G3G160-AC70-01

EC centrifugal fan

forward-curved, single-intake

with housing (flange)



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Nominal data

Type	**G3G160-AC70-01**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	115
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2110
Power consumption	W	170
Current draw	A	2.2
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	2.0 kg
Fan size	160 mm
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	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 supply - Thermal overload protection for motor
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)
Approval	UL 2111; CSA C22.2 No. 77

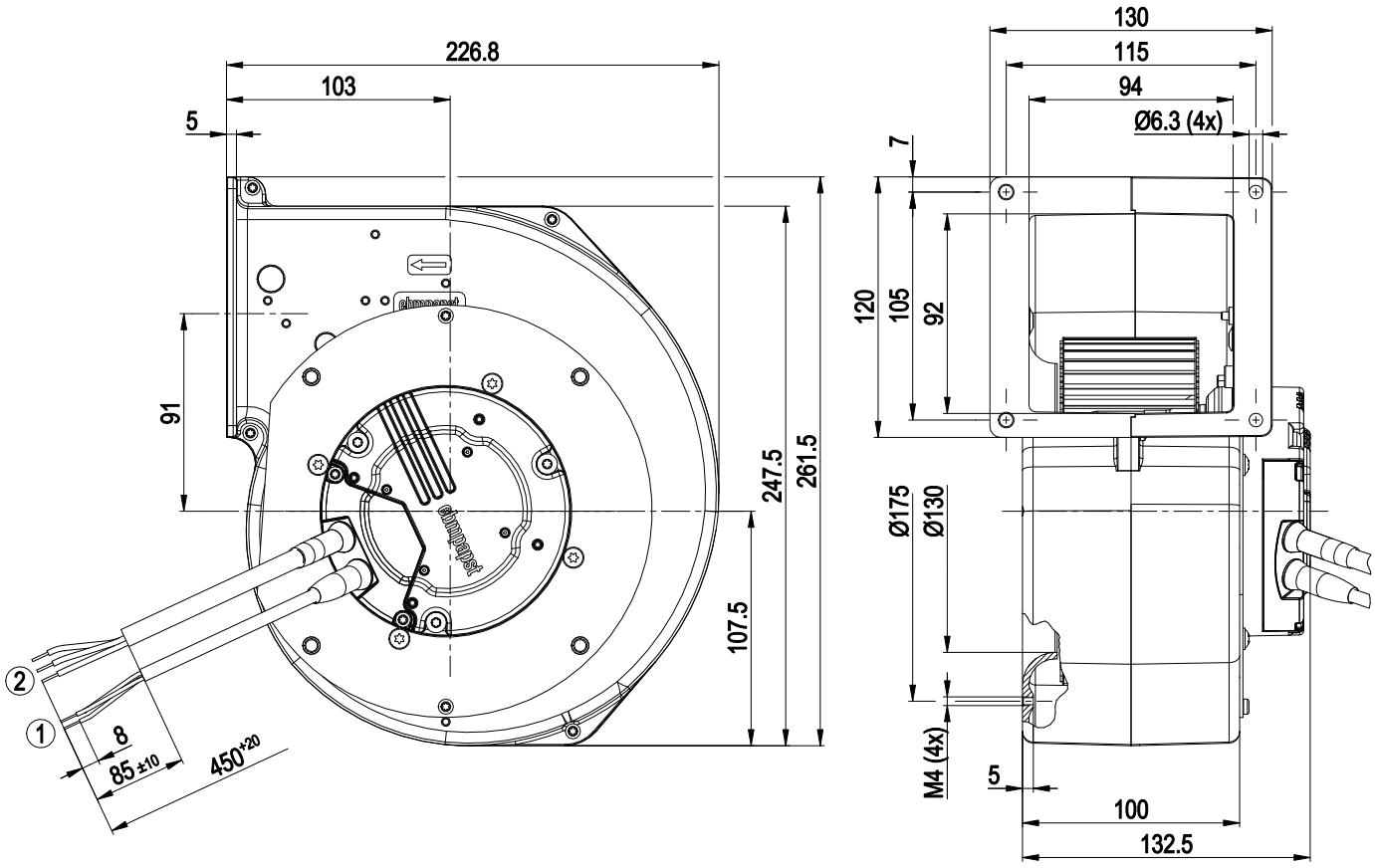
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Product drawing



1	Cable PVC AWG22, 4x crimped ferrules
2	Cable PVC AWG18, 3x crimped ferrules

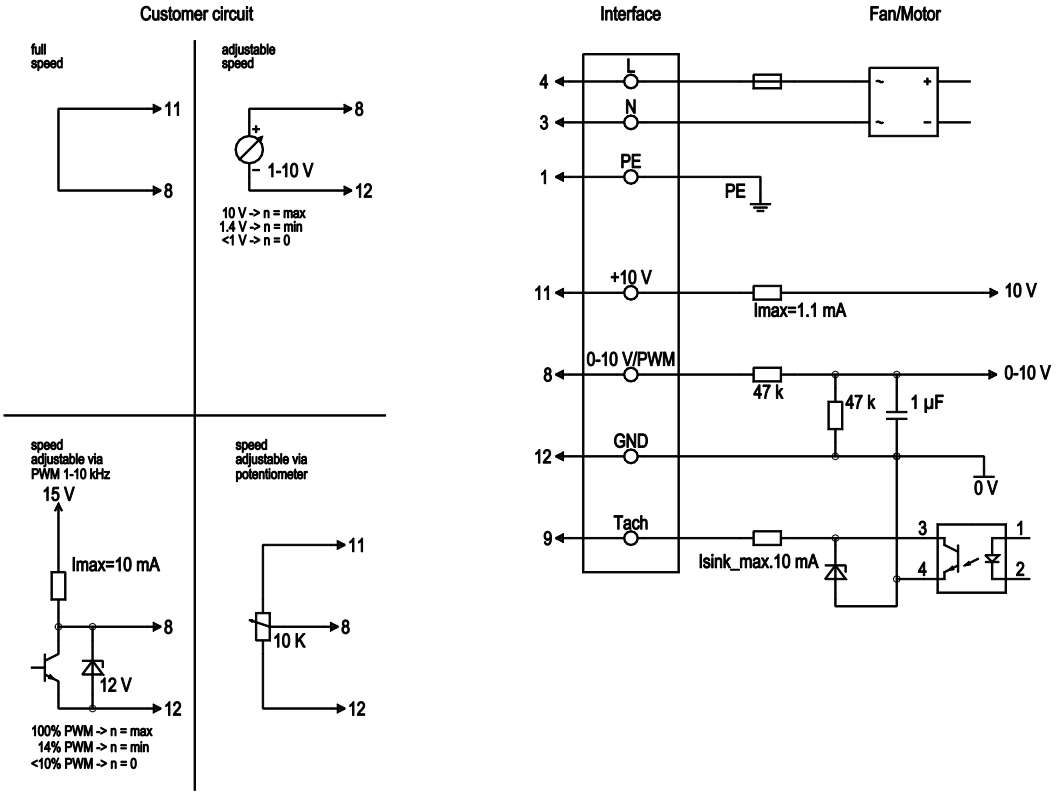
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Connection diagram



Not switchable via power supply. Restart via input voltage only after 5 minute delay.

No.	Conn.	Designation	Color	Function/assignment
	4	L	black	Supply connection, power supply, phase, voltage range see nameplate, 50/60 Hz
	3	N	blue	Supply connection, power supply, neutral conductor, voltage range see nameplate, 50/60 Hz
	1	PE	green/yellow	Ground connection
	8	0-10 V / PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	9	Tacho	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	11	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax.= 1.1 mA, short-circuit-proof, power supply for ext. devices (e.g. potentiometers), SELV
	12	GND	blue	Reference ground for control interface, SELV

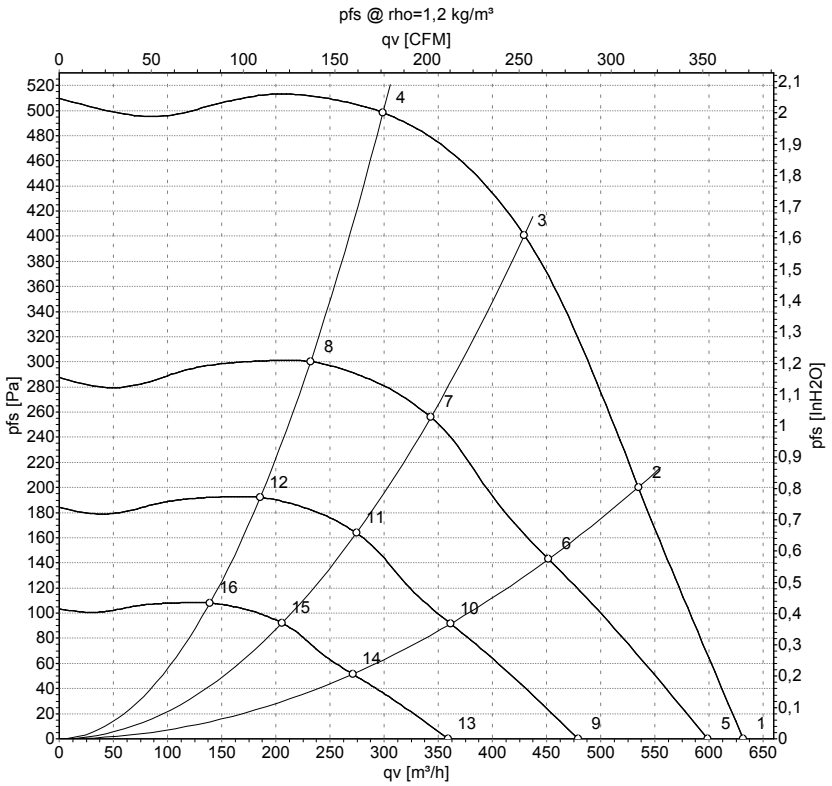
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Curves: Air performance 50 Hz



Measurement: LU-141592-1

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	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	cfm	inH2O
1	115	50	2110	170	2.20	630	0	370	0.00
2	115	50	2365	171	2.16	535	200	315	0.80
3	115	50	2500	146	1.89	430	400	255	1.61
4	115	50	2575	113	1.50	300	500	175	2.01
5	115	50	2000	145	1.85	600	0	355	0.00
6	115	50	2000	104	1.31	450	143	265	0.57
7	115	50	2000	74	0.96	345	256	200	1.03
8	115	50	2000	53	0.70	230	301	135	1.21
9	115	50	1600	74	0.95	480	0	280	0.00
10	115	50	1600	53	0.67	360	92	215	0.37
11	115	50	1600	38	0.49	275	164	160	0.66
12	115	50	1600	27	0.36	185	193	110	0.77
13	115	50	1200	31	0.40	360	0	210	0.00
14	115	50	1200	22	0.28	270	52	160	0.21
15	115	50	1200	16	0.21	205	92	120	0.37
16	115	50	1200	11	0.15	140	108	80	0.43

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · q_V = Air flow · p_{fs} = Pressure increase

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