G3G160-AC50-01

EC centrifugal fan

forward curved, single inlet

with housing (flange)



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Nominal data

Type	**G3G160-AC50-01**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 277
Frequency	Hz	50/60
Type of data definition		ml
Speed	min^{-1}	2150
Power input	W	170
Current draw	A	1.25
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	3.5 kg
Size	160 mm
Surface of rotor	Thick layer passivated
Material of impeller	Sheet steel, galvanised
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 44
Insulation class	"B"
Humidity class	F3-1
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Shaft horizontal or rotor on top; rotor on bottom on request
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Soft start - Motor current limit - Control input 0-10 VDC / PWM - Output 10 VDC, max. 1.1 mA
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3 (household environment)
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1; CE
Approval	CCC; UL 2111; CSA C22.2 Nr.77

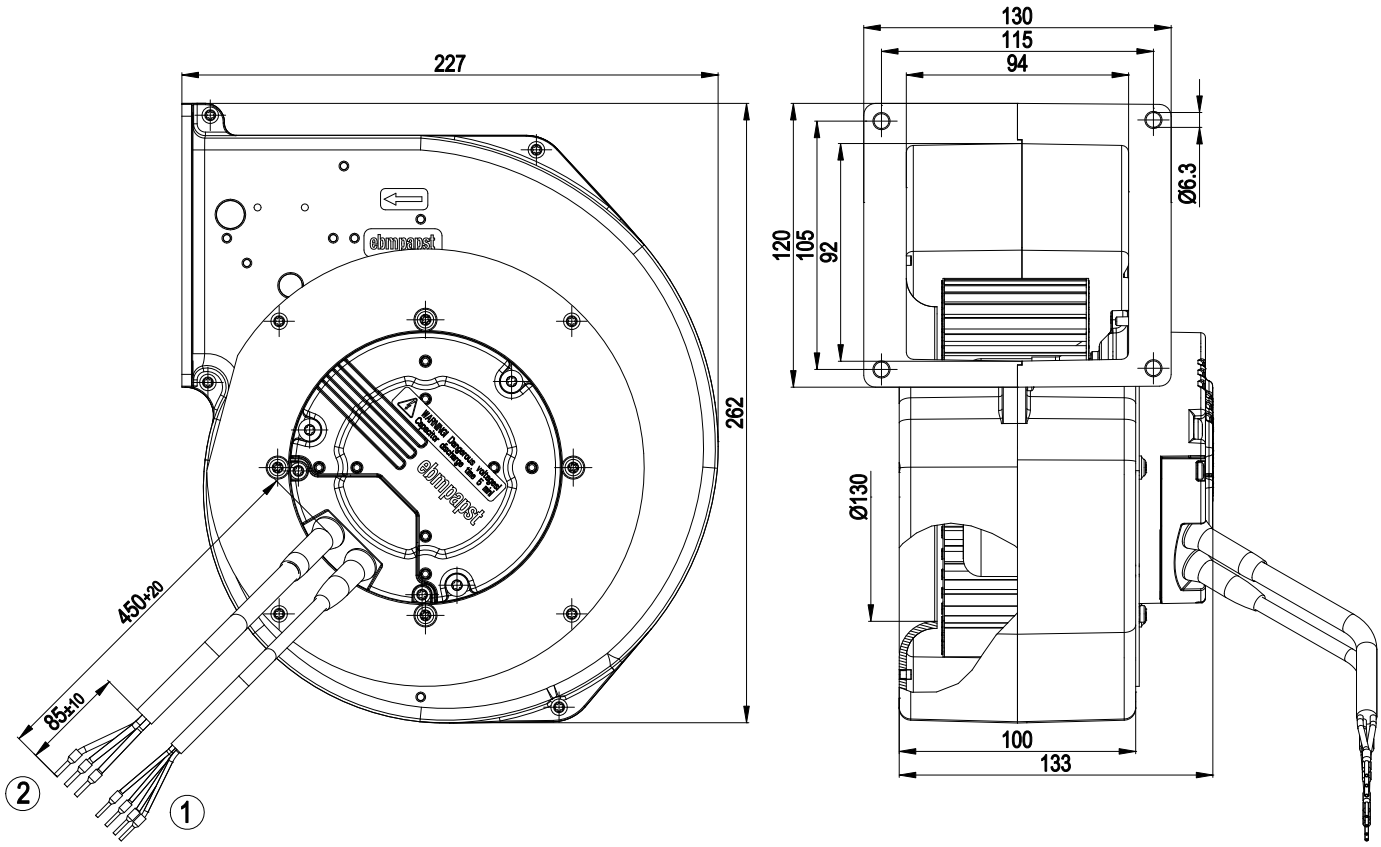
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Product drawing



1	Connection line PVC AWG22, 4x crimped core-end sleeves
2	Connection line PVC AWG18, 3x crimped core-end sleeves

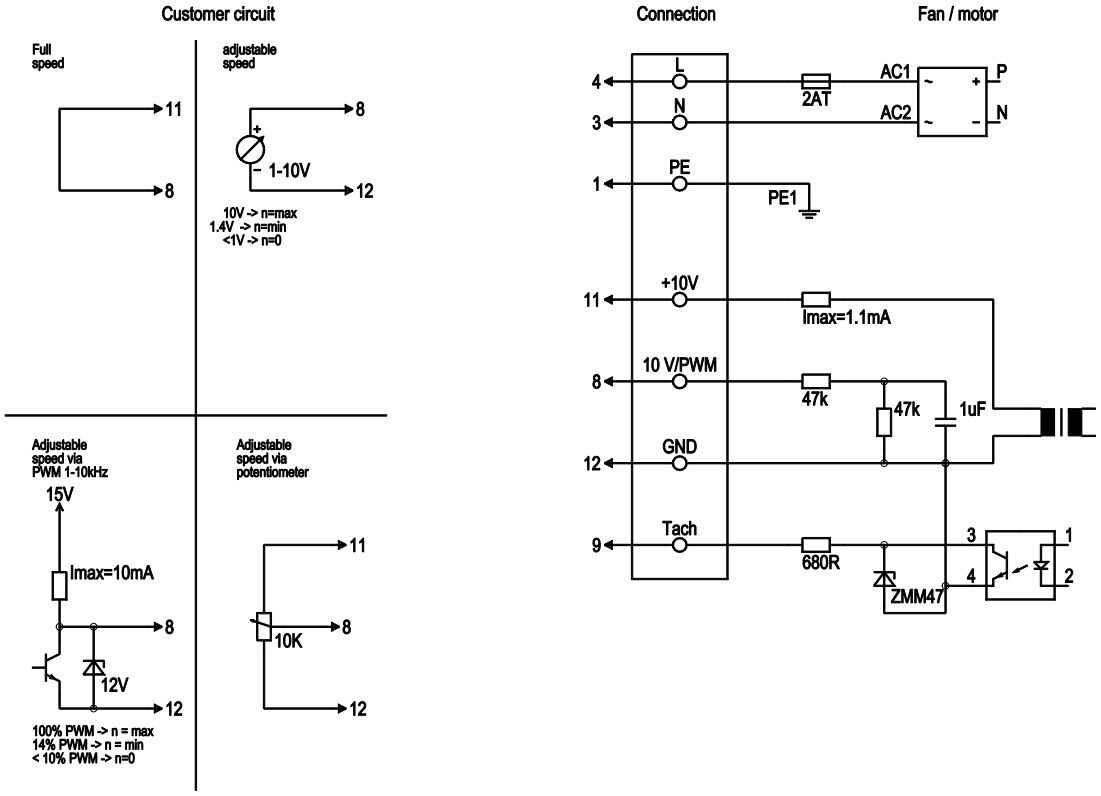
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	4	L	black	Power supply 230 VAC, 50-60 Hz, see type plate 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

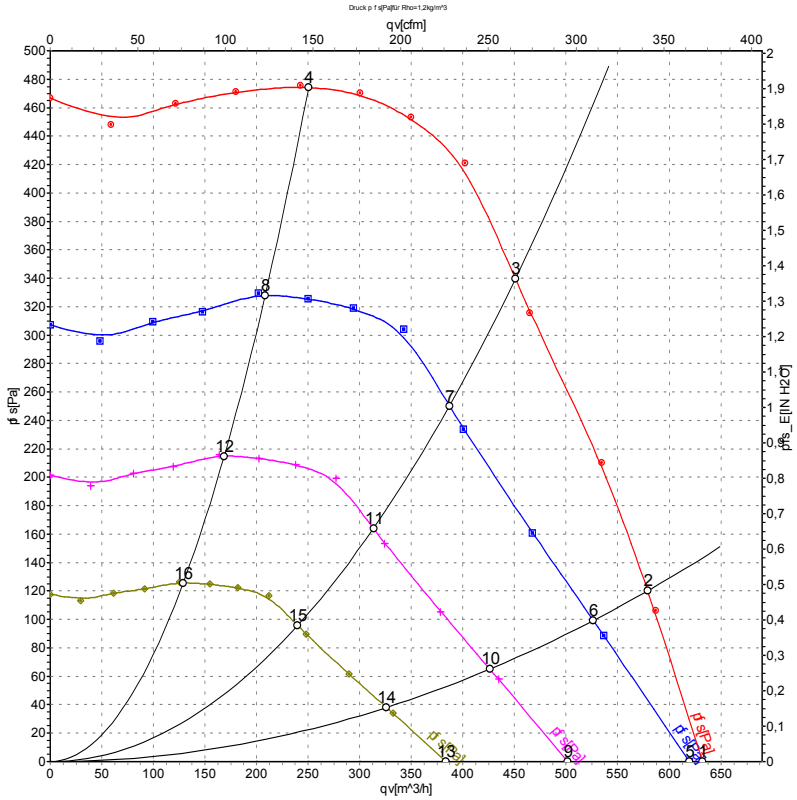
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Charts: Air flow 50 Hz



Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	f	n	P_{ed}	I	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa
1	230	50	2150	170	1.25	630	0
2	230	50	2310	170	1.25	580	120
3	230	50	2445	142	1.07	450	340
4	230	50	2525	97	0.74	250	475
5	230	50	2100	162	1.19	620	0
6	230	50	2100	129	0.96	525	100
7	230	50	2100	90	0.68	385	250
8	230	50	2100	56	0.42	210	329
9	230	50	1700	86	0.63	500	0
10	230	50	1700	69	0.51	425	65
11	230	50	1700	48	0.36	315	164
12	230	50	1700	30	0.23	170	216
13	230	50	1300	38	0.28	385	0
14	230	50	1300	31	0.23	325	38
15	230	50	1300	21	0.16	240	96
16	230	50	1300	13	0.10	130	126

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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