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General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

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Nominal data

| | | |
|--------------------------|-----------------------|----------|
| Type | W1G200-HH01-52 | |
| Motor | M1G074-BF | |
| Nominal voltage | VDC | 48 |
| Nominal voltage range | VDC | 36 .. 57 |
| Frequency | Hz | - |
| Type of data definition | | fa |
| Speed | min ⁻¹ | 2950 |
| Power input | W | 55 |
| Current draw | A | 1.3 |
| Max. back pressure | Pa | 120 |
| Min. ambient temperature | °C | -25 |
| Max. ambient temperature | °C | 60 |

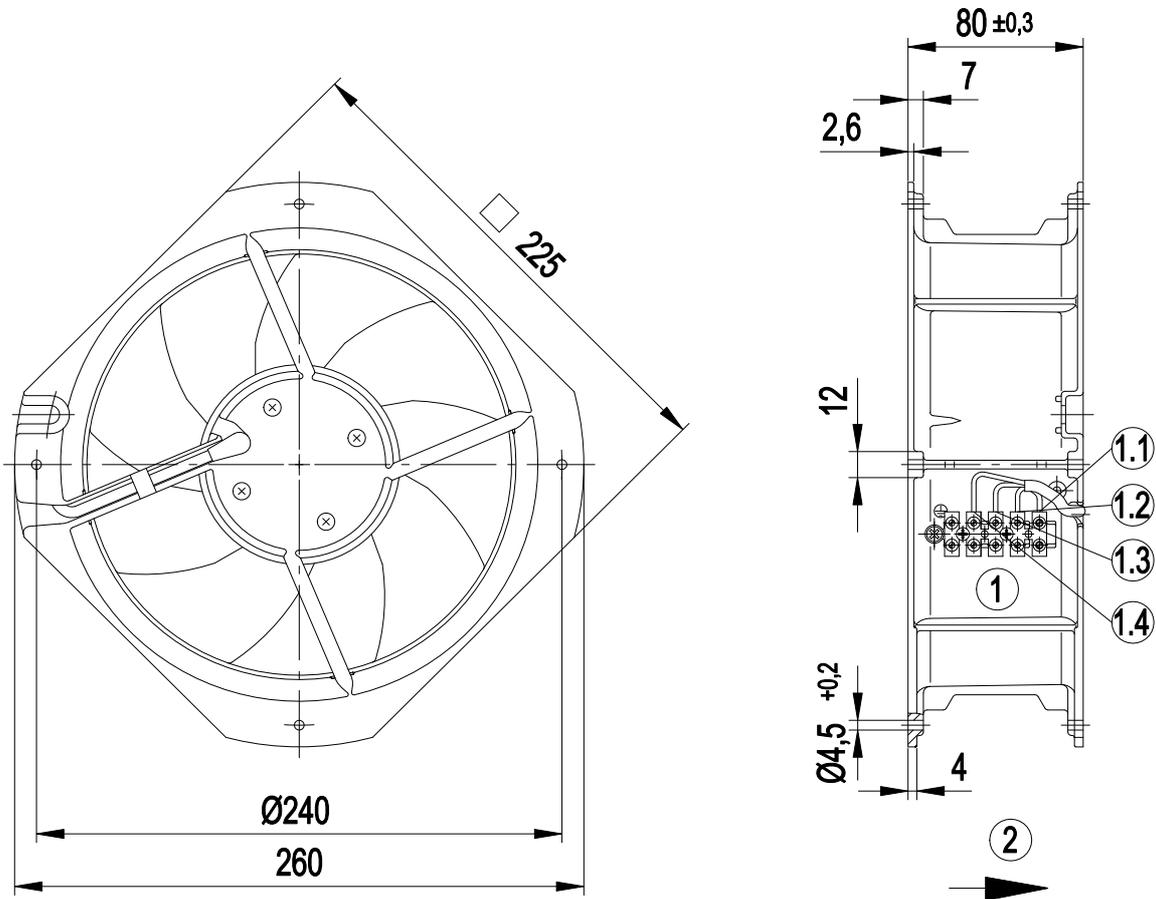
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit
Subject to alterations



Technical features

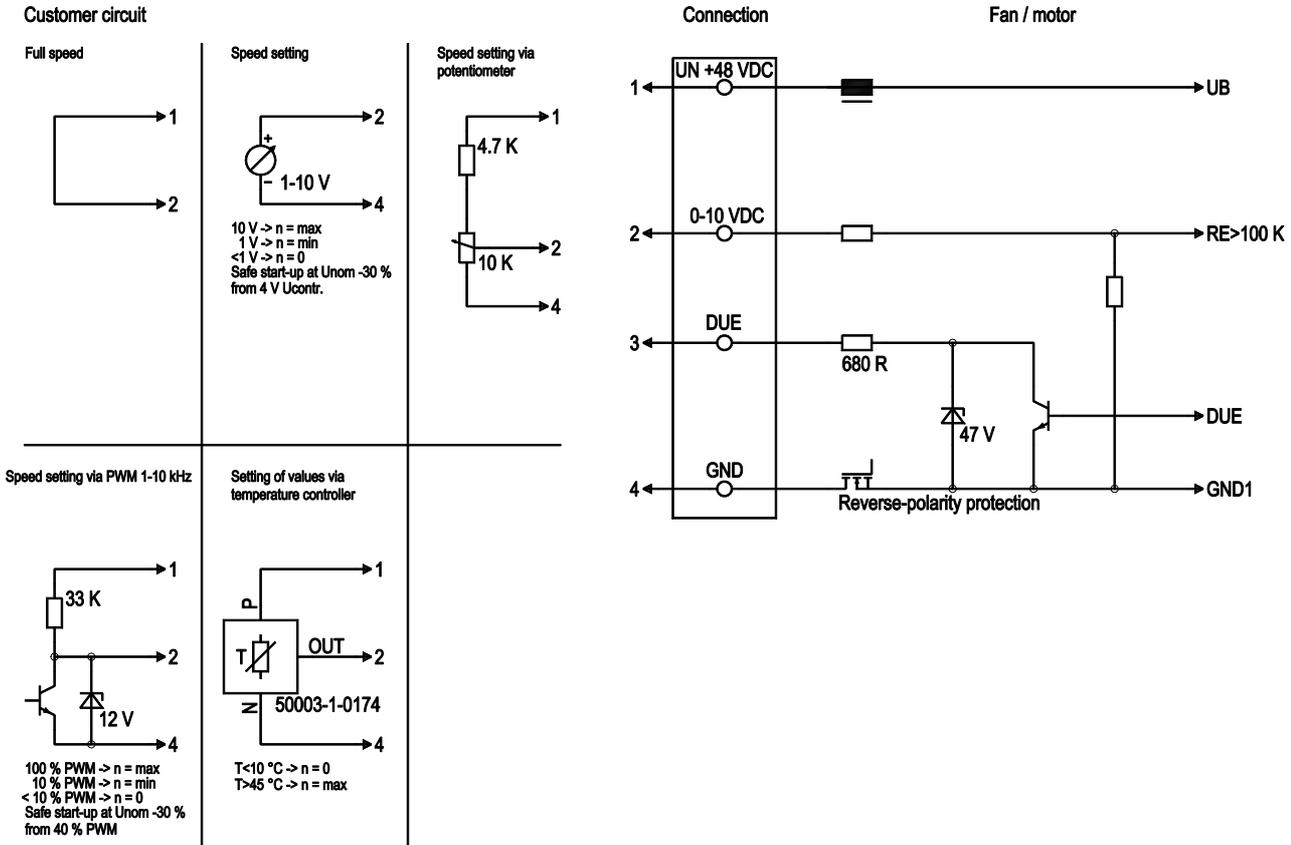
| | |
|--|--|
| Mass | 2.15 kg |
| Size | 200 mm |
| Surface of rotor | Coated in black |
| Material of blades | Sheet steel, coated in black |
| Material of wall ring | Die-cast aluminium |
| Number of blades | 9 |
| Direction of air flow | "V" |
| Direction of rotation | Counter-clockwise, seen on 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 | <ul style="list-style-type: none"> - Control input 0-10 VDC / PWM - Line undervoltage detection - Motor current limit - Soft start |
| EMC interference immunity | Acc. to EN 61000-6-2 (industrial environment) |
| EMC interference emission | Acc. to EN 55022 (Class B) |
| Electrical leads | Via terminal strip |
| Motor protection | Reverse polarity and locked-rotor protection |
| Protection class | I (if protective earth is connected by customer) |
| Product conforming to standard | EN 60335-1 |
| Approval | CCC; CSA C22.2 Nr.77; EAC; UL 1004-1 |

Product drawing



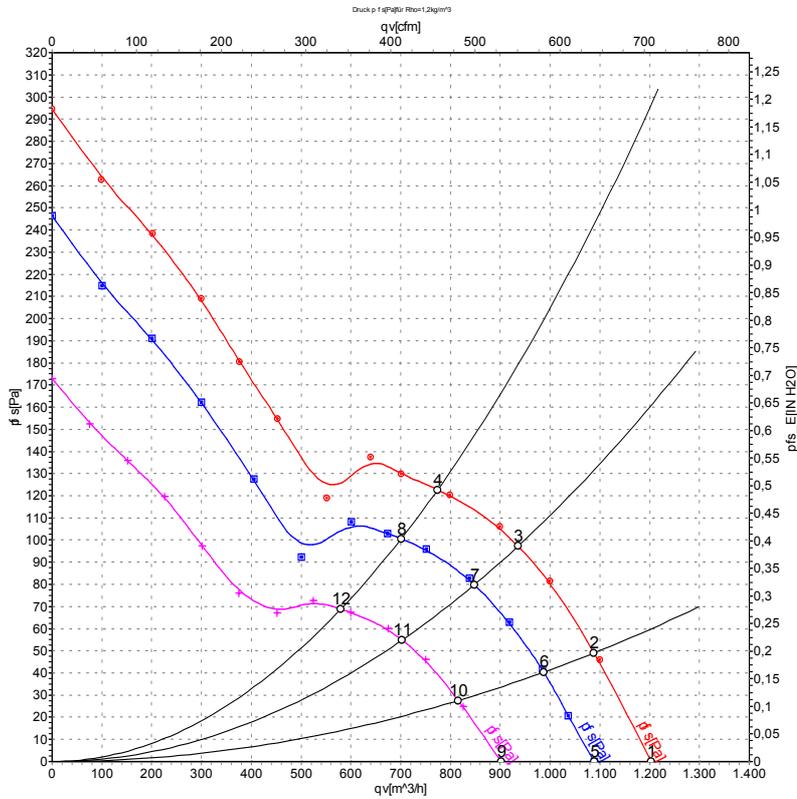
| | |
|-----|--|
| 1 | Connection: terminal strip with 5 terminals. |
| 1.1 | UN +48 VDC (red) |
| 1.2 | GND (blue) |
| 1.3 | DUE (white) |
| 1.4 | 0-10 VDC (yellow) |
| 2 | Direction of air flow "V" |

Connection screen



| No. | Conn. | Designation | Colour | Function / assignment |
|-----|-------|-------------|--------|---|
| 1 | 1 | Un +48 VDC | red | Power supply 48 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 |

Charts: Air flow



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: L_{WA} measured as per ISO 13347 / L_{pA} 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 | 57 | 3320 | 72 | 1.42 | 1205 | 0 |
| 2 | 57 | 3225 | 76 | 1.49 | 1090 | 50 |
| 3 | 57 | 3130 | 80 | 1.57 | 935 | 97 |
| 4 | 57 | 3070 | 83 | 1.62 | 775 | 123 |
| 5 | 48 | 2950 | 55 | 1.30 | 1090 | 0 |
| 6 | 48 | 2880 | 56 | 1.31 | 985 | 40 |
| 7 | 48 | 2810 | 59 | 1.38 | 850 | 80 |
| 8 | 48 | 2755 | 61 | 1.42 | 700 | 100 |
| 9 | 36 | 2500 | 34 | 1.11 | 900 | 0 |
| 10 | 36 | 2420 | 35 | 1.14 | 815 | 28 |
| 11 | 36 | 2360 | 36 | 1.16 | 705 | 55 |
| 12 | 36 | 2310 | 37 | 1.18 | 580 | 69 |

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

