EC centrifugal fan

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Nominal data

Type	**D1G133-DC13-12**
Motor	**M1G074-CF**

Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Frequency	Hz	-
Method of obtaining data		fa
Speed (rpm)	min^{-1}	1580
Power consumption	W	118
Current draw	A	6.0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

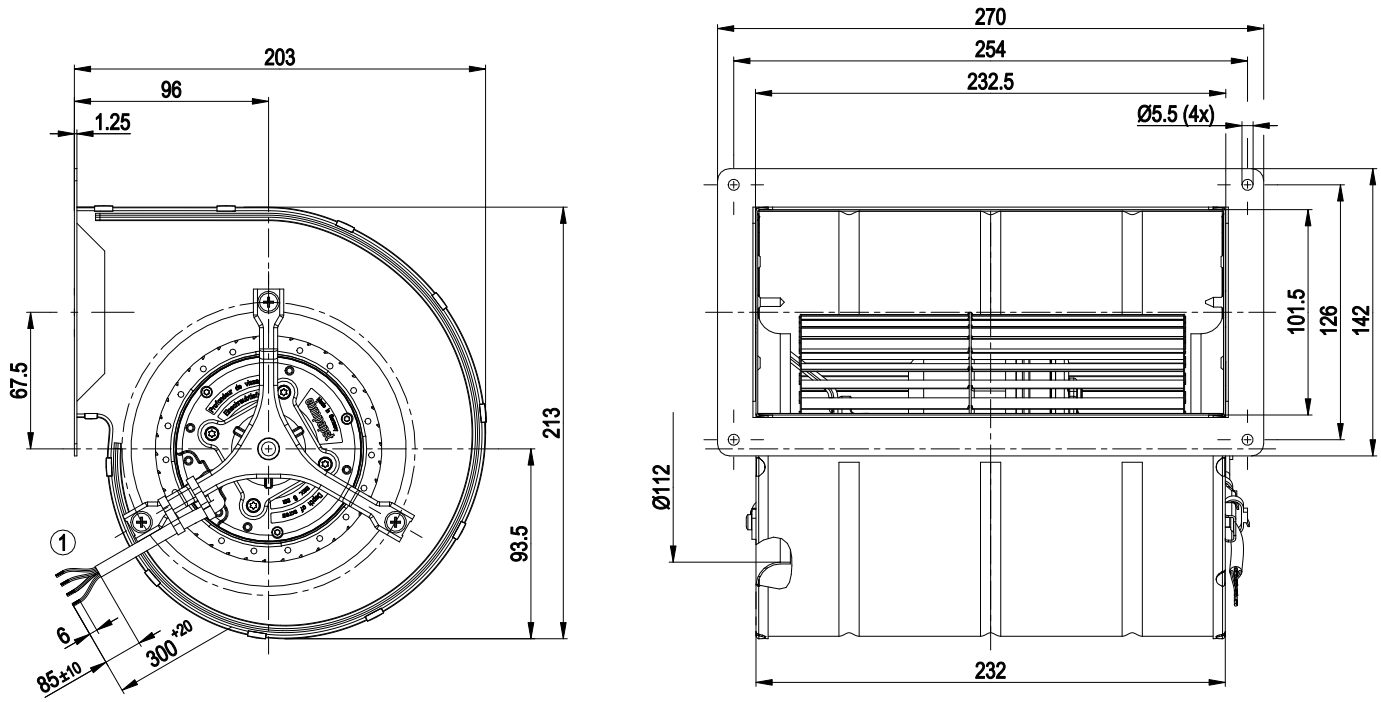
Technical description

Weight	3.8 kg
Fan size	133 mm
Rotor surface	Painted black
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	IP42
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F0
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	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
Motor protection	Reverse polarity and locked-rotor protection
With cable	Variable
Conformity with standards	EN 60950-1
Approval	CSA C22.2 No. 77; UL 1004-1

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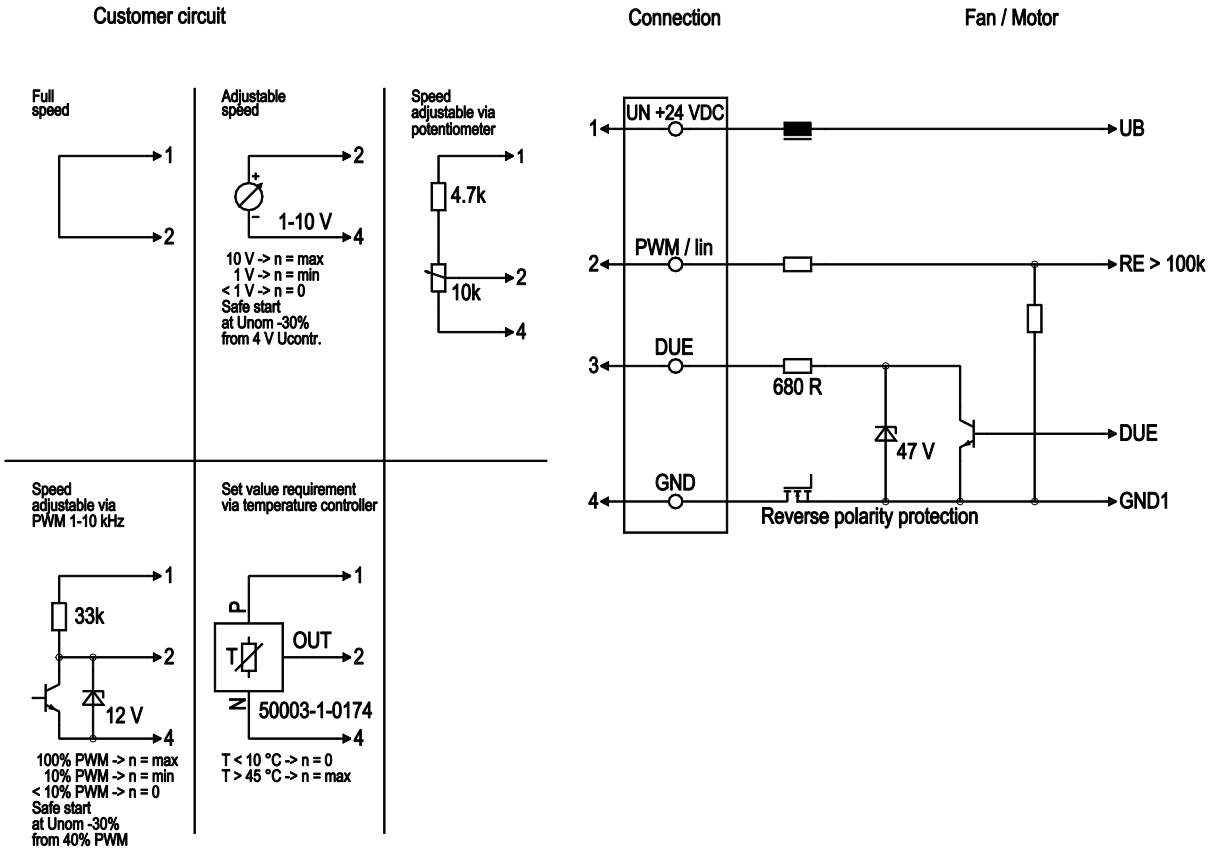
Product drawing



1	Cable PVC AWG20, 4x crimped splices

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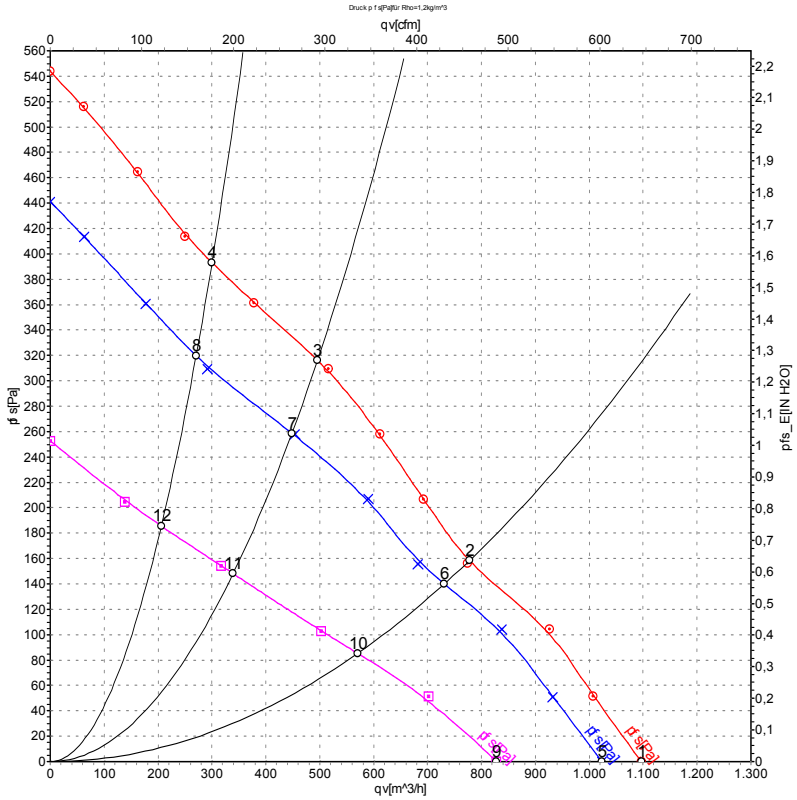
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +24V	red	Power supply 24 VDC, maximum ripple 3.5%
1	2	PWM / lin	yellow	PWM / lin., control input, 0-10 V
1	3	Tach	white	Tach output, 3 pulses per revolution, Isink max = 10 mA
1	4	GND	blue	Reference ground

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Curves: Air performance



Measurement: LU-51355-1
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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	n	P_{ed}	I	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	28	1675	147	6.46	1095	0	645	0.00
2	28	2080	128	5.21	780	155	460	0.62
3	28	2495	111	4.37	495	317	290	1.27
4	28	2715	95	3.73	300	393	175	1.58
5	24	1580	118	6.00	1020	0	600	0.00
6	24	1930	105	4.91	730	140	430	0.56
7	24	2265	83	3.84	450	260	265	1.04
8	24	2455	70	3.28	270	320	160	1.28
9	16	1290	66	4.59	830	0	485	0.00
10	16	1510	52	3.58	570	85	335	0.34
11	16	1730	39	2.84	340	148	200	0.59
12	16	1870	34	2.65	205	185	120	0.74

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

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