K1G220-AA67-04

EC centrifugal fan

backward-curved, single-intake

with housing (without flange)



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Nominal data

Type	**K1G220-AA67-04**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	48
Nominal voltage range	VDC	36 .. 57
Method of obtaining data		fa
Speed (rpm)	min^{-1}	3100
Power consumption	W	94
Current draw	A	2.3
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	2.2 kg
Fan size	220 mm
Impeller material	PA plastic
Housing material	PA plastic
Number of blades	7
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP44
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	F4-1
Max. permitted ambient temp. for motor (transport/storage)	+80 °C
Min. permitted ambient temp. for motor (transport/storage)	-40 °C
Installation position	Any
Mode	S1
Motor bearing	Ball bearing
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, household environment)
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

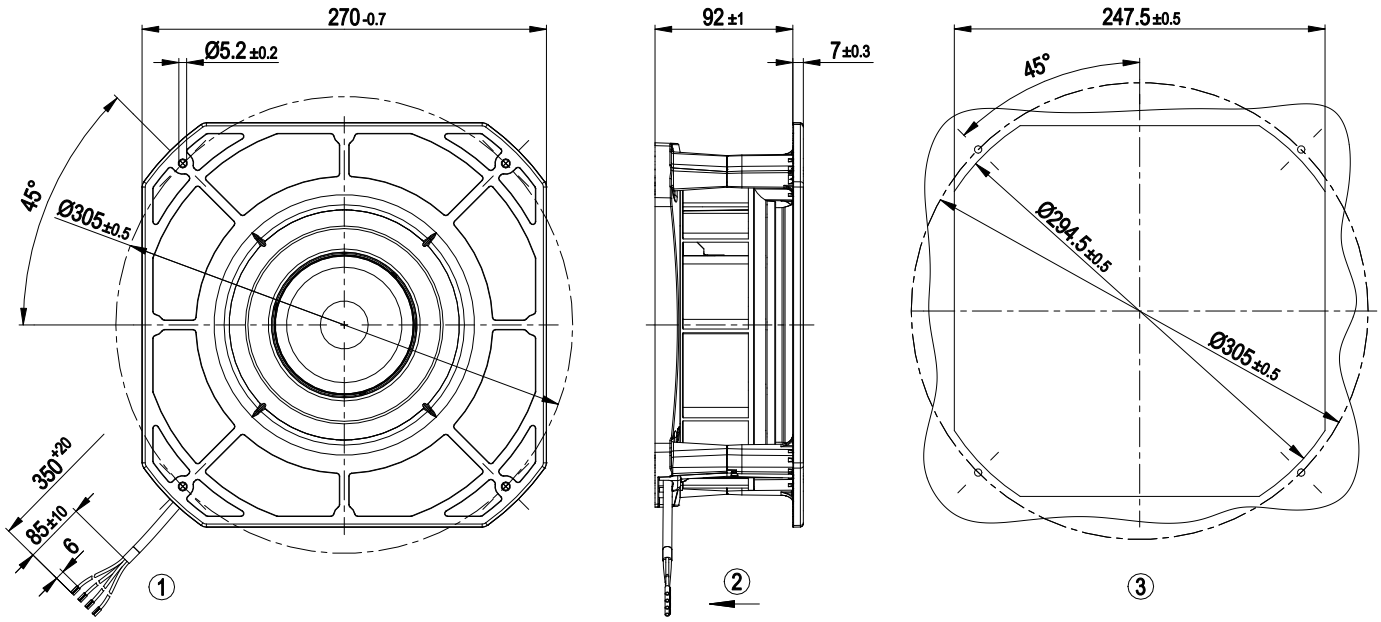
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Product drawing



1	Cable PVC AWG20, 4x crimped splice
2	Direction of air flow "V"
3	Mounting dimensions

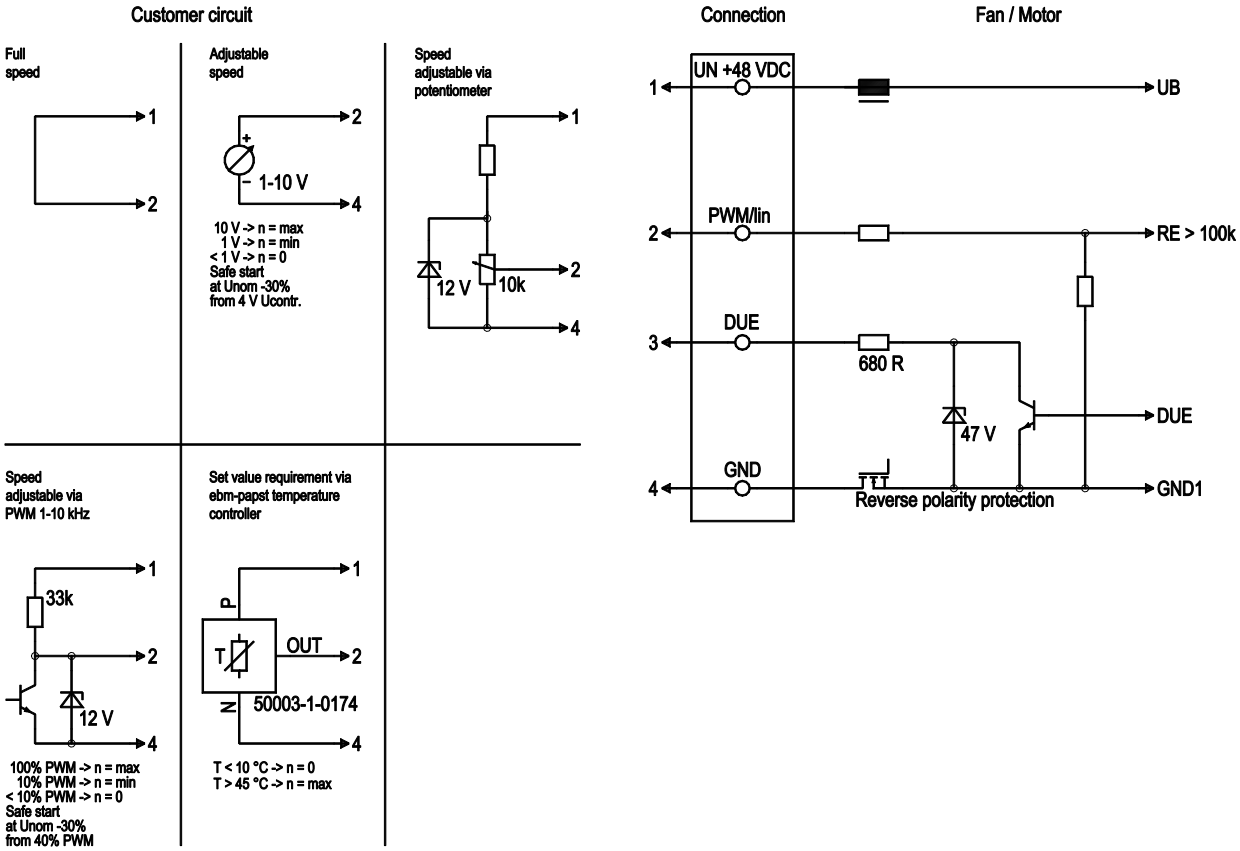
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Connection diagram



No.	Conn.	Designation	Color	Function/assignment
1	1	Un +48 VDC	red	Power supply 48 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

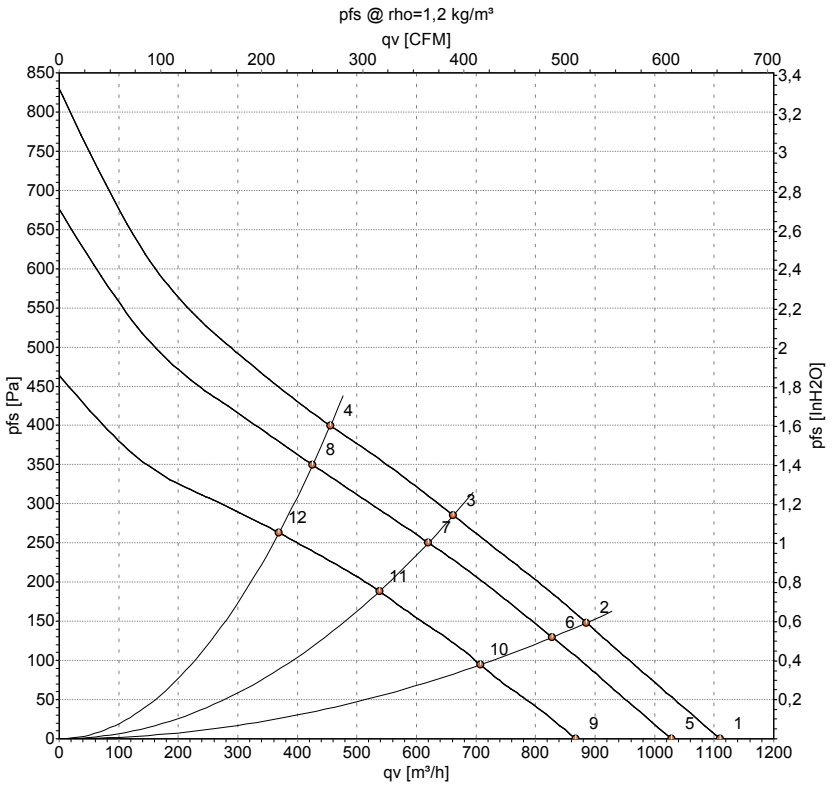
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Curves: Air performance



Measurement: LU-118703-1
Measurement: LU-118697-1
Measurement: LU-118706-1

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	LpA_{in}	LwA_{in}	qv	p_{fs}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa	CFM	inH2O
1	57	3265	113	2.35	72	79	1110	0	655	0.00
2	57	2975	118	2.56	69	76	885	148	520	0.59
3	57	2820	121	2.70	65	72	660	285	390	1.14
4	57	2850	120	2.67	66	73	455	399	270	1.60
5	48	3100	94	2.30	71	78	1030	0	605	0.00
6	48	2785	96	2.33	67	74	830	130	485	0.52
7	48	2645	98	2.44	64	71	620	250	365	1.00
8	48	2670	98	2.41	63	70	425	350	250	1.41
9	36	2550	55	1.70			870	0	510	0.00
10	36	2385	61	1.92			705	94	415	0.38
11	36	2305	65	2.04			540	188	315	0.75
12	36	2330	64	2.01			370	263	215	1.06

U = Power supply · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side · qv = Air flow
p_{fs} = Pressure increase

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