G1G146-BA07-06

EC centrifugal fan

forward-curved, single-intake

with housing (flange)



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Nominal data

Type	**G1G146-BA07-06**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2200
Power consumption	W	100
Current draw	A	5.0
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

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Technical description

Weight	2.8 kg
Fan size	146 mm
Rotor surface	Painted black
Impeller material	Sheet steel, galvanized
Housing material	Die-cast aluminum
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F5
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing made of stainless steel
Technical features	- Tach output - Motor current limitation - Soft start - Control input 0-10 VDC / PWM
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 55022 (Class B)
Motor protection	Reverse polarity and locked-rotor protection
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60950-1
Approval	EAC; UL 1004-1; CSA C22.2 No. 77

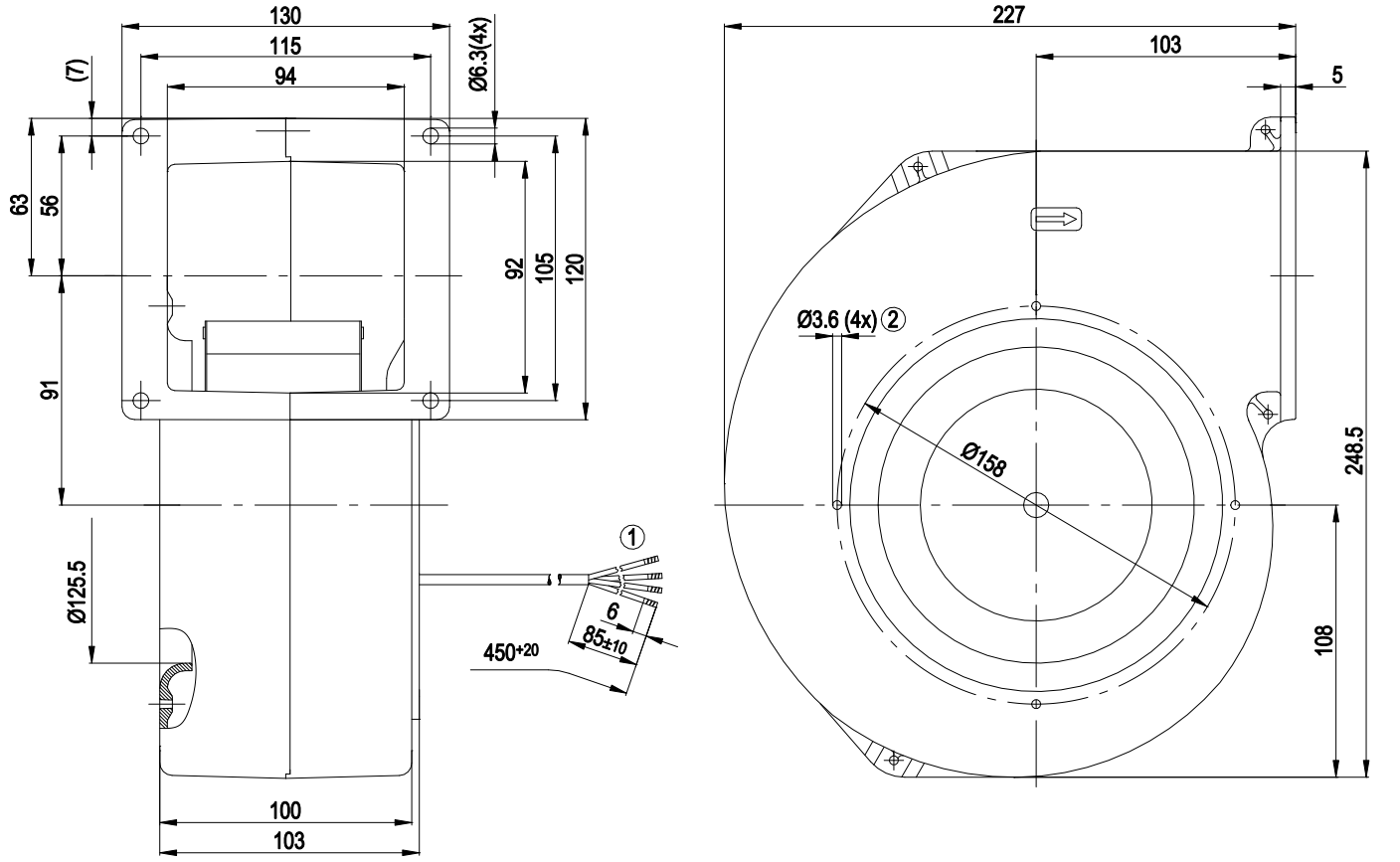
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Product drawing



1	Cable PVC AWG20, 4x crimped splices
2	Tapping hole ready for self-tapping M4 screw

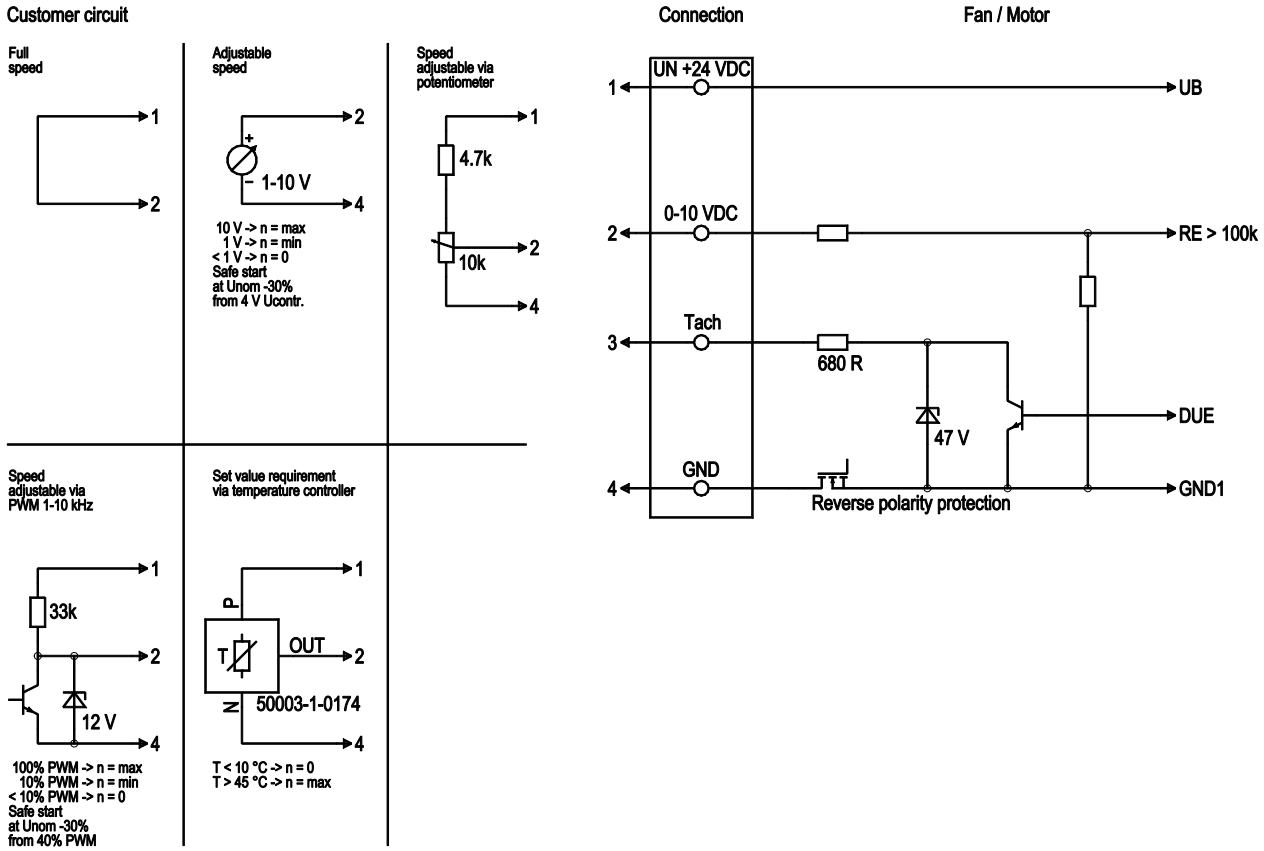
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Connection diagram



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

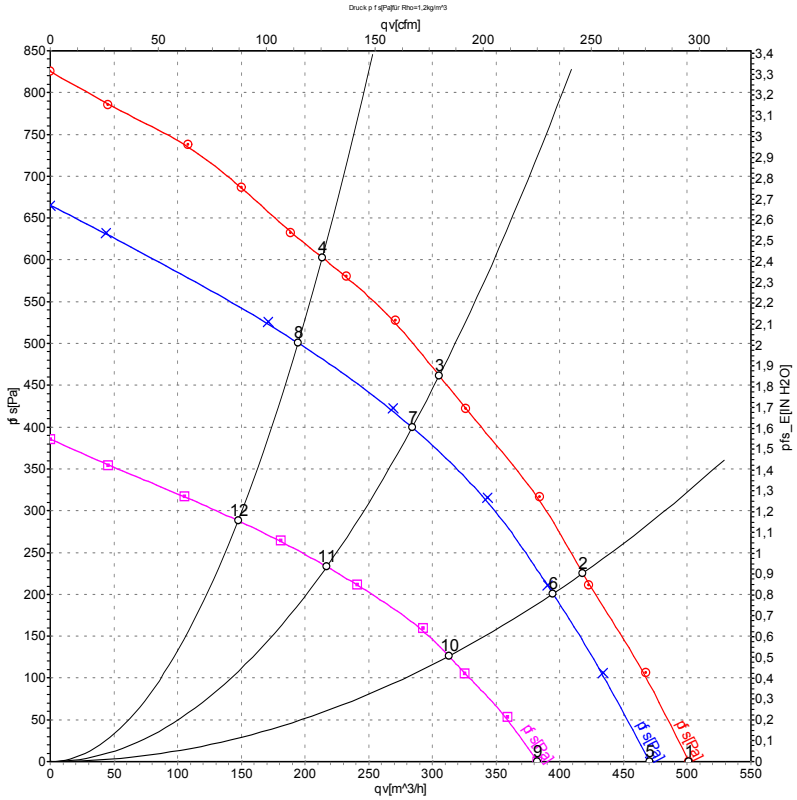
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Curves: Air performance



Measurement: LU-49675-1
Measurement: LU-49674-1
Measurement: LU-49676-1

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	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa	CFM	inH2O
1	28	2350	124	5.54	500	0	295	0.00
2	28	2585	118	5.03	420	224	245	0.90
3	28	2955	110	4.48	305	461	180	1.85
4	28	3275	101	4.00	215	603	125	2.42
5	24	2200	100	5.00	470	0	275	0.00
6	24	2425	98	4.67	395	200	230	0.80
7	24	2745	88	4.09	285	400	165	1.61
8	24	3000	76	3.49	195	500	115	2.01
9	16	1810	56	3.90	380	0	225	0.00
10	16	1950	50	3.45	315	126	185	0.51
11	16	2140	42	2.90	215	233	130	0.94
12	16	2295	36	2.55	150	288	85	1.16

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

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