D3G160-DR17-14

EC centrifugal fan

forward-curved, dual-intake

with housing and mounting bracket

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Nominal data

Type	**D3G160-DR17-14**
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}	1300
Power consumption	W	115
Current draw	A	1
Min. back pressure	Pa	100
Min. back pressure	in. wg	0.4
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	50

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	3.8 kg
Fan size	160 mm
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor mounted on brackets for one-sided vibration damping
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
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. 10 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	Electronic motor protection
With cable	Variable
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

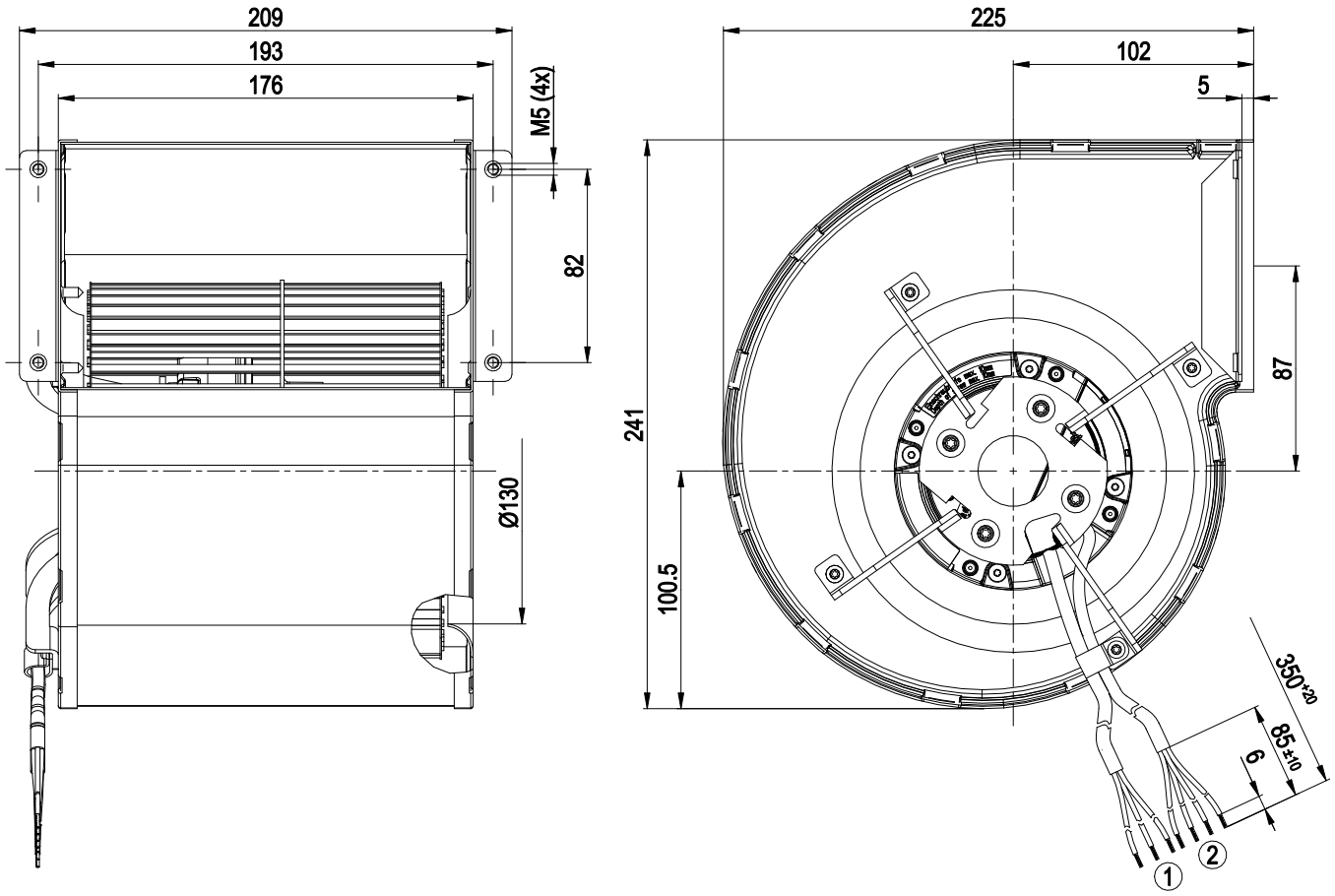
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Product drawing



1	Cable PVC AWG20, 3x crimped splices
2	Cable PVC AWG22, 4x crimped splices

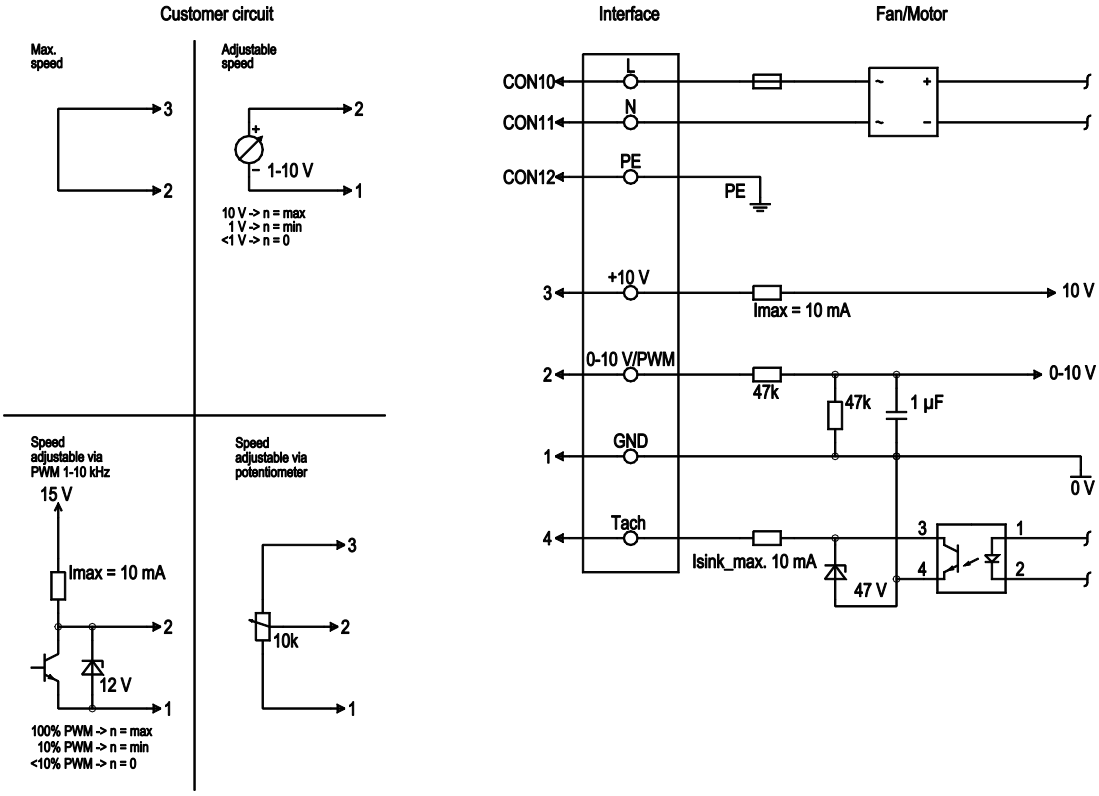
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Connection diagram



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
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV

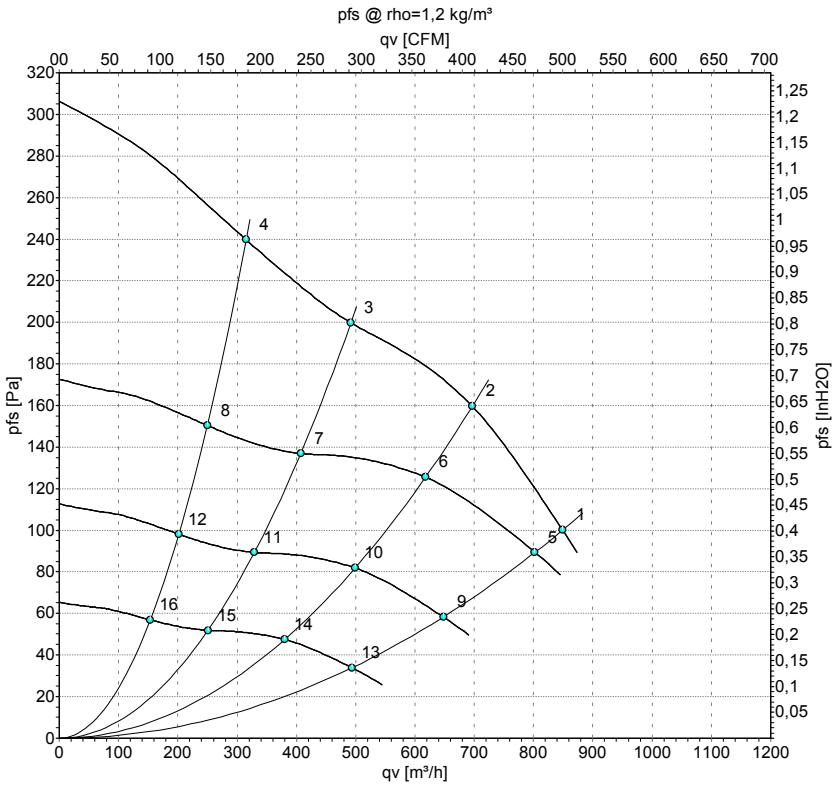
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Curves: Air performance 50 Hz



Measurement: LU-138048-1

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	in. wg
1	230	50	1370	115	1.00	850	100	500	0.40
2	230	50	1465	90	0.78	695	160	410	0.64
3	230	50	1570	71	0.62	490	200	290	0.80
4	230	50	1640	56	0.51	315	240	185	0.96
5	230	50	1300	92	0.77	800	89	470	0.36
6	230	50	1300	63	0.54	620	126	365	0.51
7	230	50	1300	40	0.35	405	137	240	0.55
8	230	50	1300	28	0.25	250	150	145	0.60
9	230	50	1050	48	0.41	650	58	380	0.23
10	230	50	1050	33	0.29	500	82	295	0.33
11	230	50	1050	21	0.19	330	89	195	0.36
12	230	50	1050	15	0.13	200	98	120	0.39
13	230	50	800	21	0.18	495	34	290	0.14
14	230	50	800	15	0.13	380	48	225	0.19
15	230	50	800	9.0	0.08	250	52	150	0.21
16	230	50	800	7.0	0.06	155	57	90	0.23

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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