D3G133-LT13-01

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Nominal data

Type	**D3G133-LT13-01**
Motor	**M3G055-BI**

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}	1270
Power consumption	W	47
Current draw	A	0.45
Min. back pressure	Pa	0
Min. back pressure	inH2O	0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

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	1.9 kg
Fan size	133 mm
Rotor surface	Thick-film passivated
Impeller material	PA plastic
Housing material	PP plastic
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, 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	- 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 - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC circuit feedback	According to EN 61000-3-2/3
EMC interference emission	According to EN 61000-6-3 (household environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) internally connected
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE
Approval	CCC

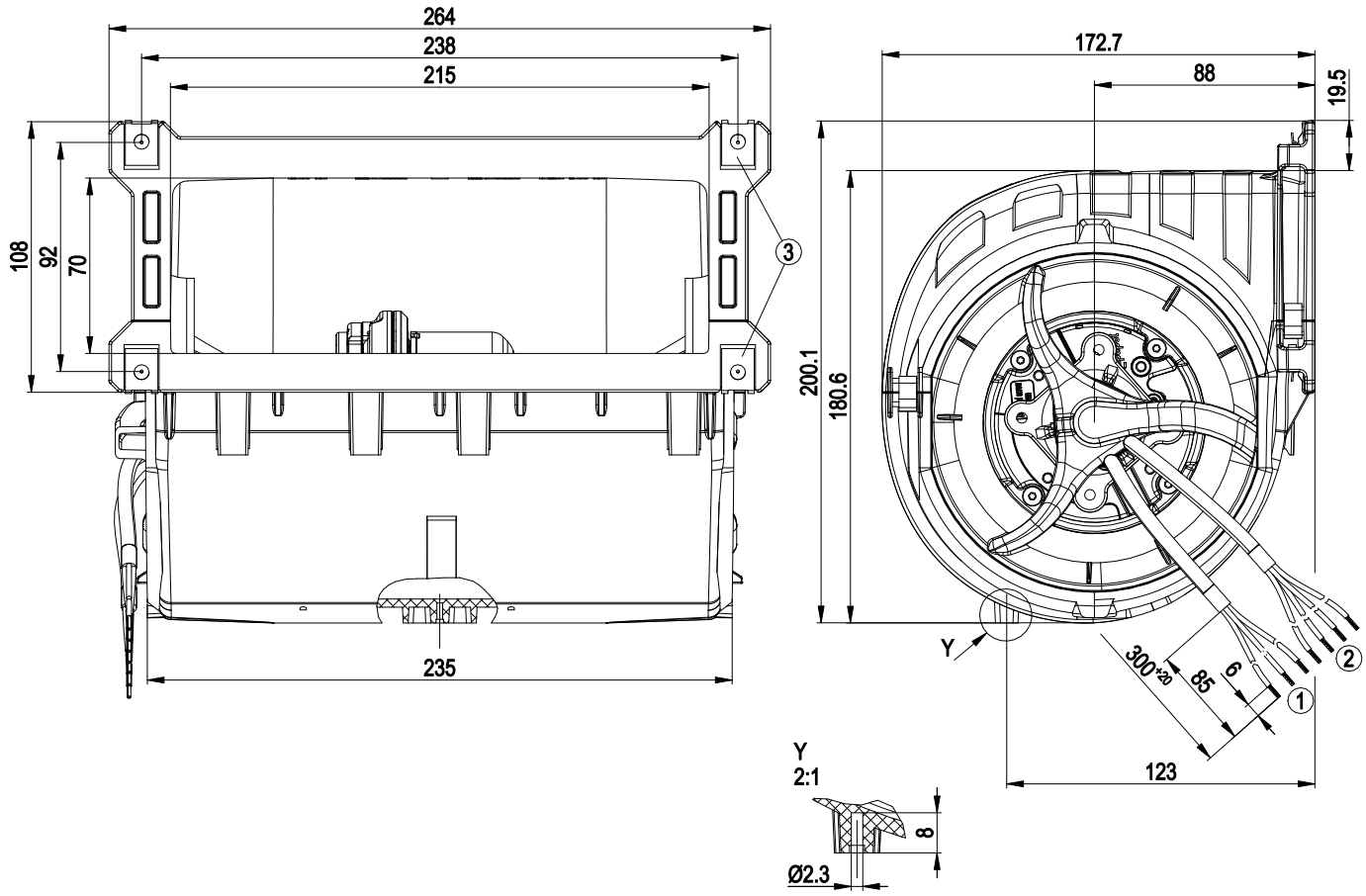
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Product drawing



1	Cable PVC AWG20, 3x crimped splices
2	Cable PVC AWG22, 4x crimped splices
3	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus material thickness of mounting)

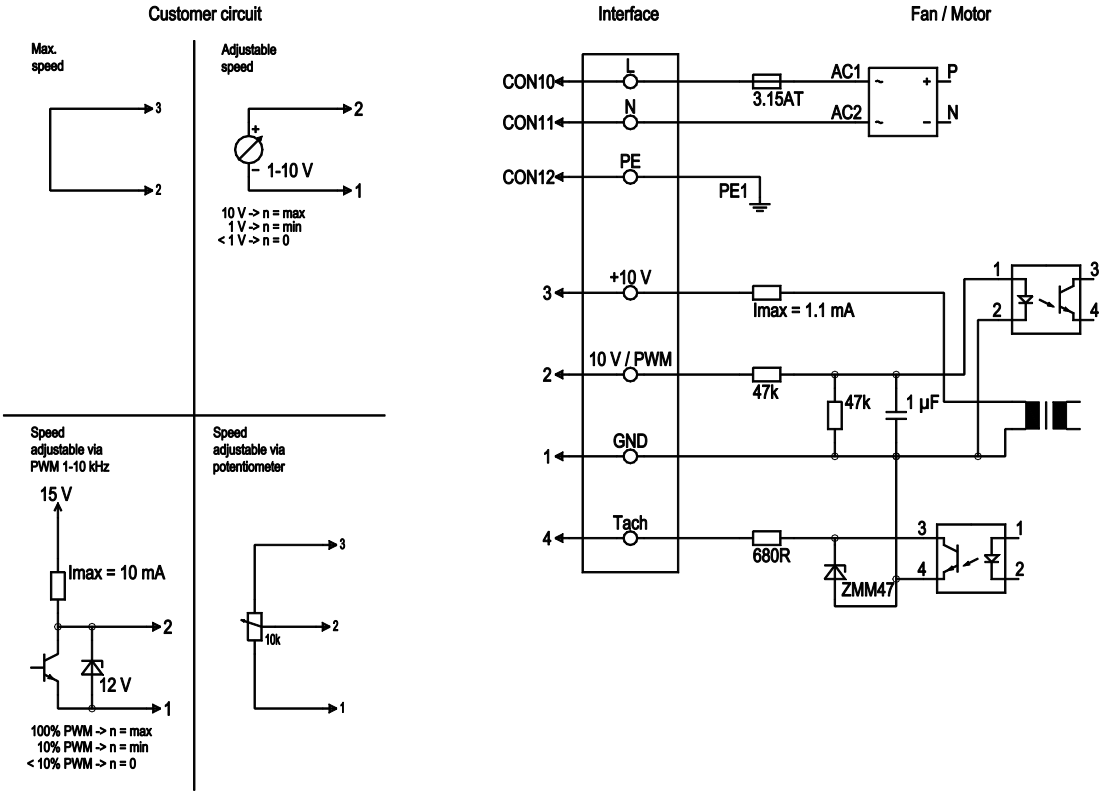
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range
	CON11	N	blue	Neutral conductor
	CON12	PE	green/yellow	Protective earth
	1	GND	blue	GND connection for control interface
	2	0-10V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
	3	10 V / max. 1,1 mA	red	Voltage output 10 VDC 1.1 mA, electrically isolated, short-circuit-proof
	4	Tacho	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

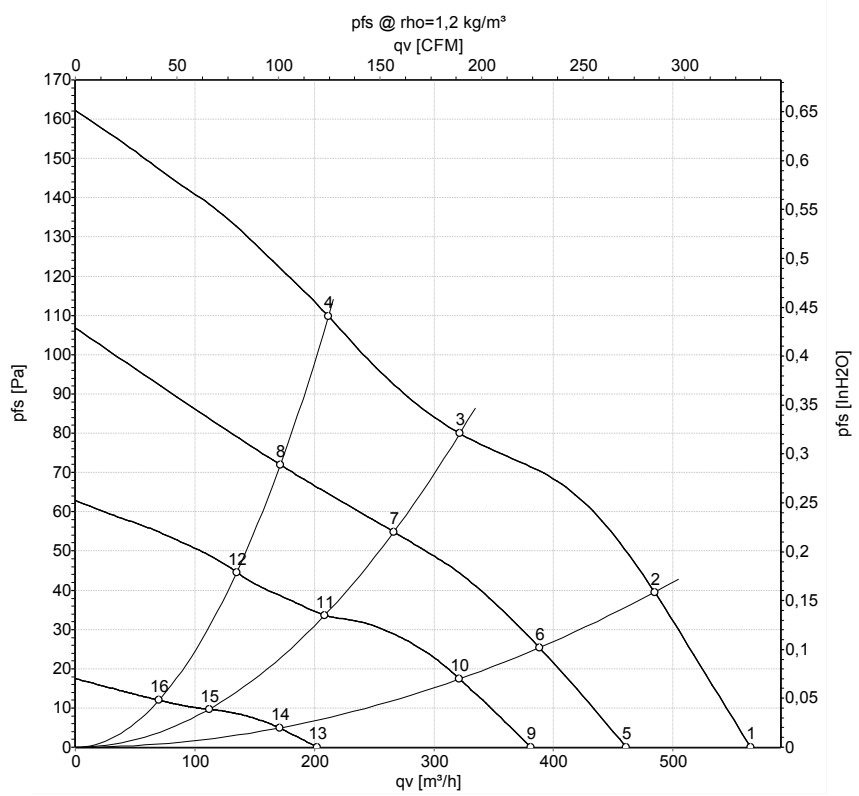
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Curves: Air performance 50 Hz



Measurement: LU-164609-1
Measurement: LU-137453-1
Measurement: LU-134179-1
Measurement: LU-134181-1

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	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	230	50	1270	47	0.45	565	0	335	0.00
2	230	50	1360	42	0.41	485	40	285	0.16
3	230	50	1530	31	0.32	320	80	190	0.32
4	230	50	1660	25	0.26	210	110	125	0.44
5	230	50	1040	25	0.25	460	0	270	0.00
6	230	50	1105	22	0.25	390	27	230	0.11
7	230	50	1210	18	0.21	265	55	155	0.22
8	230	50	1330	14	0.17	170	72	100	0.29
9	230	50	885	16	0.20	380	0	225	0.00
10	230	50	930	14	0.17	320	17	190	0.07
11	230	50	1015	11	0.14	210	33	125	0.13
12	230	50	1075	10.0	0.13	135	45	80	0.18
13	230	50	490	5.0	0.07	200	0	120	0.00
14	230	50	515	4.0	0.07	170	5	100	0.02
15	230	50	550	4.0	0.06	110	10	65	0.04
16	230	50	575	4.0	0.06	70	12	40	0.05

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

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