D1G097-EF63-11

EC centrifugal fan

forward-curved, dual-intake

with housing (flange)

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Nominal data

Type	**D1G097-EF63-11**
Motor	**M1G055-BD**

Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2170
Power consumption	W	50
Current draw	A	2.6
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

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Technical description

Weight	1.7 kg
Size	97 mm
Motor size	55
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Sheet steel, galvanized
Guard grille material	Steel, coated with white-aluminum plastic (RAL 9006)
Motor suspension	Motor vibration-damped on one side
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP20
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0 - dry environment
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft vertical, rotor on bottom; rotor on top
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 - Reverse polarity protection
Protection class assignment	III; Requires supply with safety extra-low voltage SELV. This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection. If there is a PE connection point on the housing, it must not be visible after installation.
Conformity with standards	EN 62368-1

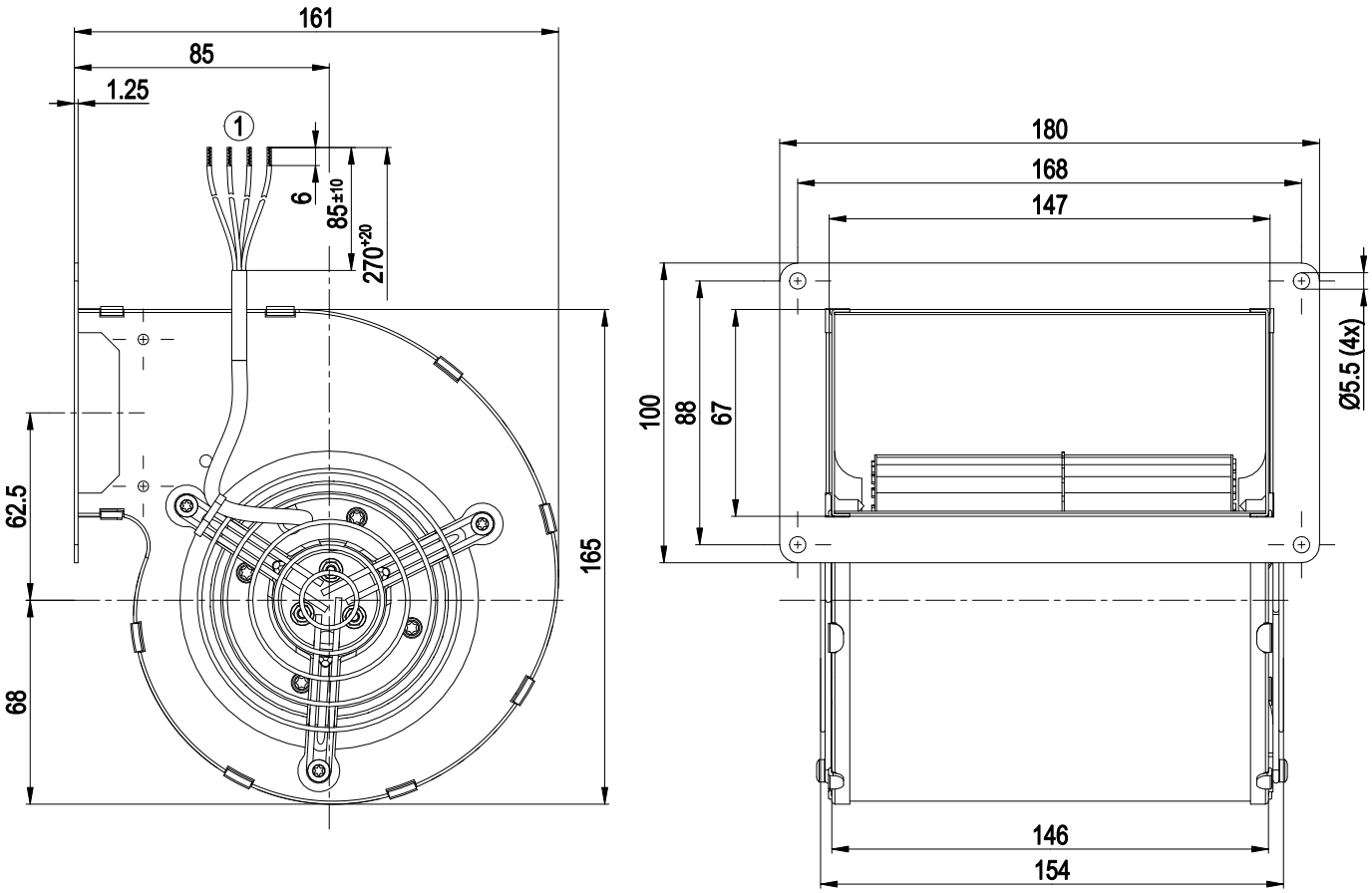
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Product drawing



1	Cable AWG20, 4x crimped splices

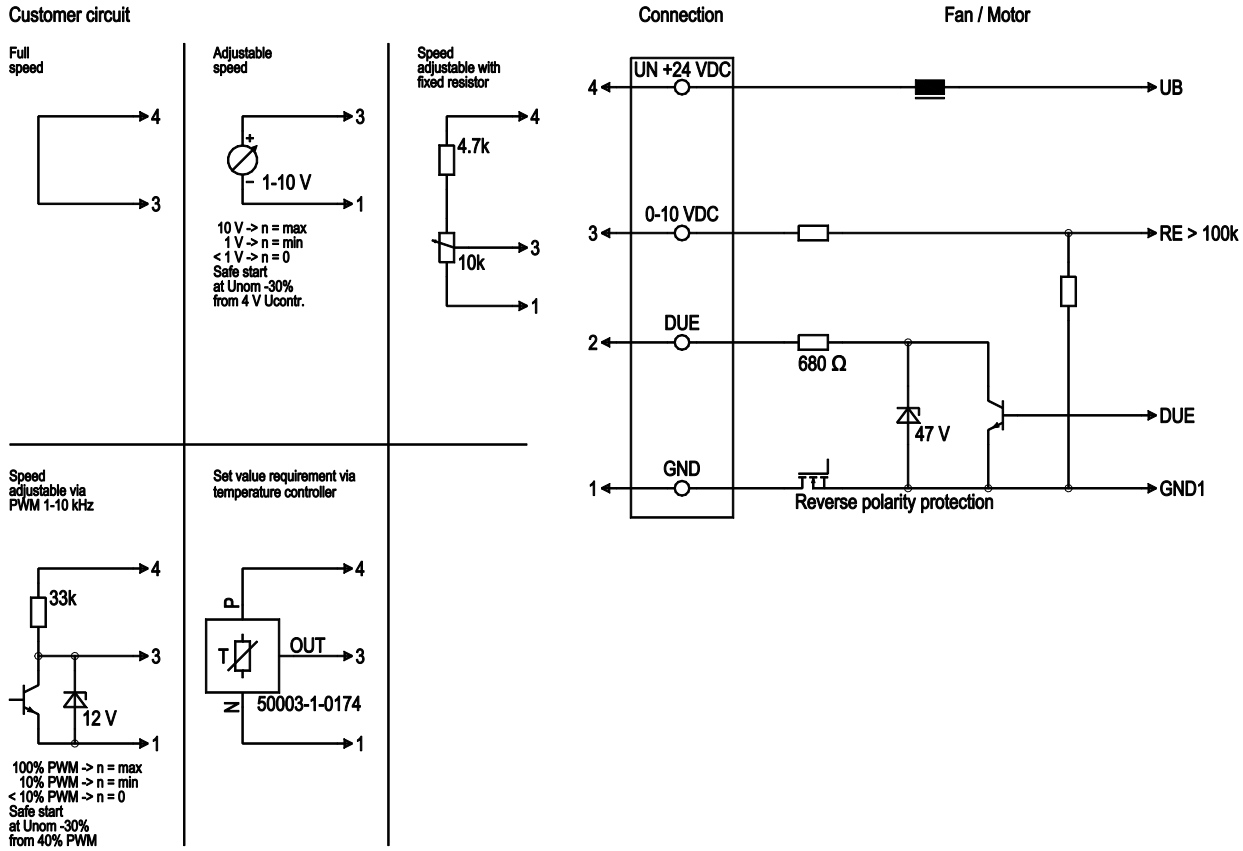
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	GND	blue	Reference ground
1	2	Tach	white	Tach output, 2 pulses per revolution, Isink max = 10 mA
1	3	0-10 VDC	yellow	Control input Re > 100k
1	4	Un +24 VDC	red	Power supply 24 VDC, maximum ripple 3.5%

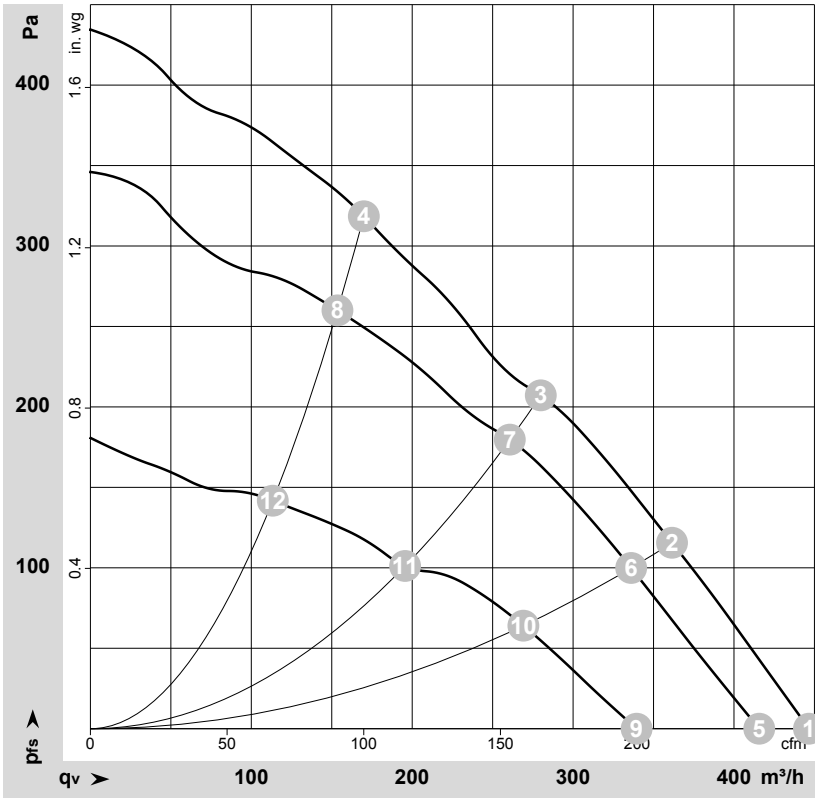
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Curves: Air performance



ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-161768-1
Measurement: LU-161765-1
Measurement: LU-161414-1

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	n	P_{ed}	I	q_V	p_{fs}	q_V	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	cfm	in. wg
1	28	2350	66	3.05	445	0	265	0.00
2	28	2645	58	2.54	360	116	210	0.47
3	28	2975	51	2.15	280	208	165	0.84
4	28	3530	44	1.75	170	319	100	1.28
5	24	2170	50	2.60	415	0	245	0.00
6	24	2460	45	2.22	335	100	200	0.40
7	24	2775	41	1.92	260	180	155	0.72
8	24	3200	33	1.52	155	260	90	1.04
9	16	1805	27	1.91	340	0	200	0.00
10	16	1985	23	1.61	270	64	160	0.26
11	16	2160	19	1.33	195	99	115	0.40
12	16	2385	15	1.03	115	142	65	0.57

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

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