D3G160-BP03-15

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Nominal data

Type	**D3G160-BP03-15**
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}	1170
Power consumption	W	83
Current draw	A	0.7
Min. back pressure	Pa	60
Min. back pressure	inH2O	0.24
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

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	4.3 kg
Fan size	160 mm
Rotor surface	Thick-film passivated
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Motor suspension	Motor vibration-damped on both sides
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP54; installation- and position-dependent
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	Shaft horizontal
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	Locked-rotor protection
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1; CE

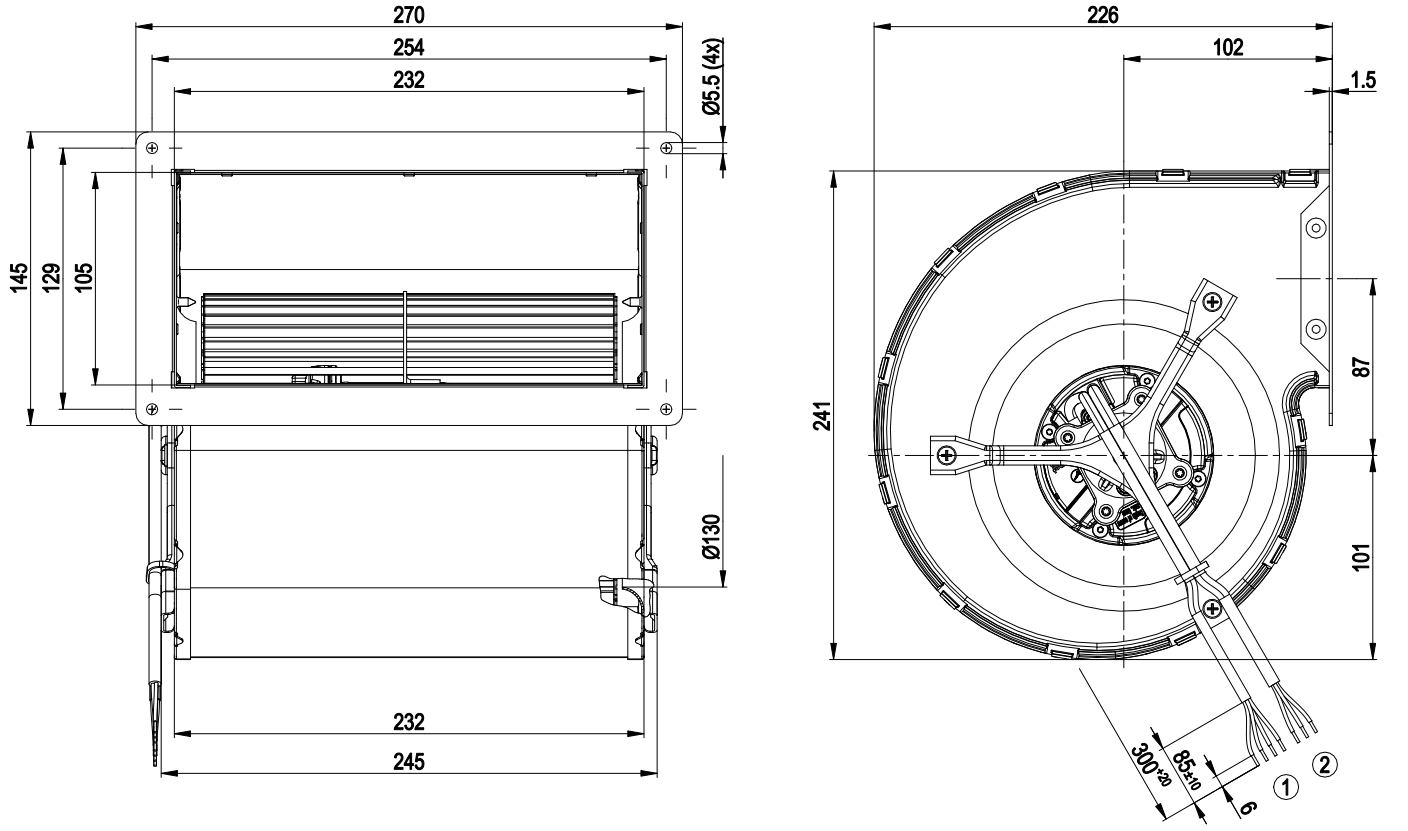
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Product drawing



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

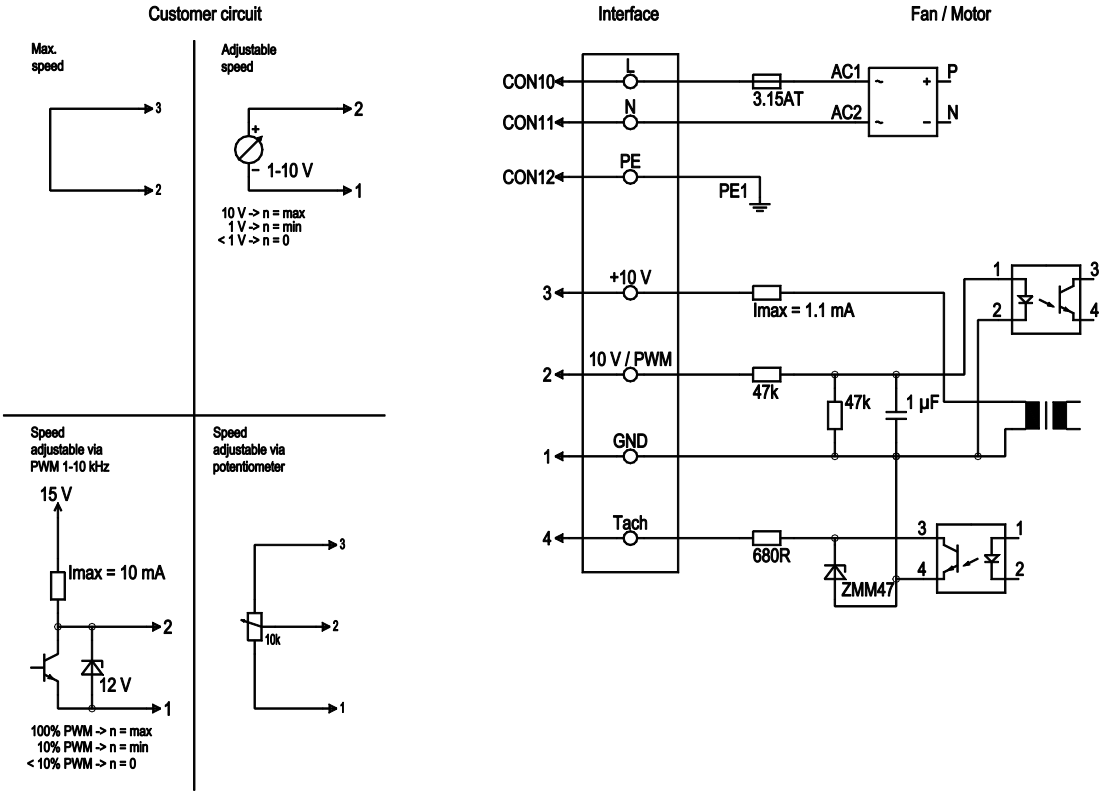
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Connection diagram



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

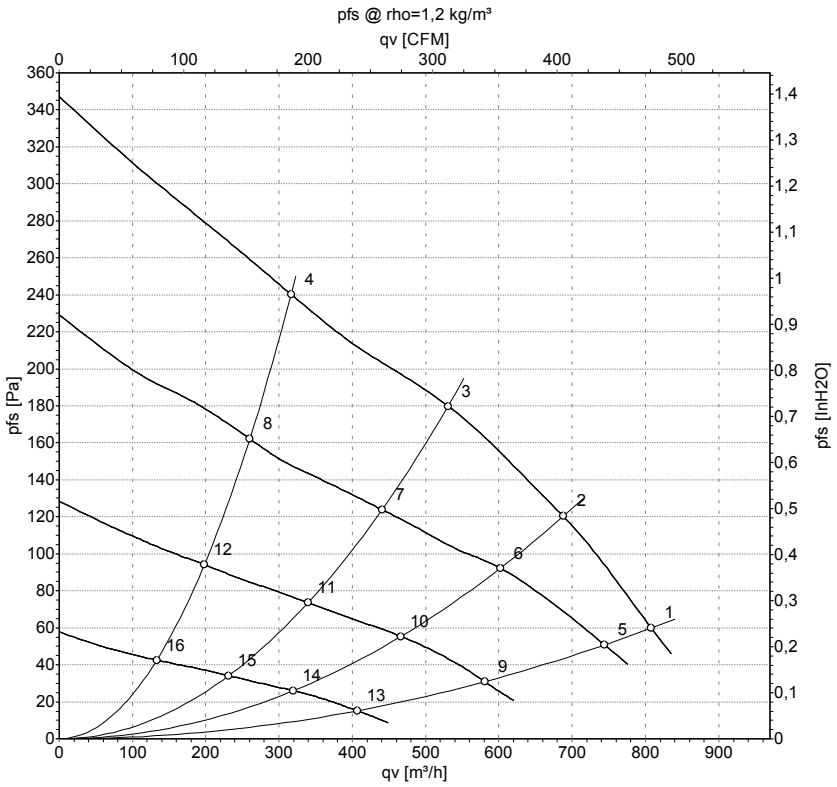
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Curves: Air performance 50 Hz



Measurement: LU-150949-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	Hz	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	230	50	1170	83	0.70	50	62	810	60	475	0.24
2	230	50	1320	83	0.70	51	62	690	120	405	0.48
3	230	50	1495	81	0.69	52	64	530	180	315	0.72
4	230	50	1645	69	0.60	54	66	315	240	185	0.96
5	230	50	1075	66	0.59			745	51	440	0.20
6	230	50	1170	57	0.52			600	93	355	0.37
7	230	50	1265	47	0.44			440	124	260	0.50
8	230	50	1375	39	0.37			260	162	155	0.65
9	230	50	860	33	0.32			580	31	340	0.12
10	230	50	925	28	0.28			465	55	275	0.22
11	230	50	995	23	0.24			340	74	200	0.30
12	230	50	1055	20	0.22			200	94	115	0.38
13	230	50	615	13	0.16			405	15	240	0.06
14	230	50	660	11	0.13			320	26	190	0.10
15	230	50	690	10.0	0.12			230	34	135	0.14
16	230	50	730	8.0	0.11			135	43	80	0.17

U = Power supply · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
qv = Air flow · p_{fs} = Pressure increase

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