K1G220-AA89-02

EC centrifugal fan

backward curved, single inlet

with housing (without flange)



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Nominal data

Type	**K1G220-AA89-02**	
Motor	**M1G074-BF**	
Nominal voltage	VDC	24
Nominal voltage range	VDC	16 .. 28
Type of data definition		fa
Speed	min^{-1}	2800
Power input	W	68
Current draw	A	3.2
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 kg
Size	220 mm
Material of impeller	PA plastic
Housing material	PA plastic
Number of blades	7
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	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	- Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM
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	Variable
Product conforming to standard	EN 60950-1
Approval	GOST; UL 1004-1; CSA C22.2 Nr.77

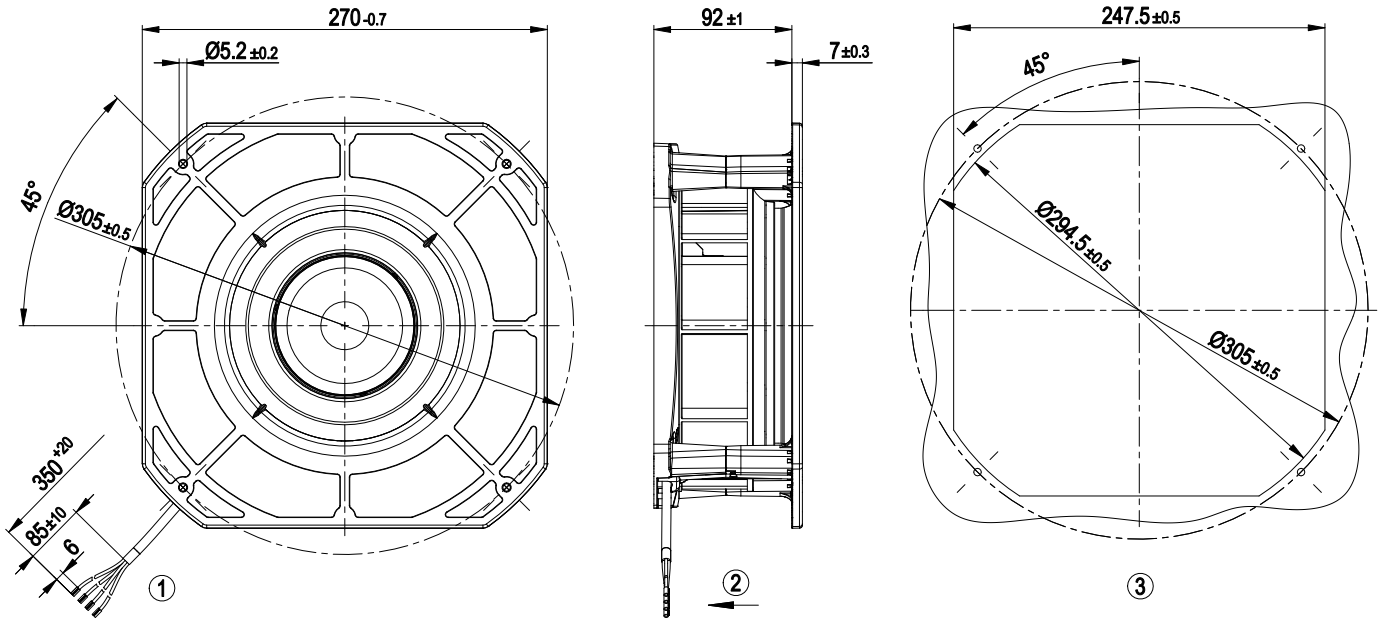
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Product drawing



1	Connection line PVC AWG20, 4x lead tips crimped
2	Direction of air flow "V"
3	Mounting dimensions

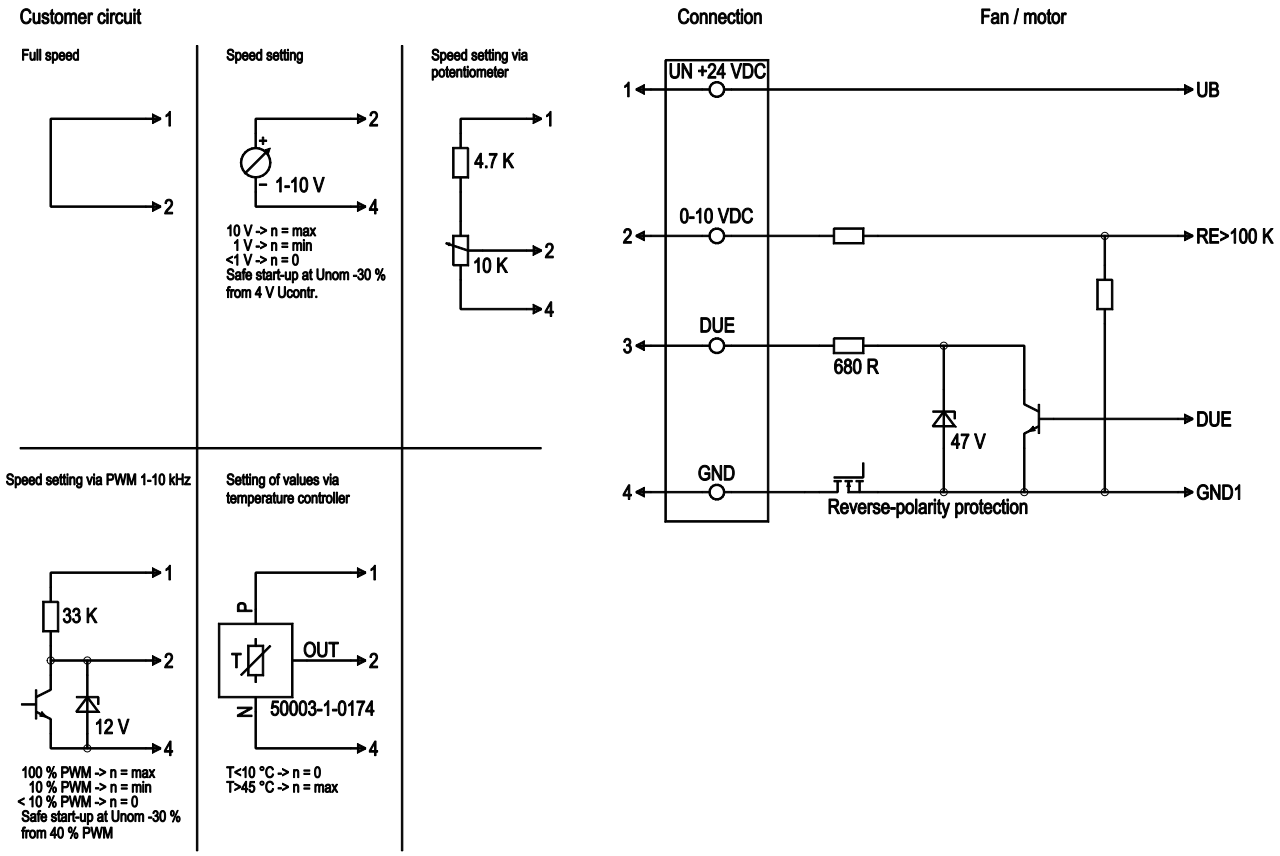
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Connection screen



Line	No.	Signal	Colour	Function / assignment
1	1	Un +24 VDC	red	Power supply 24 VDC, residual ripple 3.5 %
1	2	0-10 VDC	yellow	Control input Re > 100 K
1	3	Tach	white	Speed monitoring output, 3 pulses per rotation, Isink max = 10 mA
1	4	GND	blue	Reference mass

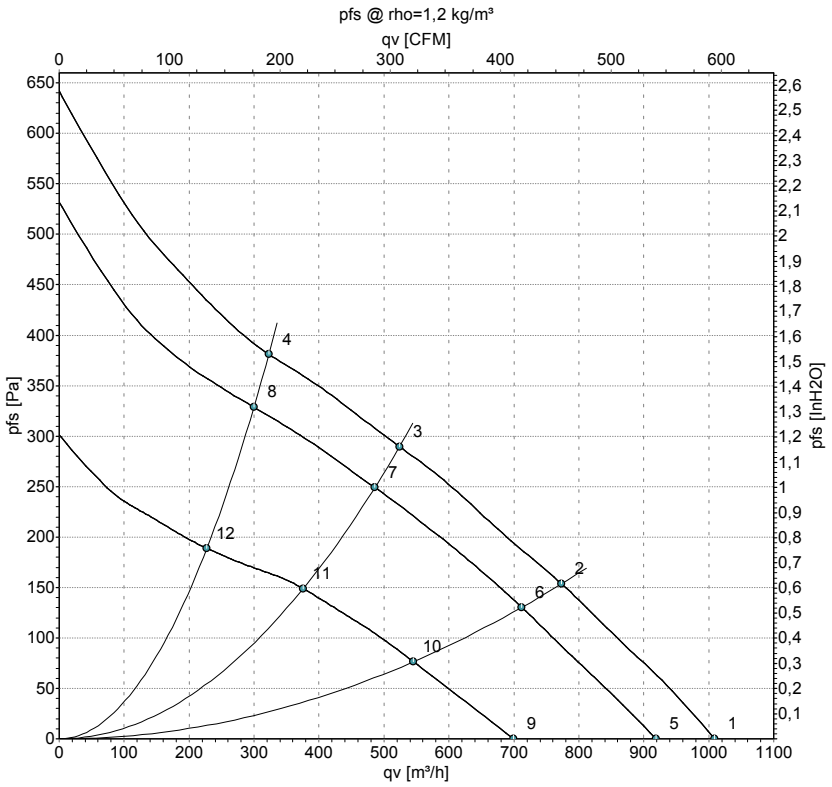
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Charts: Air flow



Measurement: LU-118711
Measurement: LU-118710
Measurement: LU-118713

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	LpA_{in}	LwA_{in}	qv	p_{fs}
	V	min^{-1}	W	A	dB(A)	dB(A)	m^3/h	Pa
1	28	2960	88	3.48	70	77	1010	0
2	28	2705	95	3.83	65	73	775	155
3	28	2605	96	3.95	63	70	525	289
4	28	2720	94	3.81	65	72	325	380
5	24	2800	68	3.20	67	74	920	0
6	24	2490	75	3.50	64	71	710	130
7	24	2425	78	3.63	62	69	485	250
8	24	2480	76	3.51	63	71	300	330
9	16	2055	31	2.18			700	0
10	16	1930	35	2.45			545	76
11	16	1885	37	2.57			375	149
12	16	1920	36	2.48			225	188

U = Supply voltage · n = Speed · P_{ed} = Power input · I = Current draw · LpA_{in} = Sound pressure level inlet side · LwA_{in} = Sound power level inlet side · qv = Air flow · p_{fs} = Pressure increase

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