D3G180-AC01-10

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)



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Nominal data

Type	**D3G180-AC01-10**
Motor	**M3G074-CF**

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1050
Power consumption	W	170
Current draw	A	1.35
Min. back pressure	Pa	0
Min. back pressure	in. wg	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	6.6 kg
Size	180 mm
Motor size	74
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	Clockwise, 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
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 interference emission	According to EN 61000-6-4 (industrial 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 60950-1; EN 60335-1; EN 61800-5-1; CE

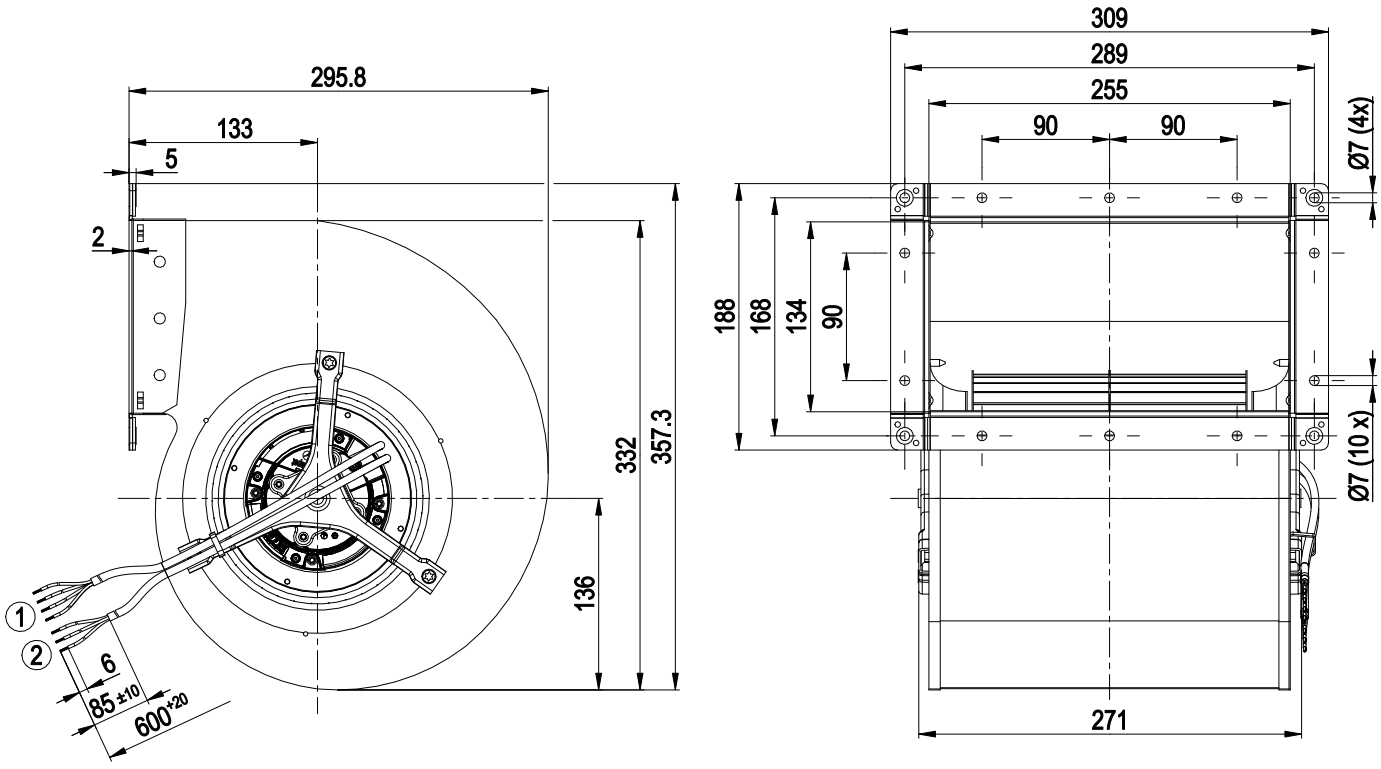
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Product drawing



1	Cable PVC AWG22		4x splice	2	Cable PVC AWG20
	3x splice				

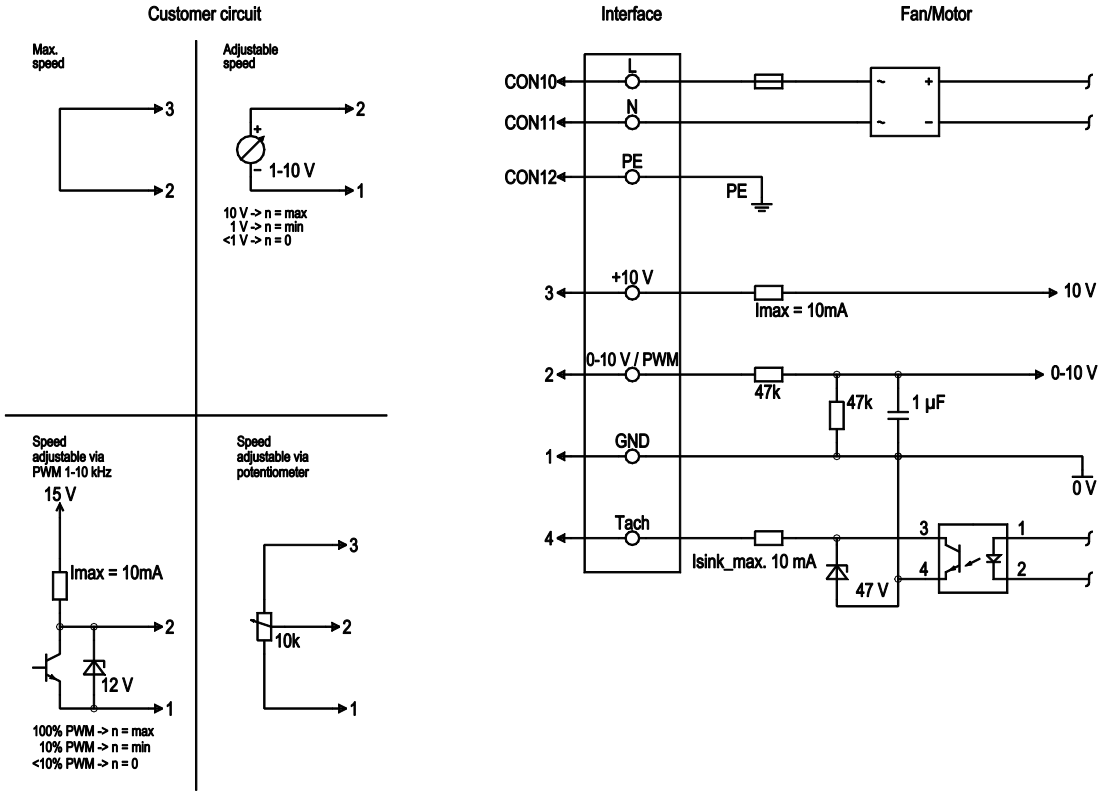
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Connection diagram



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

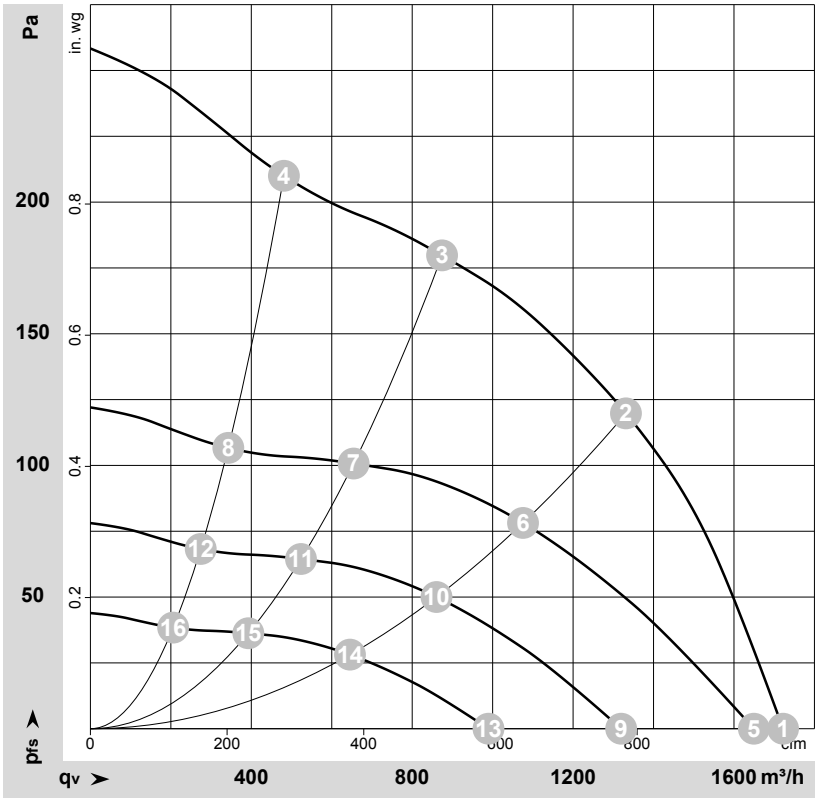
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Curves: Air performance 50 Hz



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-192044-1

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

	Wired	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	1~	230	50	1050	170	1.35	1720	0	1015	0.00
2	1~	230	50	1240	145	1.20	1330	120	785	0.48
3	1~	230	50	1335	103	0.88	875	180	515	0.72
4	1~	230	50	1405	73	0.64	480	210	285	0.84
5	1~	230	50	1000	146	1.18	1650	0	970	0.00
6	1~	230	50	1000	77	0.63	1075	78	635	0.31
7	1~	230	50	1000	43	0.37	655	101	385	0.41
8	1~	230	50	1000	26	0.23	345	107	200	0.43
9	1~	230	50	800	75	0.60	1320	0	775	0.00
10	1~	230	50	800	39	0.32	860	50	505	0.20
11	1~	230	50	800	22	0.19	525	64	310	0.26
12	1~	230	50	800	14	0.12	275	68	160	0.27
13	1~	230	50	600	32	0.25	990	0	585	0.00
14	1~	230	50	600	17	0.14	645	28	380	0.11
15	1~	230	50	600	9.0	0.08	395	36	230	0.14
16	1~	230	50	600	6.0	0.05	205	38	120	0.15

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

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