

W1G200-EF01-01

EC axial fan - ESM

sickled blades (S series)

ESM wall ring



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Nominal data

| | | |
|--------------------------|-------------------|----------|
| Type | W1G200-EF01-01 | |
| Motor | M1G055-BD | |
| Nominal voltage | VDC | 24 |
| Nominal voltage range | VDC | 16 .. 28 |
| Type of data definition | | fa |
| Speed | min ⁻¹ | 2130 |
| Power input | W | 29 |
| Current draw | A | 1.5 |
| Max. back pressure | Pa | 55 |
| Min. ambient temperature | °C | -30 |
| Max. ambient temperature | °C | 50 |

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



Technical features

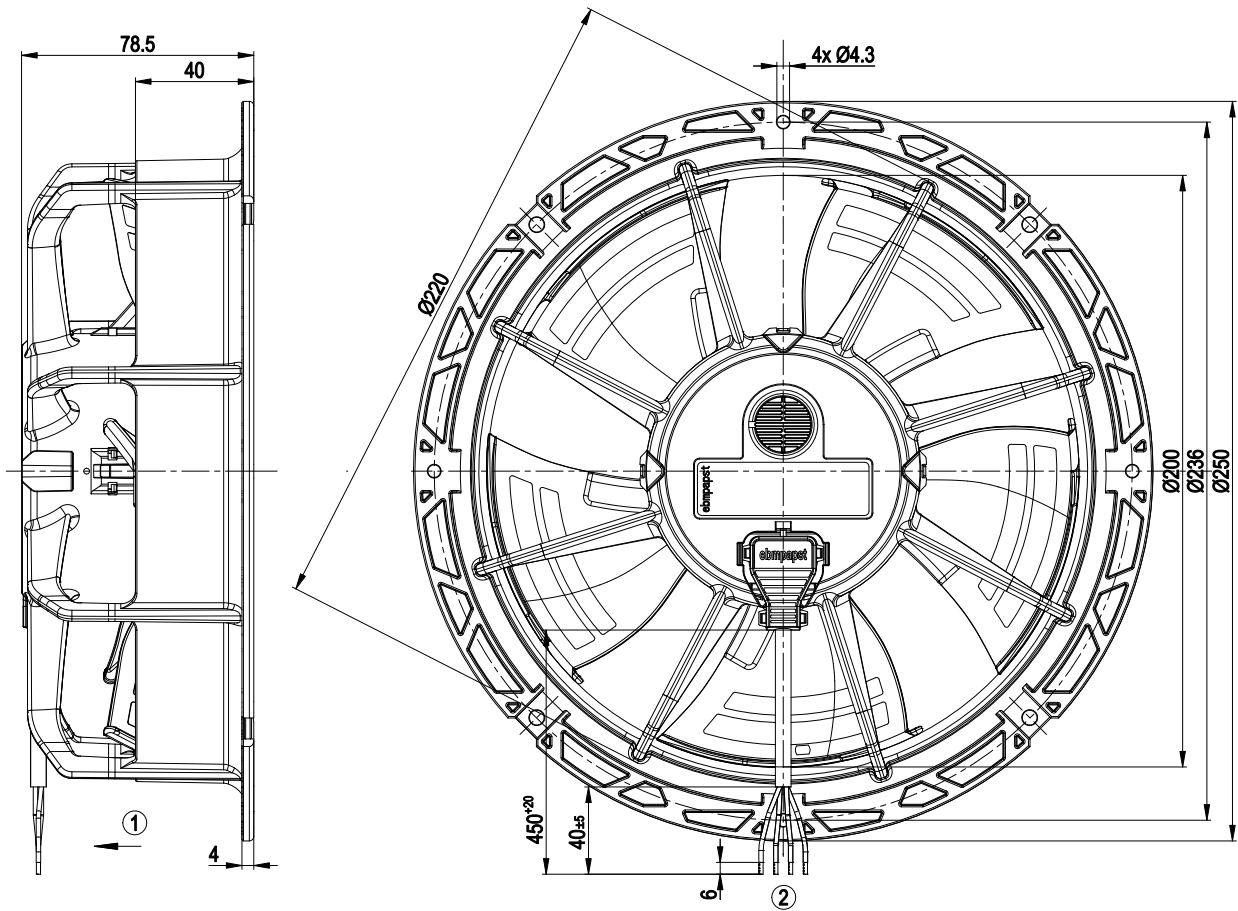
| | |
|--|--|
| Mass | 1 kg |
| Size | 200 mm |
| Material of electronics housing | PP plastic |
| Material of blades | PA plastic |
| Material of wall ring | Plastic, epylene GT50 |
| Number of blades | 5 |
| Direction of air flow | "V" |
| Direction of rotation | Counter-clockwise, seen on rotor |
| Type of protection | IP 54 |
| Insulation class | "B" |
| Humidity class | F3-1 |
| 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"> - Tach output - Motor current limit - Soft start - Control input 0-10 VDC / PWM - Over-temperature protected electronics / motor |
| Motor protection | Thermal overload protector (TOP) wired internally |
| Cable exit | Lateral |
| Protection class | II |
| Approval | CSA C22.2 Nr.77; EAC; UL 2111; VDE |

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Product drawing



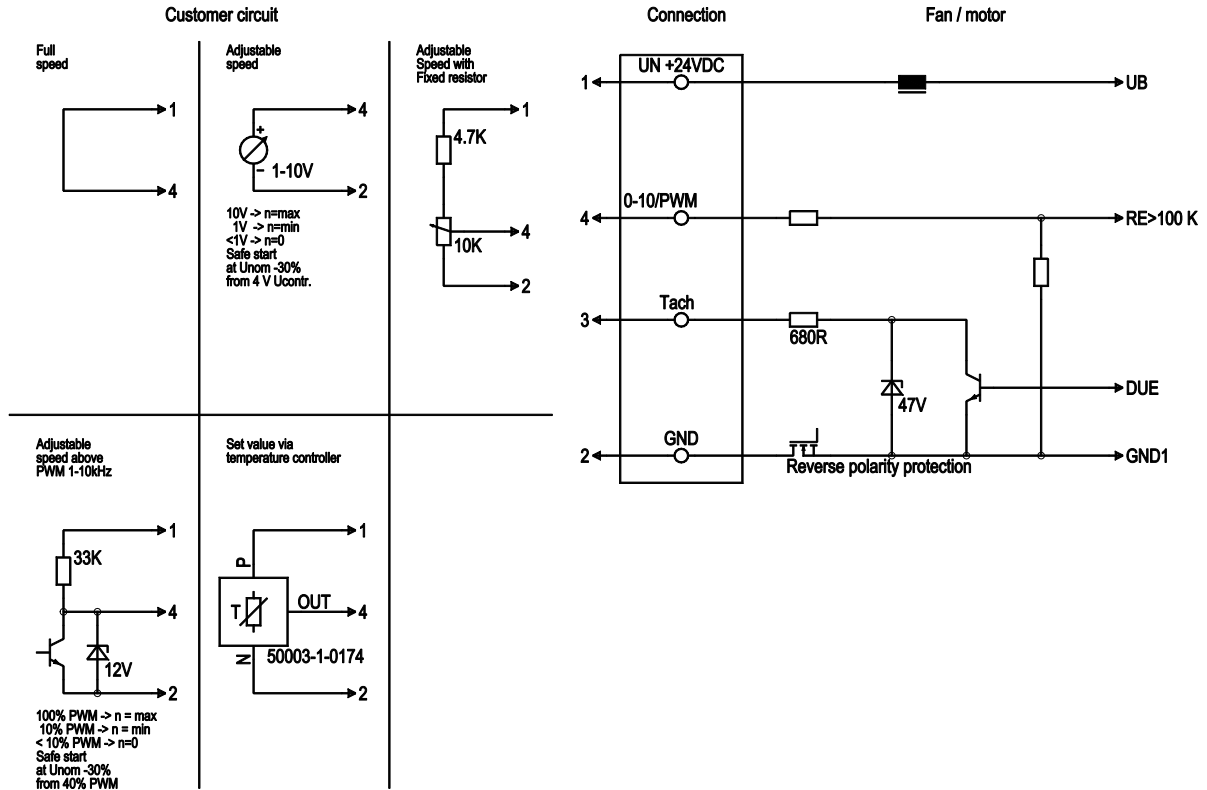
- | | |
|---|--|
| 1 | Direction of air flow "V" |
| 2 | Connection line AWG20, 4 x brass lead tips crimped |

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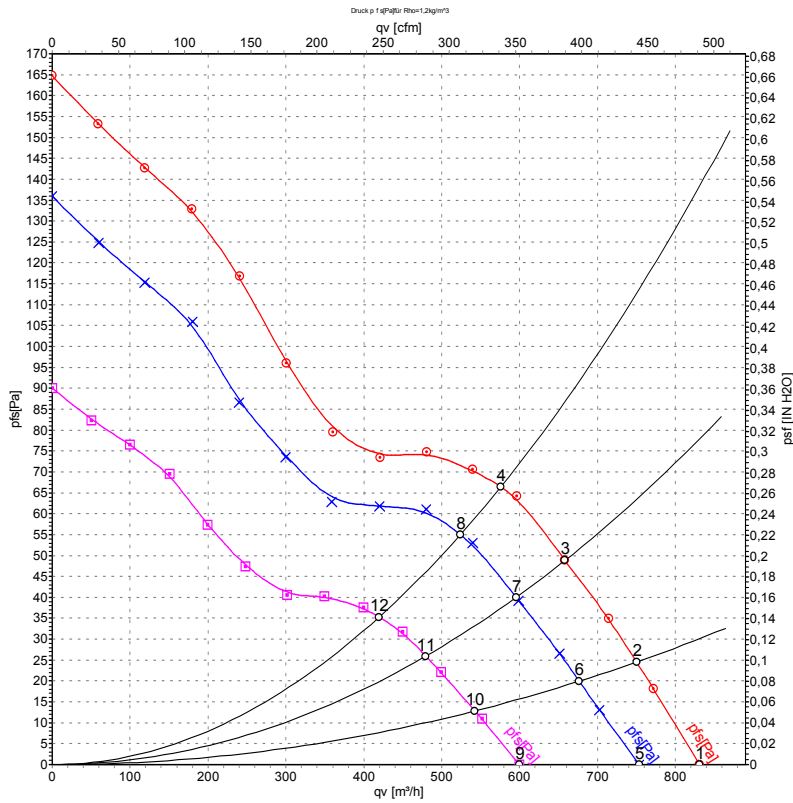
Connection screen



| No. | Conn. | Designation | Colour | Function / assignment |
|-----|-------|----------------|--------|---|
| | 1 | UN +24 VDC | red | Power supply 24 VDC, residual ripple 3.5 % |
| | 2 | GND | Blue | Reference ground |
| | 3 | Tach | white | Tacho output, 1 pulse per revolution, Isink max = 10 mA, open collector |
| | 4 | PWM / 0-10 VDC | yellow | Control input PWM or 0-10 V, RE >100K |



Charts: Air flow



Measurement: LU-140491
 Measurement: LU-140490
 Measurement: LU-140492

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 | L _{pA_{in}} | L _{wA_{in}} | qv | P _{fs} |
|----|----|-------------------|-----------------|------|------------------------------|------------------------------|-------------------|-----------------|
| | V | min ⁻¹ | W | A | dB(A) | dB(A) | m ³ /h | Pa |
| 1 | 28 | 2310 | 38 | 1.80 | 57 | 65 | 830 | 0 |
| 2 | 28 | 2260 | 40 | 1.88 | 57 | 65 | 750 | 24 |
| 3 | 28 | 2225 | 42 | 1.96 | 56 | 63 | 660 | 49 |
| 4 | 28 | 2230 | 42 | 1.95 | 54 | 62 | 575 | 66 |
| 5 | 24 | 2130 | 29 | 1.50 | 55 | 62 | 755 | 0 |
| 6 | 24 | 2085 | 30 | 1.56 | 54 | 62 | 675 | 20 |
| 7 | 24 | 2050 | 31 | 1.61 | 53 | 61 | 595 | 40 |
| 8 | 24 | 2050 | 31 | 1.62 | 51 | 59 | 525 | 55 |
| 9 | 16 | 1705 | 13 | 0.91 | 49 | 57 | 600 | 0 |
| 10 | 16 | 1670 | 14 | 0.95 | 48 | 56 | 545 | 13 |
| 11 | 16 | 1645 | 14 | 0.98 | 47 | 55 | 480 | 26 |
| 12 | 16 | 1660 | 14 | 0.97 | 46 | 54 | 420 | 35 |

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

