K1G225-RB49-02

EC centrifugal fan

backward-curved, single-intake

with housing (without flange)

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Nominal data

Type	**K1G225-RB49-02**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Method of obtaining data		fa
Speed (rpm)	min^{-1}	2370
Power consumption	W	72
Current draw	A	3.4
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	2.1 kg
Fan size	225 mm
Impeller material	PA plastic
Housing material	PA plastic
Number of blades	7
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
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; EAC; UL 1004-1

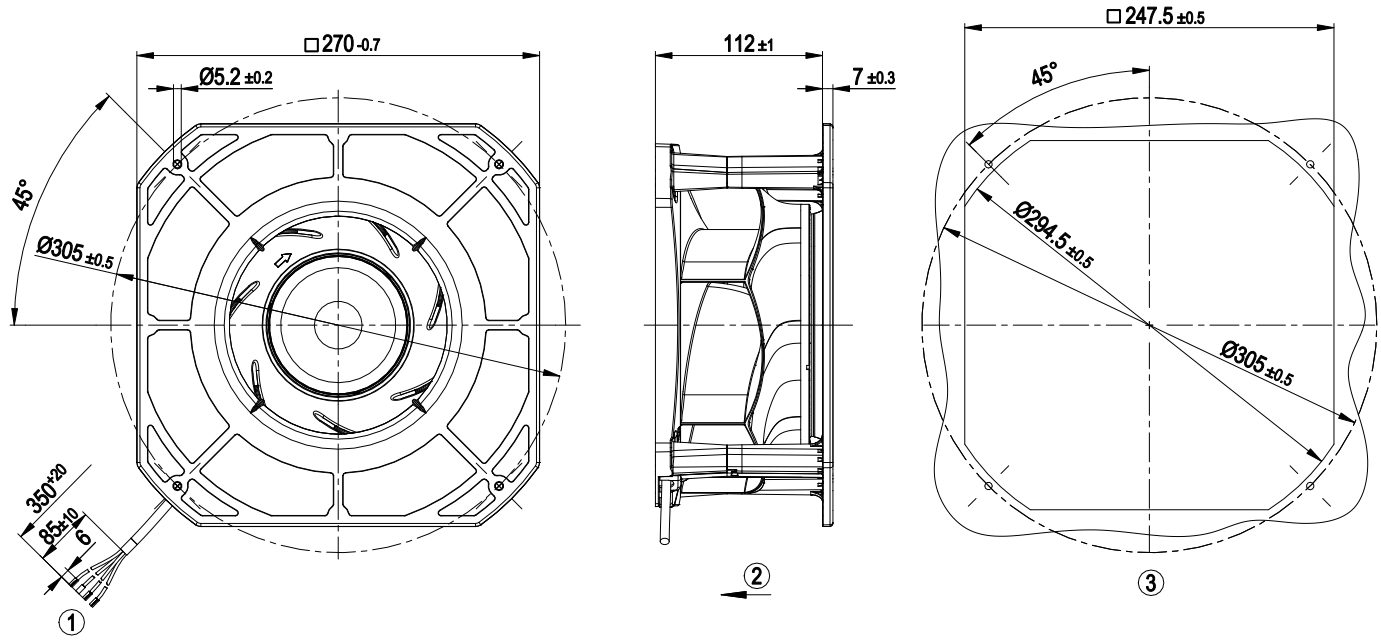
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Product drawing



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

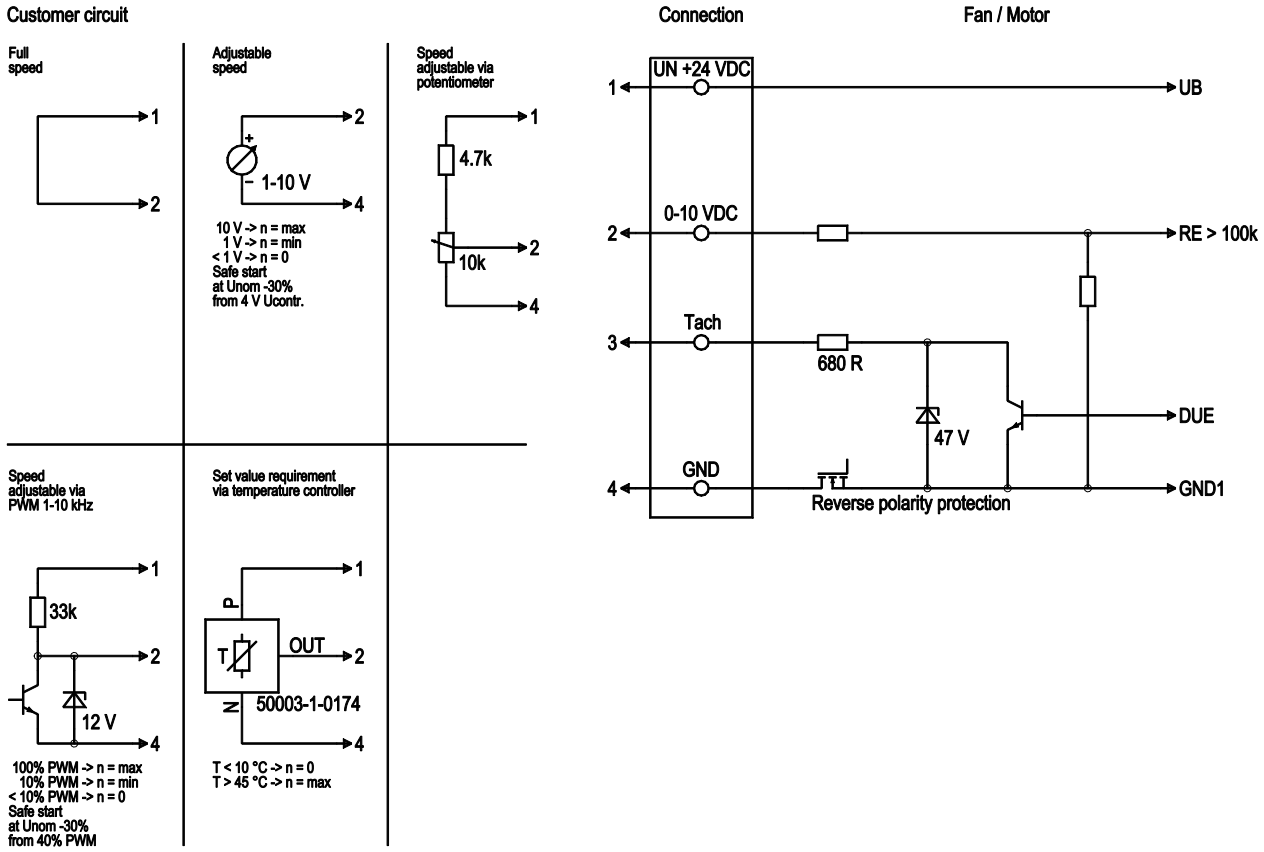
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Connection diagram



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

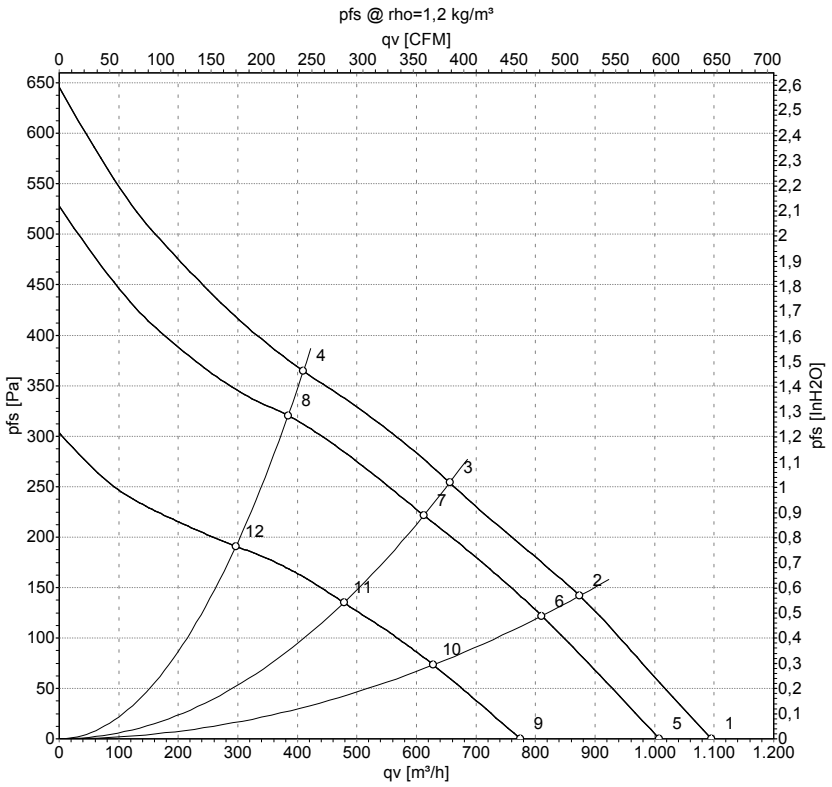
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Curves: Air performance



Measurement: LU-133499-1
Measurement: LU-133496-1
Measurement: LU-133501-1

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	28	2545	90	3.62			1095	0	645	0.00
2	28	2375	93	3.82			875	142	515	0.57
3	28	2315	94	3.89			655	254	385	1.02
4	28	2420	92	3.76			410	364	240	1.46
5	24	2370	72	3.40	64	72	1010	0	595	0.00
6	24	2220	76	3.54	59	67	810	120	475	0.48
7	24	2160	78	3.65	55	63	615	220	360	0.88
8	24	2265	74	3.44	58	66	385	320	225	1.28
9	16	1810	34	2.36			775	0	455	0.00
10	16	1730	37	2.55			630	74	370	0.30
11	16	1695	38	2.63			480	135	280	0.54
12	16	1755	36	2.48			295	191	175	0.77

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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