D3G133-BF05-14

EC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D3G133-BF05-14**
Motor	**M3G055-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		fa
Speed	min^{-1}	1270
Power input	W	85
Current draw	A	0.7
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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	3.2 kg
Size	133 mm
Surface of rotor	Thick layer passivated
Material of electronics housing	Die-cast aluminium
Material of impeller	Sheet steel, galvanised
Housing material	Sheet steel, galvanised
Motor suspension	Motor mounted via brackets on one side
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 54
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	Any
Condensate discharge holes	Rotor-side
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Output limit - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Over-temperature protected electronics / motor - Line undervoltage detection
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
Motor protection	Locked-rotor protection
Cable exit	Lateral
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60335-1

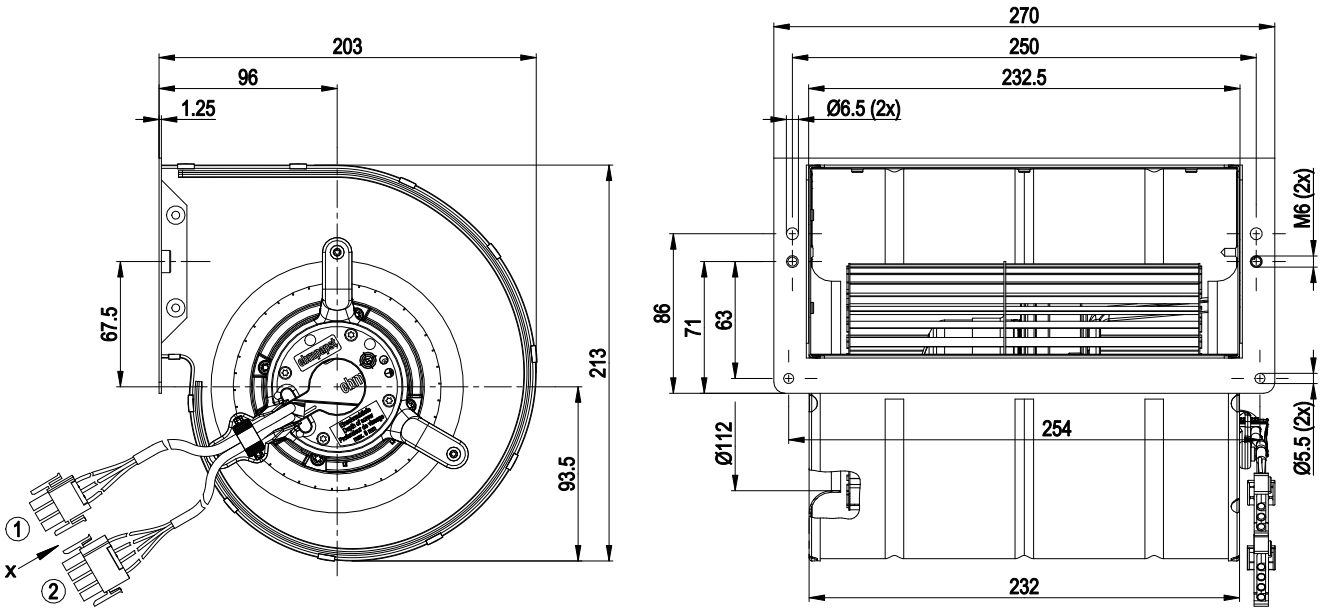
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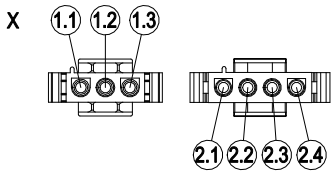
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Product drawing





1	Connection line PVC 3G 0.5 mm²; connector housing 3-pole tyco 1-480700-0, 3x plug pin tyco 926885-3 crimped
1.1	L (brown)
1.2	N (blue)
1.3	PE (green/yellow)
2	Connection line PVC 4x 0.25 mm², connector housing 4-pole tyco 1-480702-0, 4x plug pin tyco 926885-3 crimped
2.1	+10 V (red)
2.2	0-10 V PWM (yellow)
2.3	GND (blue)
2.4	Tach (white)

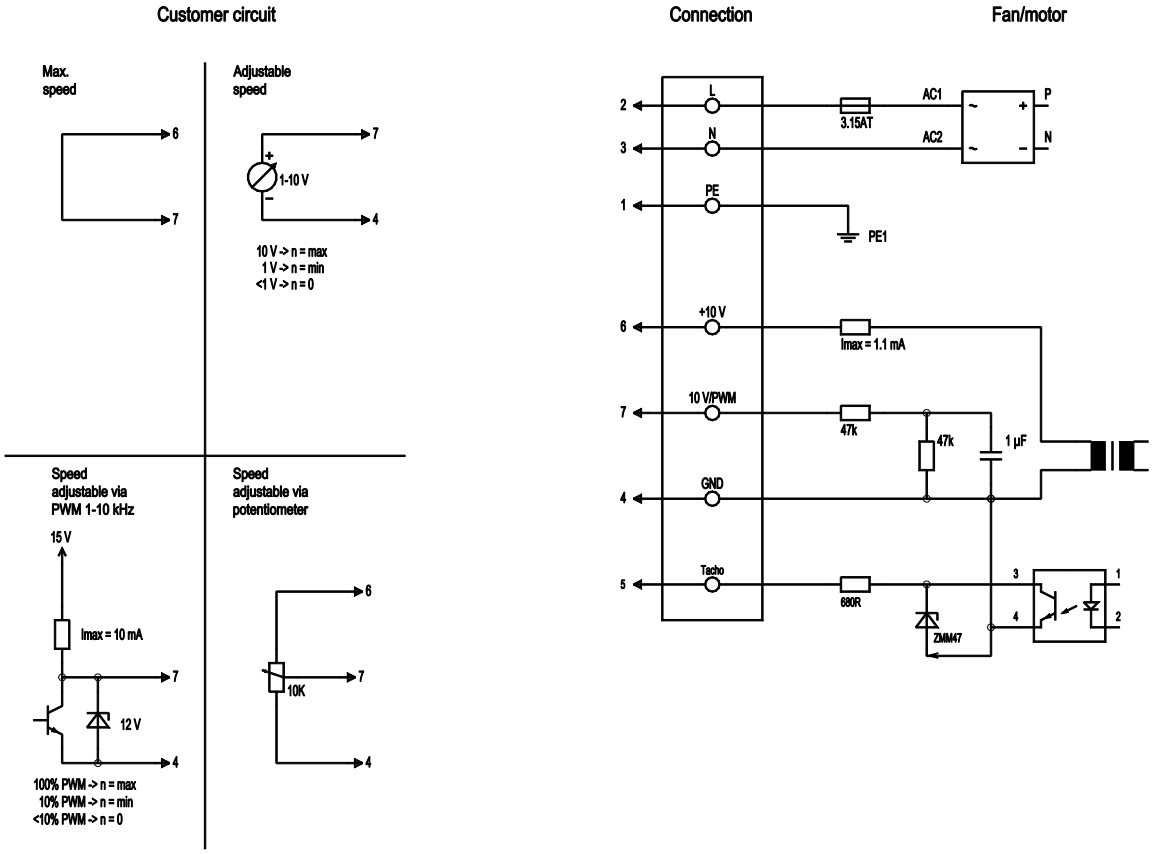
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
	2	L		Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
	3	N		Neutral conductor
	1	PE		Protective earth
	7	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	5	Tacho	white	Tach output: Open collector, 1 pulse per revolution, electrically isolated, Isink_max=10 mA
	6	10 V / max. 1,1 mA	red	Voltage output 10 V, 1.1 mA, electrically isolated
	4	GND	blue	GND connection for control interface

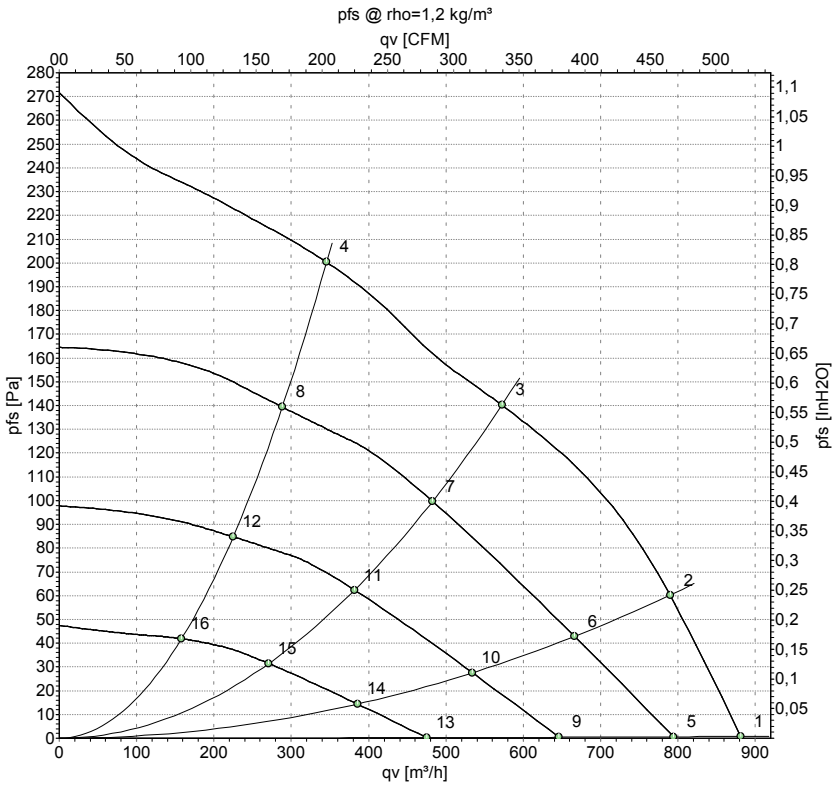
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Charts: Air flow 50 Hz



Measurement: LU-155842
Measurement: LU-156192
Measurement: LU-156194
Measurement: LU-156196

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	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	230	50	1270	85	0.70	52	65	880	0
2	230	50	1455	85	0.70	52	64	790	60
3	230	50	1720	69	0.67	50	62	570	140
4	230	50	1960	51	0.51	51	62	345	200
5	230	50	1145	66	0.64	51	63	795	0
6	230	50	1280	55	0.55	49	61	665	43
7	230	50	1475	40	0.42	46	57	485	105
8	230	50	1650	29	0.32	46	57	290	139
9	230	50	930	34	0.37	46	58	645	0
10	230	50	1035	28	0.31	43	55	535	28
11	230	50	1175	21	0.23	39	50	380	66
12	230	50	1295	16	0.20	40	51	225	85
13	230	50	685	14	0.16	38	50	475	0
14	230	50	750	12	0.14	35	47	385	15
15	230	50	840	9.0	0.11	31	42	270	33
16	230	50	895	7.0	0.10	31	42	160	42

U = Supply voltage · f = Frequency · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow
p_{fs} = Pressure increase

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