

K1G220-AA67-02

EC centrifugal fan

backward-curved, single-intake
with housing (without flange)



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Nominal data

| | | |
|--------------------------|-------------------|----------|
| Type | K1G220-AA67-02 | |
| 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

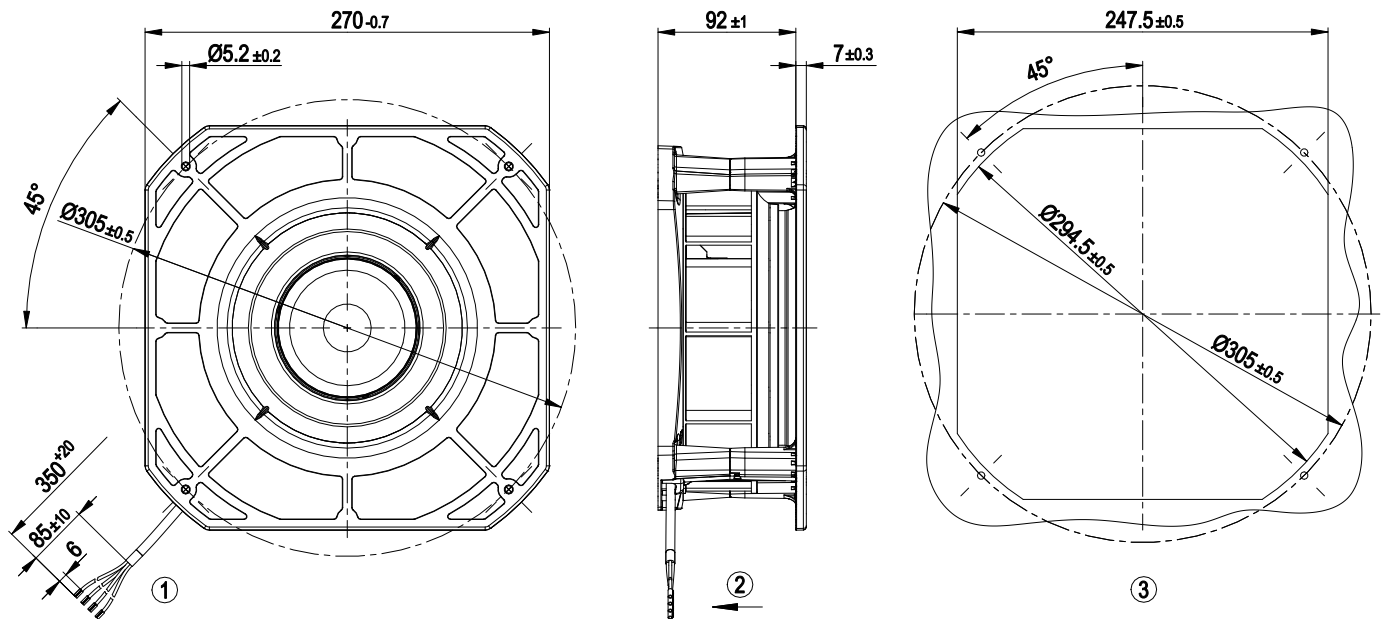
| | |
|---|---|
| Weight | 2 kg |
| Fan size | 220 mm |
| Impeller material | PA plastic |
| Housing material | PA plastic |
| Number of blades | 7 |
| Direction of rotation | Clockwise, viewed toward rotor |
| Degree of protection | IP42 |
| Insulation class | "B" |
| Moisture (F) / Environmental (H) 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 |
| Mode | S1 |
| Motor bearing | Ball bearing |
| Technical features | <ul style="list-style-type: none"> - 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

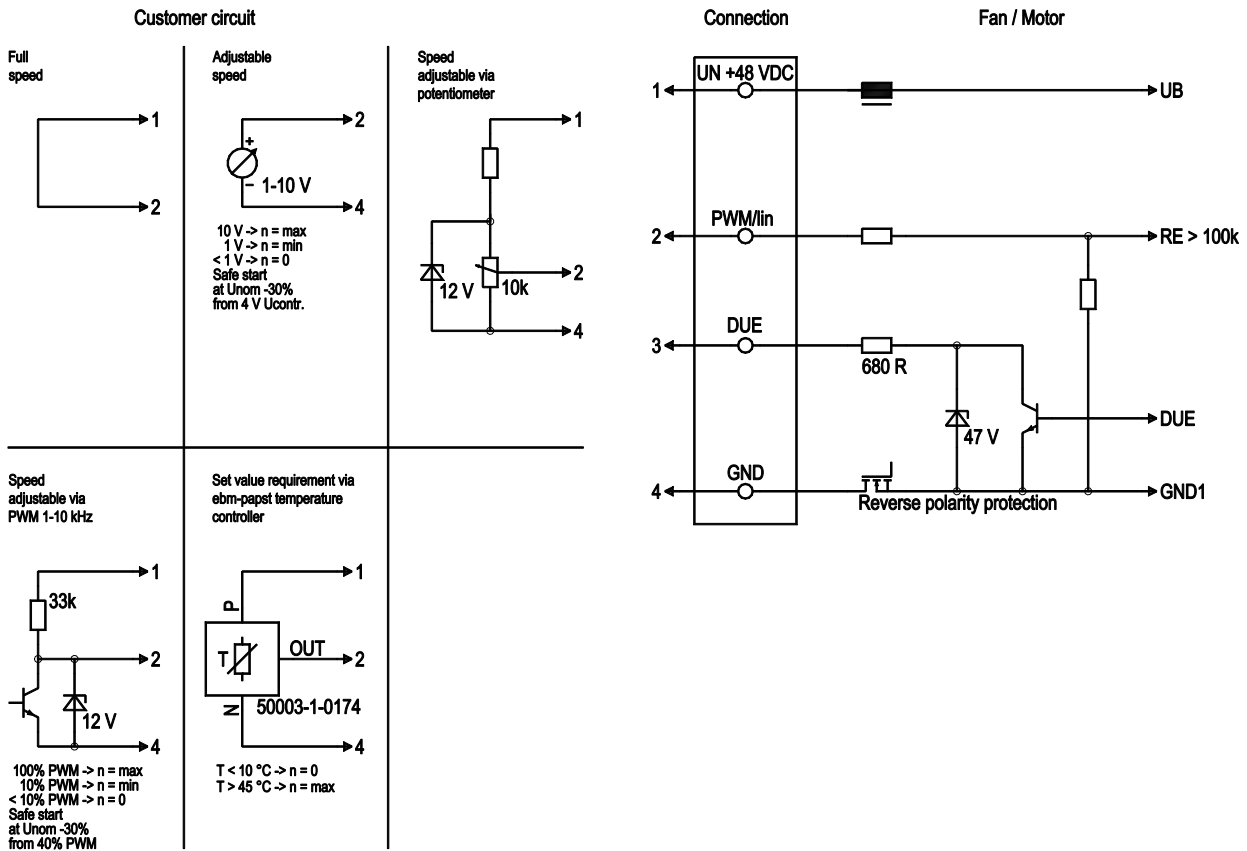


| | |
|---|------------------------------------|
| 1 | Cable PVC AWG20, 4x crimped splice |
| 2 | Direction of air flow "V" |
| 3 | Mounting dimensions |

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Connection diagram



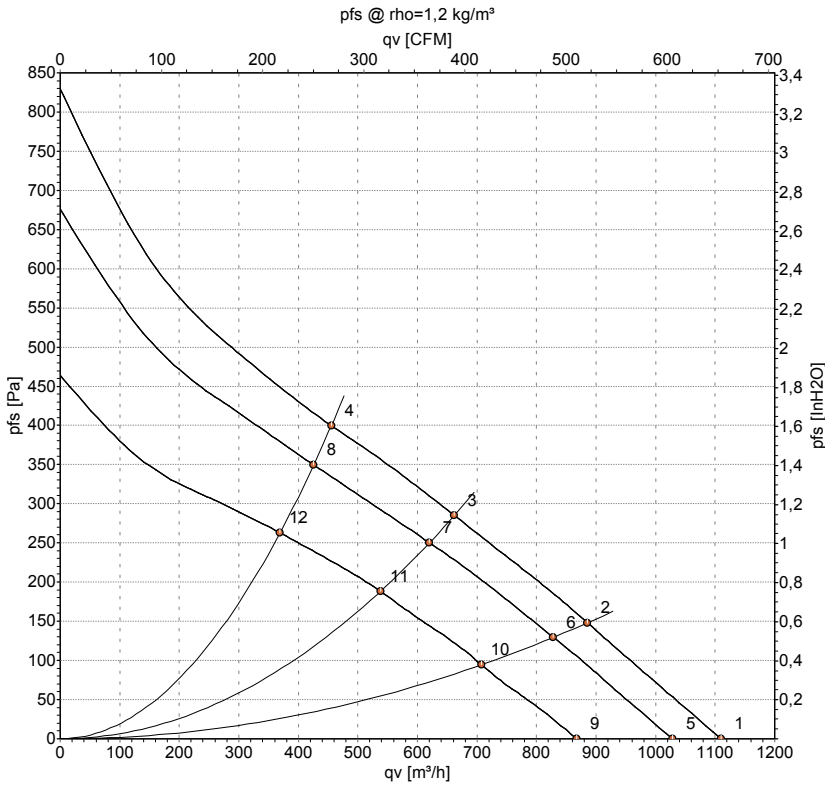
| No. | Conn. | Designation | Color | Function/assignment |
|-----|-------|-------------|--------|---|
| 1 | 1 | Un +48 VDC | red | Power supply 48 VDC, maximum ripple 3.5% |
| 1 | 2 | 0-10 VDC | yellow | Control input Re > 100k |
| 1 | 3 | Tach | white | Tach output, 3 pulses per revolution, Isink max = 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

