

ebm-papst Mulfingen GmbH & Co. KG

Bachmühle 2 · D-74673 Mulfingen

Phone +49 7938 81-0

Fax +49 7938 81-110

info1@de.ebmpapst.com

www.ebmpapst.com

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

Nominal data

| | | | |
|-----------------------------|-----------------------|---------|---------|
| Type | W2E142-BB01-A7 | | |
| Motor | M2E052-BA | | |
| Phase | | 1~ | 1~ |
| Nominal voltage | VAC | 230 | 230 |
| Frequency | Hz | 50 | 60 |
| Method of obtaining data | | fa | fa |
| Valid for approval/standard | | CE | CE |
| Speed (rpm) | min ⁻¹ | 2800 | 3350 |
| Power consumption | W | 27 | 28 |
| Current draw | A | 0.12 | 0.13 |
| Capacitor | µF | 1 | 1 |
| Capacitor voltage | VDB | 400 | 400 |
| Capacitor standard | | S0 (CE) | S0 (CE) |
| Min. ambient temperature | °C | -25 | -25 |
| Max. ambient temperature | °C | 55 | 65 |

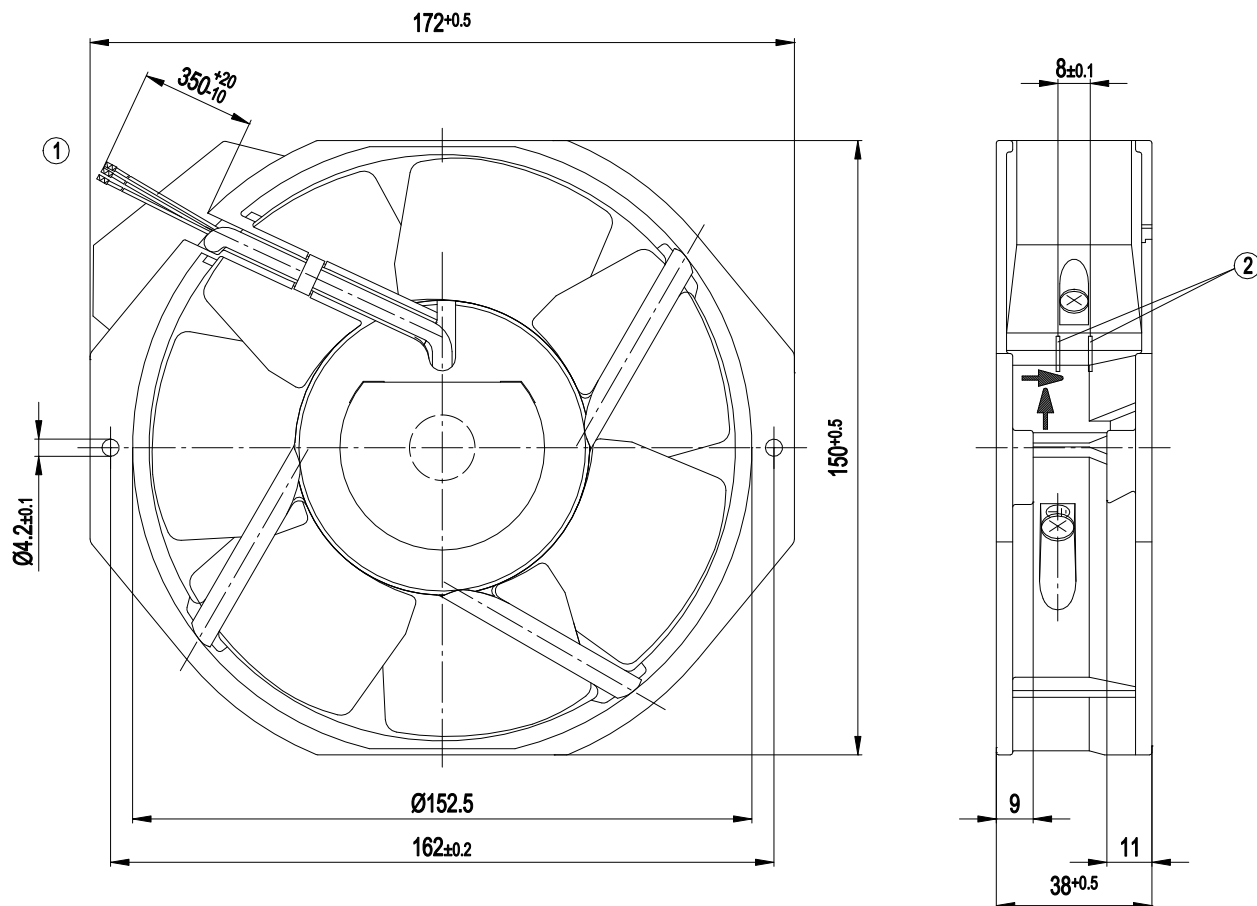
ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
 Subject to change



Technical description

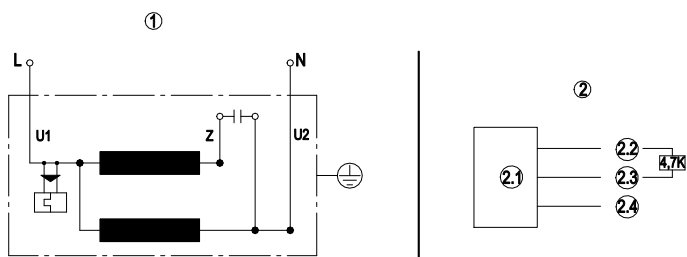
| | |
|--|---|
| Weight | 0.8 kg |
| Size | 142 mm |
| Motor size | 52 |
| Rotor surface | Painted black |
| Blade material | Sheet steel, painted black |
| Fan housing material | Die-cast aluminum, painted black |
| Number of blades | 7 |
| Airflow direction | V |
| Direction of rotation | Counterclockwise, viewed toward rotor |
| Degree of protection | IP22 |
| Insulation class | "B" |
| Moisture (F) / Environmental (H) protection class | H0+ |
| Max. permitted ambient temp. for motor (transport/storage) | + 80 °C |
| Min. permitted ambient temp. for motor (transport/storage) | - 40 °C |
| Installation position | Any |
| Condensation drainage holes | None |
| Mode | S1 |
| Motor bearing | Ball bearing |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | < 0.75 mA |
| Electrical hookup | Plug |
| Motor protection | Thermal overload protector (TOP) internally connected |
| Protection class | I (with customer connection of protective earth) |
| Motor capacitor according to EN 60252-1 in safety protection class | S0 |
| Conformity with standards | EN 60335-1; CE |
| Approval | UL 507; CSA C22.2 No. 113 |

Product drawing



- | | |
|---|---------------------------------|
| 1 | Cable AWG26, 3x crimped splices |
| 2 | 2x flat plug |

Connection diagram



1 Fan connection diagram

L blue

N blue

2 Hall IC circuit

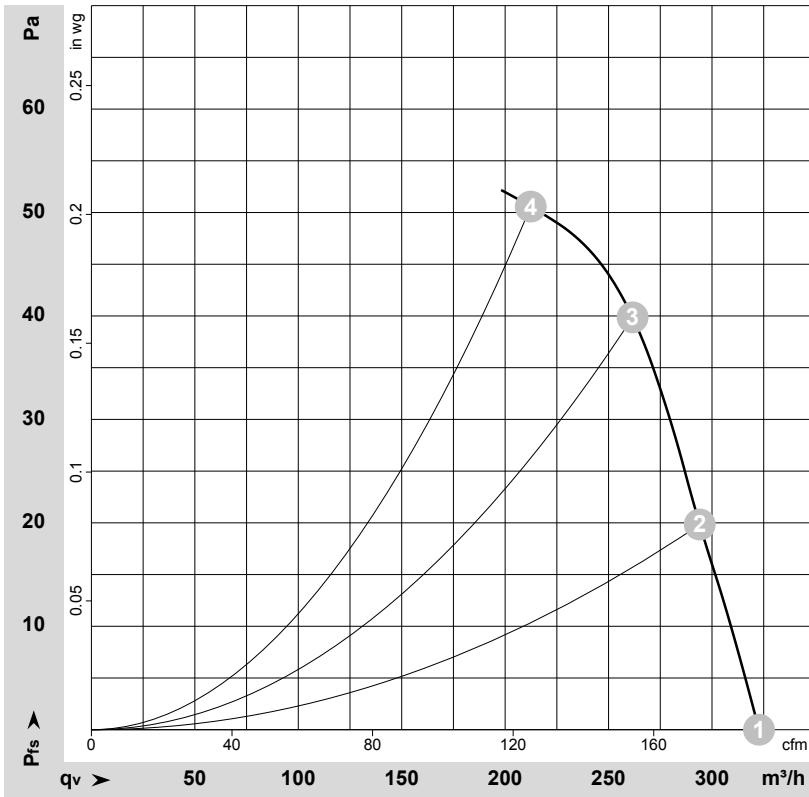
2.1 Hall IC

2.2 red (+5 V)

2.3 white (out)

2.4 black (0 V)

Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-63820-1

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.

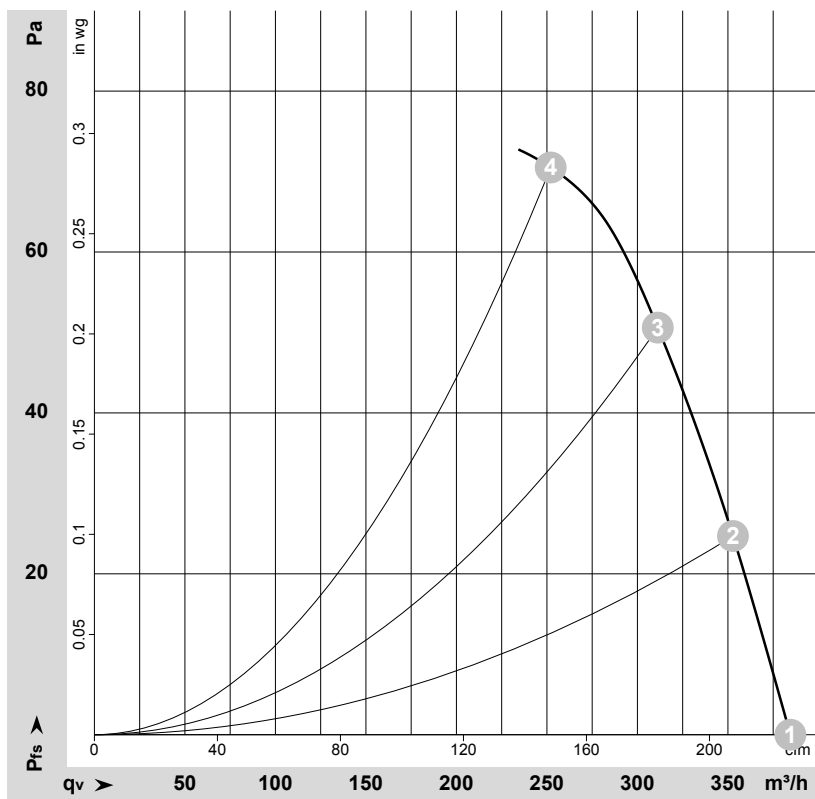
Measured values

| | U | f | n | P _e | I | q _v | p _{fs} | q _v | p _{fs} |
|---|-----|----|-------------------|----------------|------|-------------------|-----------------|----------------|-----------------|
| | V | Hz | min ⁻¹ | W | A | m ³ /h | Pa | cfm | in. wg |
| 1 | 230 | 50 | 2800 | 27 | 0.12 | 325 | 0 | 190 | 0.00 |
| 2 | 230 | 50 | 2805 | 26 | 0.12 | 295 | 20 | 175 | 0.08 |
| 3 | 230 | 50 | 2785 | 27 | 0.12 | 260 | 40 | 155 | 0.16 |
| 4 | 230 | 50 | 2775 | 27 | 0.12 | 210 | 50 | 125 | 0.20 |

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · p_{fs} = Pressure increase



Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-63821-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. 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 | f | n | P _e | I | q _v | P _{fs} | q _v | P _{fs} |
|---|-----|----|-------------------|----------------|------|-------------------|-----------------|----------------|-----------------|
| | V | Hz | min ⁻¹ | W | A | m ³ /h | Pa | cfm | in. wg |
| 1 | 230 | 60 | 3350 | 28 | 0.13 | 385 | 0 | 225 | 0.00 |
| 2 | 230 | 60 | 3305 | 30 | 0.13 | 355 | 25 | 210 | 0.10 |
| 3 | 230 | 60 | 3260 | 30 | 0.13 | 310 | 50 | 185 | 0.20 |
| 4 | 230 | 60 | 3230 | 31 | 0.14 | 250 | 70 | 150 | 0.28 |

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_v = Air flow · P_{fs} = Pressure increase

