G1G146-BA07-50

EC centrifugal fan

forward curved

with housing (flange)

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Nominal data

Type	**G1G146-BA07-50**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed	min-1	2200
Power input	W	100
Current draw	A	5.0
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	60

ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations

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Technical features

Mass	2.8 kg
Size	146 mm
Surface of rotor	Coated in black
Material of impeller	Sheet steel, galvanised
Housing material	Die-cast aluminium
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 42
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Shaft horizontal or rotor on bottom; rotor on top on request
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected motor
EMC interference immunity	Acc. to EN 61000-6-2 (industrial environment)
EMC interference emission	Acc. to EN 55022 (Class B, household environment)
Motor protection	Reverse polarity and locked-rotor protection
Cable exit	Axial
Protection class	I (if protective earth is connected by customer)
Product conforming to standard	EN 60950-1
Approval	UL 1004-1; CSA C22.2 Nr.77

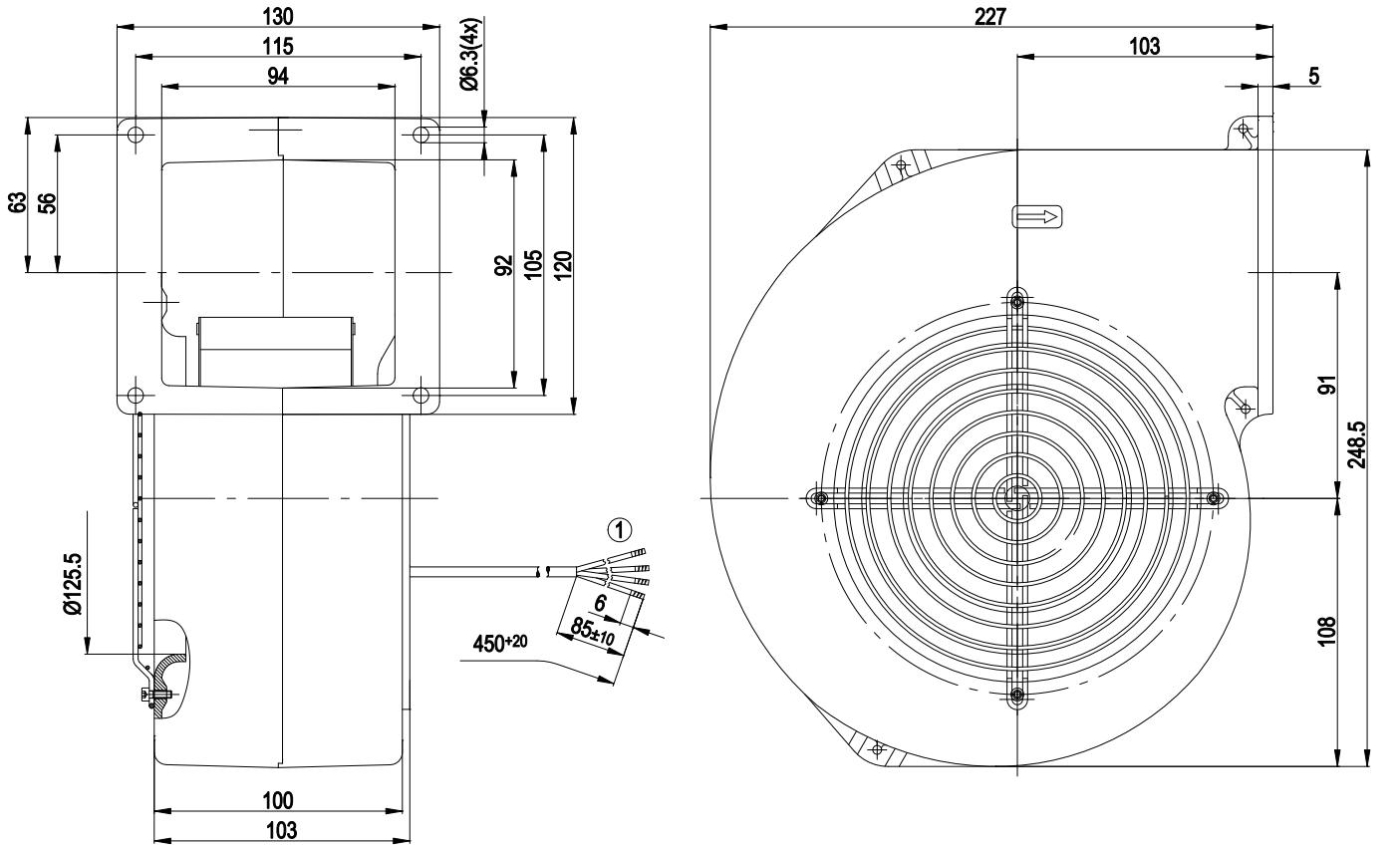
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Product drawing



1	Connection line PVC AWG20, 4x lead tips crimped

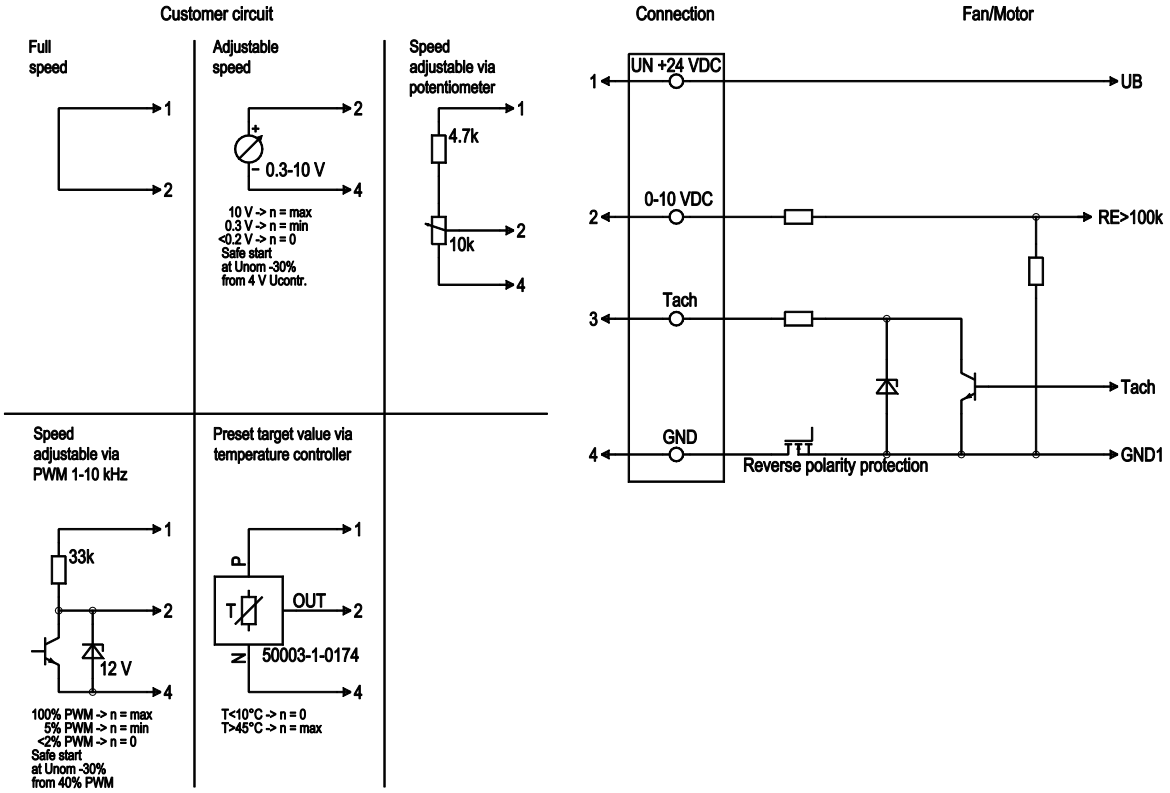
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Connection screen



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

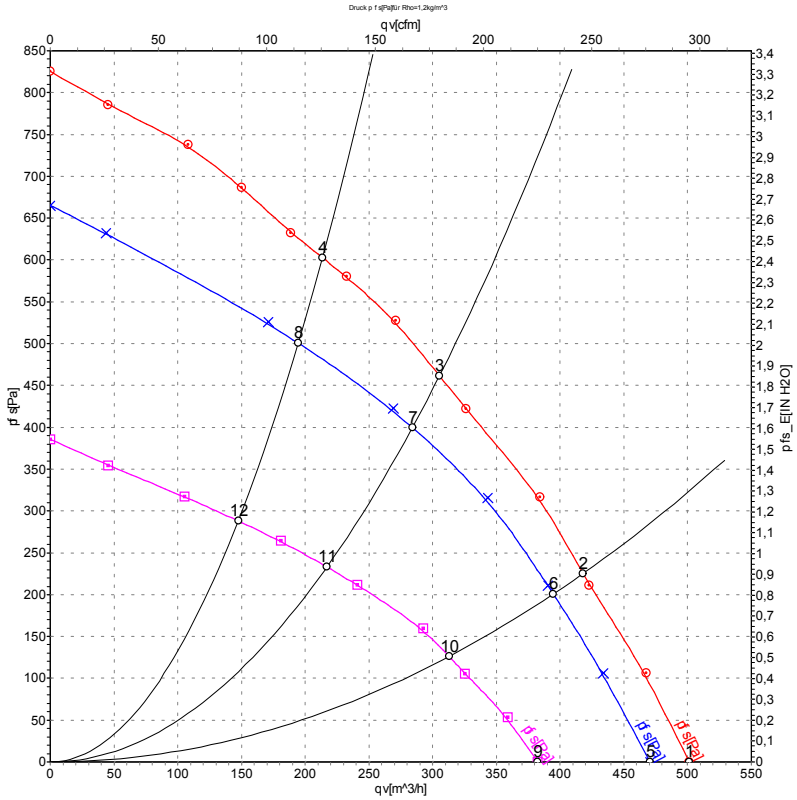
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Charts: Air flow



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

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

Measured values

	U	n	P_{ed}	I	qv	p_{fs}
	V	min^{-1}	W	A	m^3/h	Pa
1	28	2350	124	5.54	500	0
2	28	2585	118	5.03	420	224
3	28	2955	110	4.48	305	461
4	28	3275	101	4.00	215	603
5	24	2200	100	5.00	470	0
6	24	2425	98	4.67	395	200
7	24	2745	88	4.09	285	400
8	24	3000	76	3.49	195	500
9	16	1810	56	3.90	380	0
10	16	1950	50	3.45	315	126
11	16	2140	42	2.90	215	233
12	16	2295	36	2.55	150	288

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

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