**8300100468**

VWLG275XJNWZ

# EC axial fan

with brushless DC motor

Automotive



## Nominal data

| | |
|---|---|
| **Item** | **8300100468** |
| **Motor** | **E07425-10** |

| | | |
|---|---|---|
| Nominal voltage | VDC | 26 |
| Nominal voltage range | VDC | 16 .. 32 |
| Method of obtaining data | | fa |
| Speed (rpm) | $min^{-1}$ | 3000 |
| Power consumption | W | 110 |
| Current draw | A | 4.2 |
| Max. back pressure | Pa | 170 |
| Max. back pressure | in. wg | 0.68 |
| Min. ambient temperature | °C | -40 |
| Max. ambient temperature | °C | 40 |

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** | 1.1 kg |
| **Size** | 250 mm |
| **Motor size** | 74 |
| **Blade material** | PP plastic |
| **Fan housing material** | PA plastic |
| **Number of blades** | 7 |
| **Airflow direction** | V |
| **Direction of rotation** | Clockwise, viewed toward rotor |
| **Degree of protection** | Motor IP24 KM, electronics IP6K9K (mating connector installed) |
| **Insulation class** | "B" |
| **Moisture (F) / Environmental (H) protection class** | H4 |
| **Max. permitted ambient temp. for motor (transport/storage)** | +70 °C |
| **Min. permitted ambient temp. for motor (transport/storage)** | -40 °C |
| **Installation position** | Any |
| **Condensation drainage holes** | None, open rotor |
| **Mode** | S1 |
| **Motor bearing** | Ball bearing with low-temperature lubricant; (sealed) |
| **Life expectancy** | 40,000 h (depending on load profile and ambient conditions) |
| **Technical features** | - Tach output<br>- Power limiter<br>- Load dump (58 V)<br>- Motor current limitation<br>- Soft start<br>- Control input 0-10 VDC / PWM<br>- Temperature derating<br>- Reverse polarity protection |
| **Electrical hookup** | Plug; Standby current less than 350 µA |

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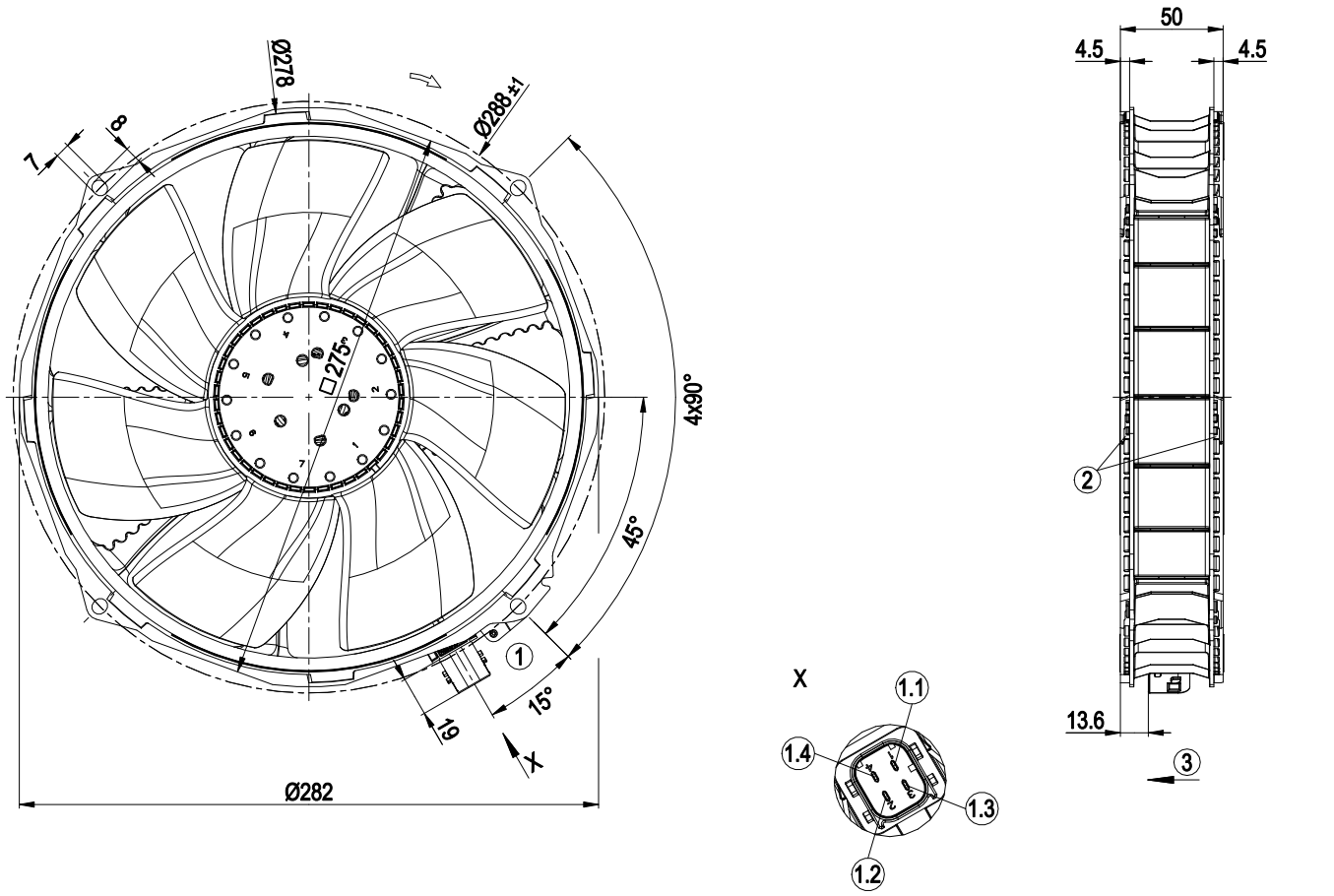
## Product drawing




| | |
|---|---|
| 1 | 4-pole plug, pluggable with cable from accessories |
| 1.1 | PWM/LIN |
| 1.2 | Tach |
| 1.3 | + UB |
| 1.4 | GND |
| | Accessory part: Cable (460 mm) with mating connector, part no. 02025-4-1021 not included in scope of delivery<br>4-pole mating connector TE 1-1418390-1, 2x socket TE 968857-1, 2x socket TE 968855-1, 2x seal TE 828905-1, 2x seal TE 828904-1 |
| | Accessory part: Guard grill (18605-2-4039) not included in scope of delivery |
| 2 | Bayonet attachment (both sides) for sheet metal or plastic 1.5, 2.0 or 2.5 mm thick |
| | Alternatively four fastening holes in each case (on both sides) |
| | A detailed drawing of the recess required for bayonet attachment can be obtained from ebm-papst. |
| 3 | Airflow direction "V" |

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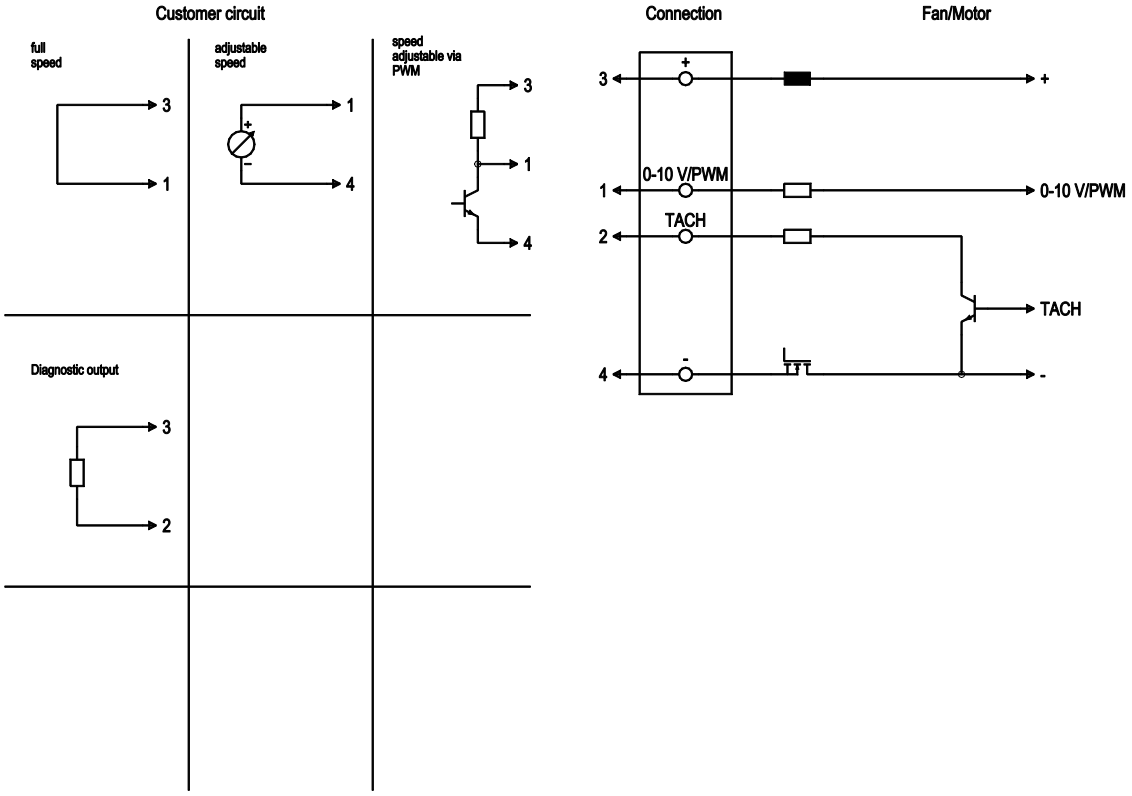
## Connection diagram




| No. | Conn. | Designation | Function/assignment |
|---|---|---|---|
| | 3 | + | Power supply + |
| | 1 | 0-10 V / PWM | Typical values<br>Control input<br>Ri > 36 kΩ<br>0-10 V:<br>- < 1 V ⇒ n=0<br>- 1,5 V ⇒ n=min<br>- > 9.5 V ⇒ n=max<br>or PWM (> 10 V; 1-10 kHz):<br>- < 4 % ⇒ n=0<br>- 10 % ⇒ n=min<br>- > 95% ⇒ n=max |
| | 2 | Tacho | Tach output: open collector, 1 pulse per revolution, Isink max = 10 mA, Ri = 2.1 kΩ |
| | 4 | - | Power supply - |

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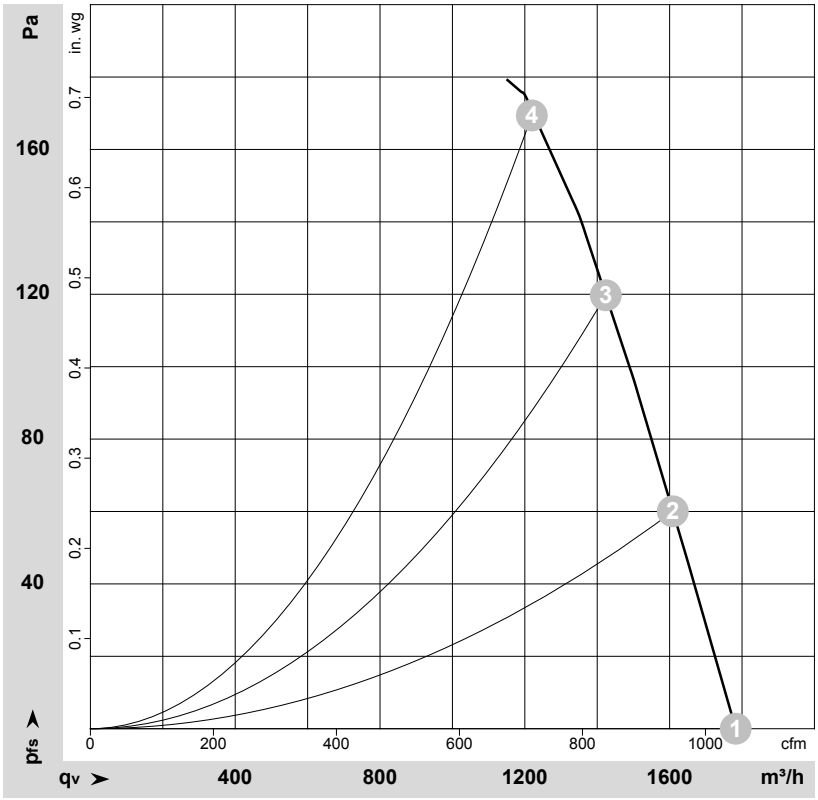
## Curves: Air performance




ρ = 1.15 kg/m³ ± 2 %

Measurement: LU-189573-1

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 | $P_e$ | I | $LpA_{in}$ | $LwA_{in}$ | $q_V$ | $p_{fs}$ | $q_V$ | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | V | $min^{-1}$ | W | A | dB(A) | dB(A) | $m^3/h$ | Pa | cfm | in. wg |
| 1 | 26 | 3000 | 110 | 4.20 | 69 | 77 | 1785 | 0 | 1050 | 0.00 |
| 2 | 26 | 2905 | 118 | 4.56 | 67 | 75 | 1610 | 60 | 945 | 0.24 |
| 3 | 26 | 2855 | 128 | 4.95 | 66 | 74 | 1425 | 120 | 840 | 0.48 |
| 4 | 26 | 2835 | 136 | 5.27 | 68 | 75 | 1220 | 170 | 715 | 0.68 |

U = Voltage · n = Speed (rpm) · $P_e$ = Power consumption · I = Current draw · $LpA_{in}$ = Sound pressure level intake side · $LwA_{in}$ = Sound power level intake side · $q_V$ = Air flow
$p_{fs}$ = Pressure increase