D3G133-LV13-36

EC centrifugal fan

forward curved, dual inlet

with housing (flange)

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Nominal data

Type	**D3G133-LV13-36**
Motor	**M3G055-DF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Type of data definition		fa
Speed (rpm)	min^{-1}	2100
Power input	W	170
Current draw	A	1.4
Min. back pressure	Pa	0
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	2.7 kg
Size	133 mm
Material of electronics housing	PP plastic
Material of impeller	Sheet steel, galvanised
Housing material	PP plastic
Motor suspension	Motor mounted vibration-free on both sides
Direction of rotation	Counter-clockwise, seen on rotor
Type of protection	Motor IP34, electronics IP20
Insulation class	"F"
Max. permissible ambient motor temp. (transp./ storage)	+ 80 °C
Min. permissible ambient motor temp. (transp./storage)	- 40 °C
Mounting position	Any
Cooling bore / aperture	On rotor and stator sides
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 1.1 mA - Fault output (open collector) - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Over-temperature protected motor
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Electrical leads	With plug
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

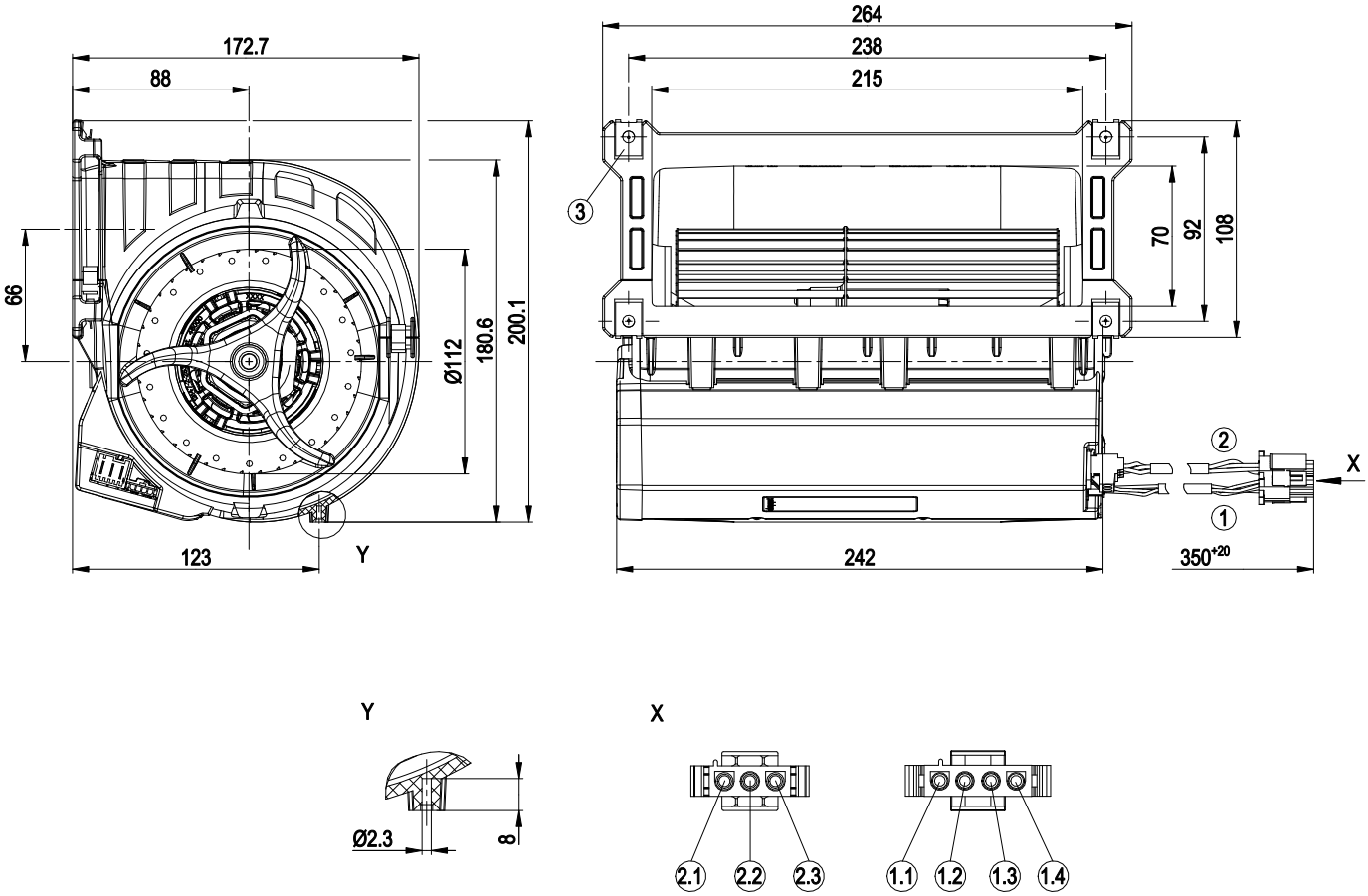
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Product drawing



1	Connection line PVC AWG22, connector housing 4-pole Tyco 350779-4, 4x plug pin Tyco 926885-1
1.1	+10 V (red)
1.2	GND (blue)
1.3	0-10 V PWM (yellow)
1.4	Fan good / fan bad (white)
2	Connection line PVC AWG18, tyco 3-pin connector housing 350766-4, 3x tyco plug pin 926883-1
2.1	PE (green/yellow)
2.2	N (blue)
2.3	L (black)
3	4x sheet metal nut for thread EN ISO 1478-ST4.8 (min. screw length 14.5 mm plus thickness of mounting material)

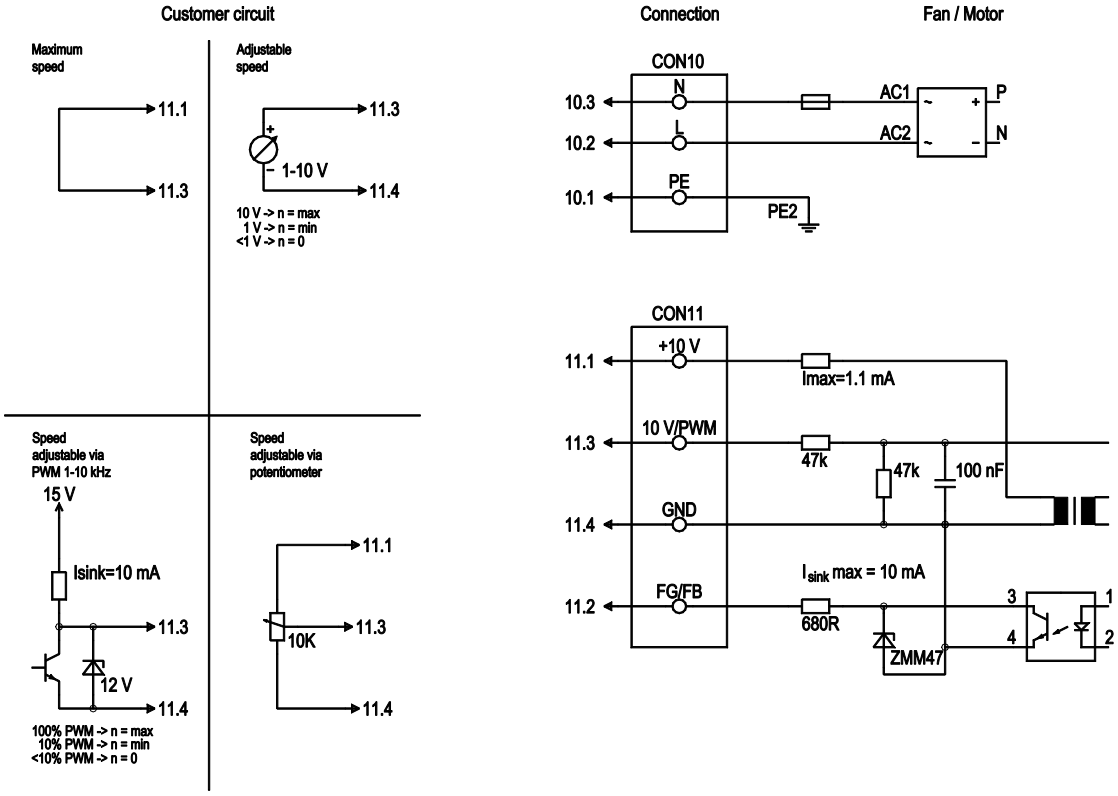
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Connection screen



No.	Conn.	Designation	Colour	Function / assignment
CON10	10.1	PE	green/yellow	Protective earth
CON10	10.2	L	black	Power supply 230 VAC, 50-60 Hz, see type plate for voltage range
CON10	10.3	N	blue	Neutral conductor
CON11	11.1	10 V/max. 1.1 mA	red	Voltage output 10 V, 1.1 mA, electrically isolated, not short-circuit-proof
CON11	11.2	FG/FB	white	Fan good / fan bad: Open collector, fan good = high, electrically isolated, Isink max=10 mA
CON11	11.3	0-10 V PWM	yellow	Control input 0-10 V or PWM, electrically isolated
CON11	11.4	GND	blue	GND connection for control interface

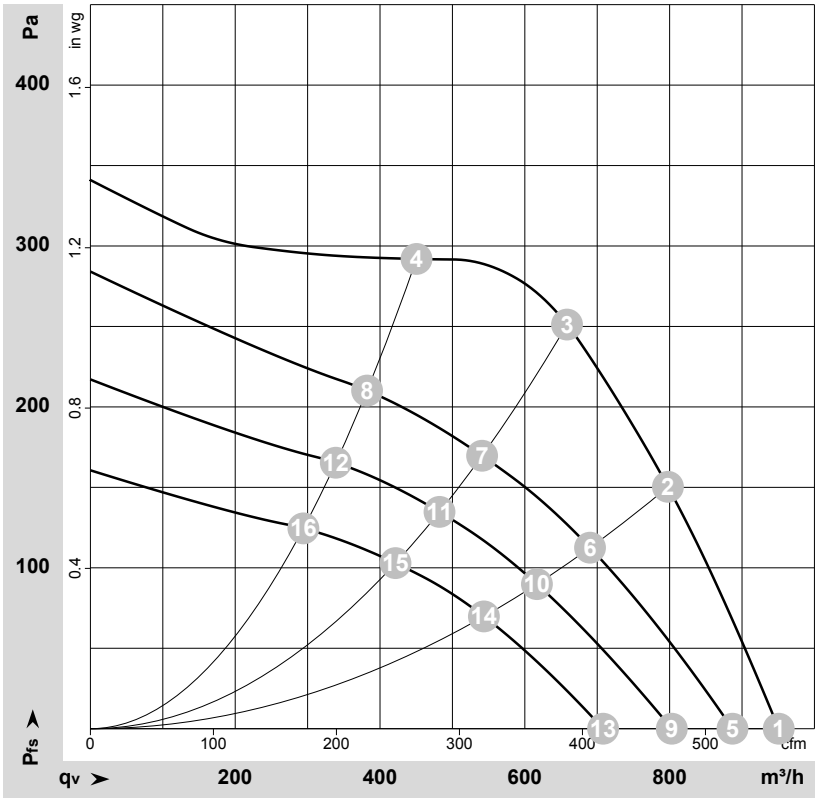
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Charts: Air flow 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-171398-1
Measurement: LU-172009-1
Measurement: LU-172011-1
Measurement: LU-172013-1

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}	q_V	p_{fs}	q_V	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	cfm	inH2O
1	230	50	2100	170	1.40	66	76	950	0	560	0.00
2	230	50	2325	170	1.40	64	75	800	150	470	0.60
3	230	50	2615	166	1.32	64	74	660	250	385	1.00
4	230	50	2715	116	0.95	62	72	450	290	265	1.16
5	230	50	1870	139	1.20	64	74	885	0	520	0.00
6	230	50	2045	112	0.98	61	72	690	120	405	0.48
7	230	50	2170	89	0.78	58	69	540	170	320	0.68
8	230	50	2290	68	0.60	57	67	380	211	225	0.85
9	230	50	1695	104	0.93	62	73	805	0	475	0.00
10	230	50	1825	81	0.72	59	69	615	96	365	0.39
11	230	50	1940	63	0.56	56	66	480	135	285	0.54
12	230	50	2045	47	0.43	54	64	340	166	200	0.67
13	230	50	1495	70	0.64	60	69	710	0	415	0.00
14	230	50	1615	54	0.49	58	67	545	75	320	0.30
15	230	50	1700	41	0.38	54	63	420	103	250	0.41
16	230	50	1775	32	0.29	51	61	295	125	175	0.50

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

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