G3G160-CZ13-14

EC centrifugal fan

forward-curved, single-intake

with housing (flange)

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Nominal data

Type	**G3G160-CZ13-14**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		ml
Speed (rpm)	min^{-1}	2060
Power consumption	W	167
Current draw	A	1.35
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
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	3.12 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	IP54
Insulation class	"B"
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, open rotor
Mode	S1
Motor bearing	Ball bearing
Technical features	- Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Locked-rotor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

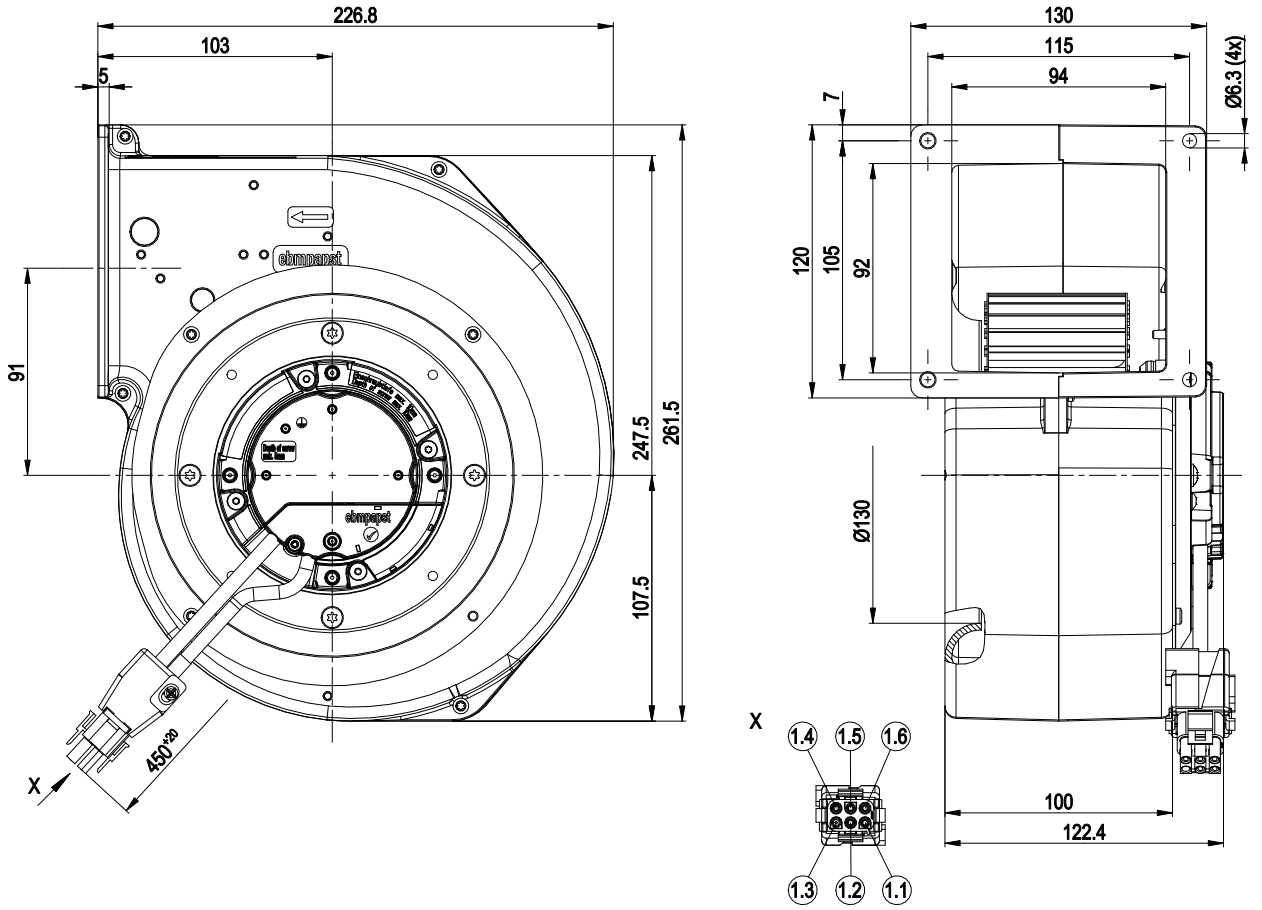
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Product drawing



1	Cable PVC AWG20/AWG22 with 6-pole connector housing tyco 1-1644055-3, 4x plug pin tyco 926885-1, 1x plug pin tyco 350654-1 (PE)
1.1	yellow (0-10 V / PWM)
1.2	blue (GND)
1.3	not used
1.4	Black (L)
1.5	blue (N)
1.6	green/yellow (PE)

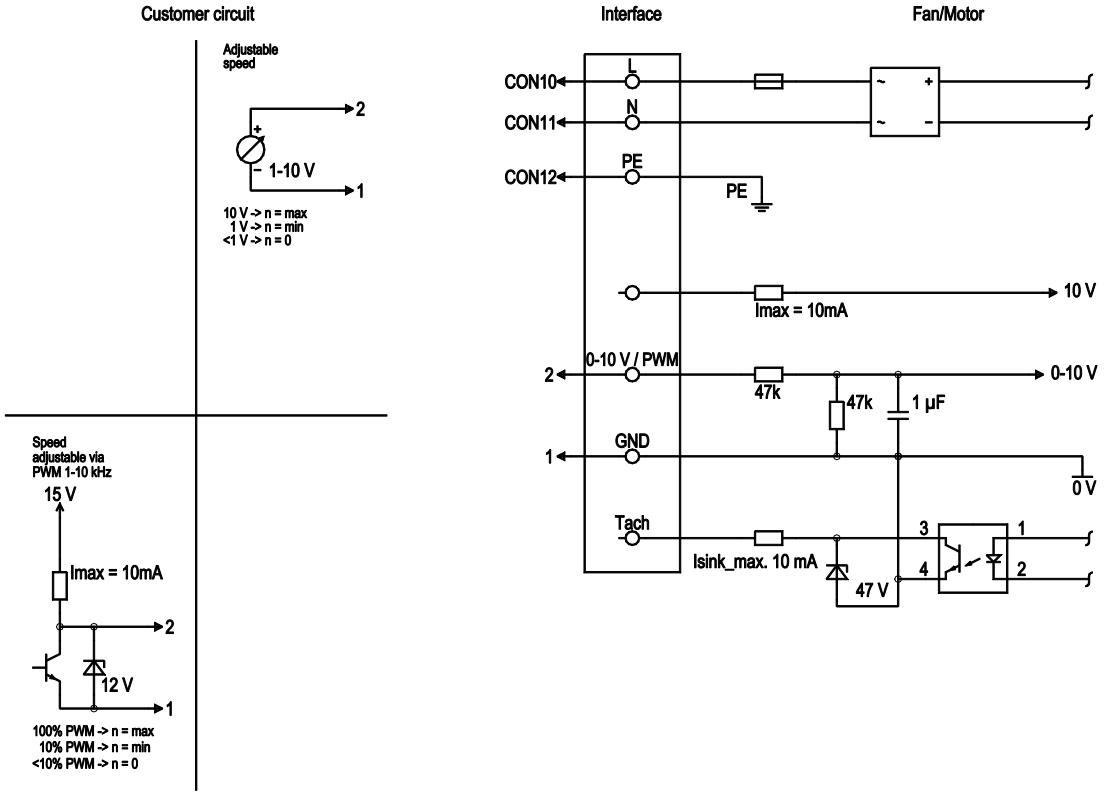
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	1	GND	blue	Reference ground for control interface, SELV

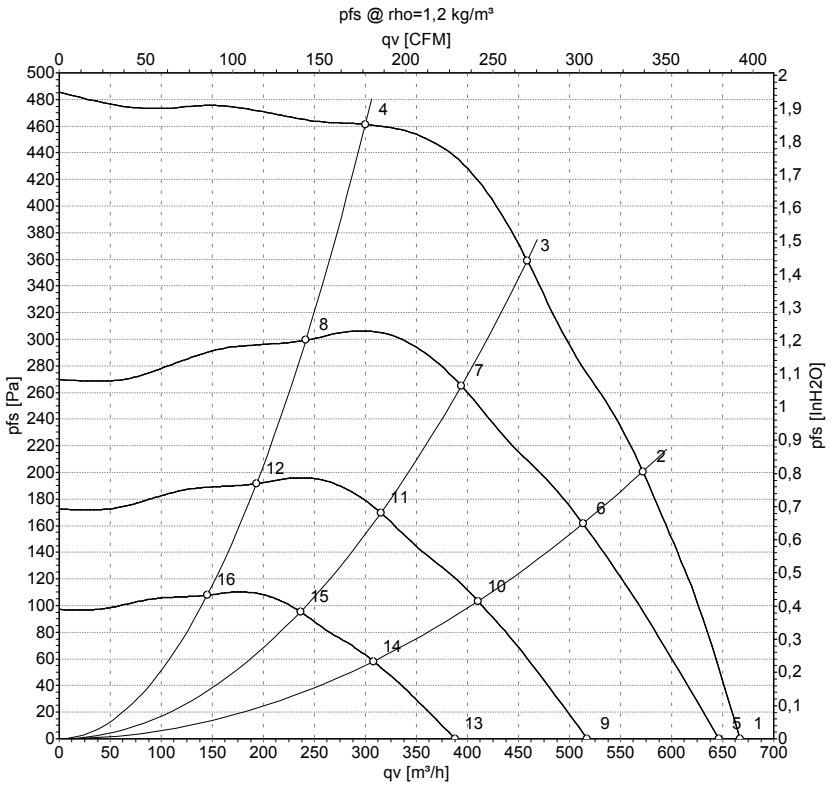
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Curves: Air performance 50 Hz



Measurement: LU-149404-1

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	230	50	2060	167	1.35	665	0	395	0.00
2	230	50	2230	151	1.23	570	200	335	0.80
3	230	50	2325	127	1.05	460	360	270	1.45
4	230	50	2490	87	0.75	300	460	175	1.85
5	230	50	2000	152	1.23	645	0	380	0.00
6	230	50	2000	109	0.89	515	162	300	0.65
7	230	50	2000	81	0.67	395	266	230	1.07
8	230	50	2000	45	0.39	240	299	140	1.20
9	230	50	1600	78	0.63	515	0	305	0.00
10	230	50	1600	56	0.46	410	103	240	0.41
11	230	50	1600	41	0.34	315	170	185	0.68
12	230	50	1600	23	0.20	195	191	115	0.77
13	230	50	1200	33	0.27	390	0	230	0.00
14	230	50	1200	24	0.19	310	58	180	0.23
15	230	50	1200	17	0.14	235	96	140	0.39
16	230	50	1200	10.0	0.08	145	107	85	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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