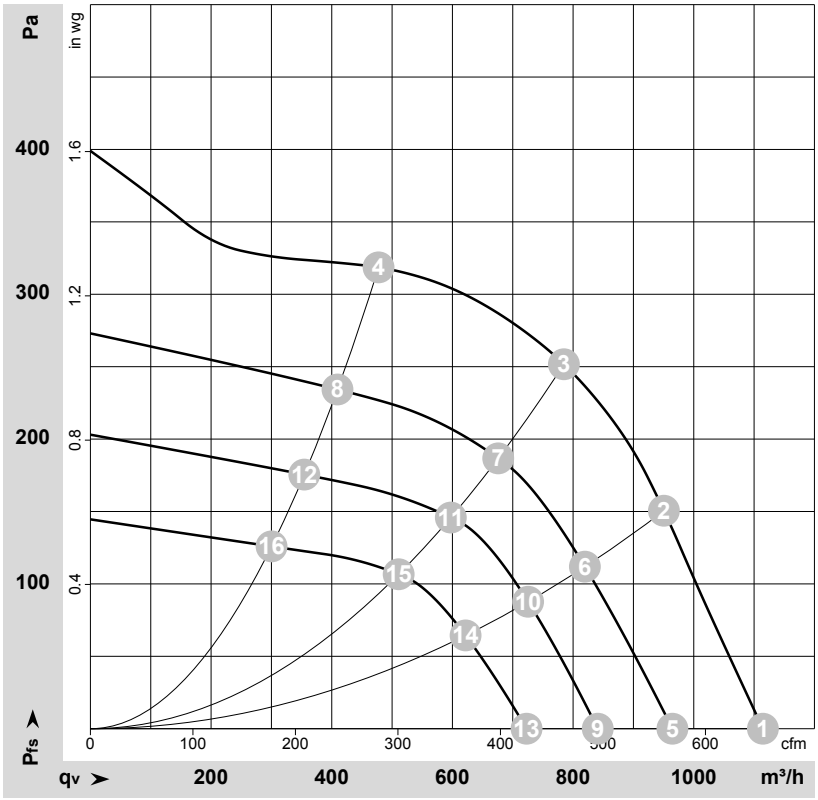
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-122437-1
Measurement: LU-132246-1
Measurement: LU-132247-1
Measurement: LU-132248-1

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}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	1320	175	1.40	68	73	1115	0	655	0.00
2	230	50	1530	168	1.20	66	71	950	150	560	0.60
3	230	50	1650	148	1.05	64	70	785	250	460	1.00
4	230	50	1750	104	0.74	62	68	480	320	280	1.28
5	230	50	1150	109	0.85	65	70	965	0	570	0.00
6	230	50	1350	110	0.86	63	68	820	121	485	0.49
7	230	50	1440	97	0.77	61	67	675	187	400	0.75
8	230	50	1505	65	0.53	58	64	410	236	240	0.95
9	230	50	1005	73	0.59	62	67	840	0	495	0.00
10	230	50	1185	73	0.59	60	65	725	97	425	0.39
11	230	50	1265	66	0.54	58	64	595	146	350	0.59
12	230	50	1320	44	0.38	55	61	355	176	210	0.71
13	230	50	865	47	0.41	58	64	725	0	425	0.00
14	230	50	1020	48	0.41	56	62	620	71	365	0.29
15	230	50	1085	43	0.38	54	60	510	107	300	0.43
16	230	50	1120	29	0.26	52	58	300	126	175	0.51

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
qv = Air flow · p_{fs} = Pressure increase

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