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Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

**Nominal data**

|                             |                    |      |      |
|-----------------------------|--------------------|------|------|
| Type                        | R2S175-AB56-01     |      |      |
| Motor                       | M2S052-CA          |      |      |
| 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 <sup>-1</sup>  | 2350 | 2300 |
| Power consumption           | W                  | 53   | 51   |
| Current draw                | A                  | 0.33 | 0.29 |
| Min. back pressure          | Pa                 | 0    | 0    |
| Min. back pressure          | inH <sub>2</sub> O | 0    | 0    |
| Min. ambient temperature    | °C                 | -25  | -25  |
| Max. ambient temperature    | °C                 | 40   | 55   |

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

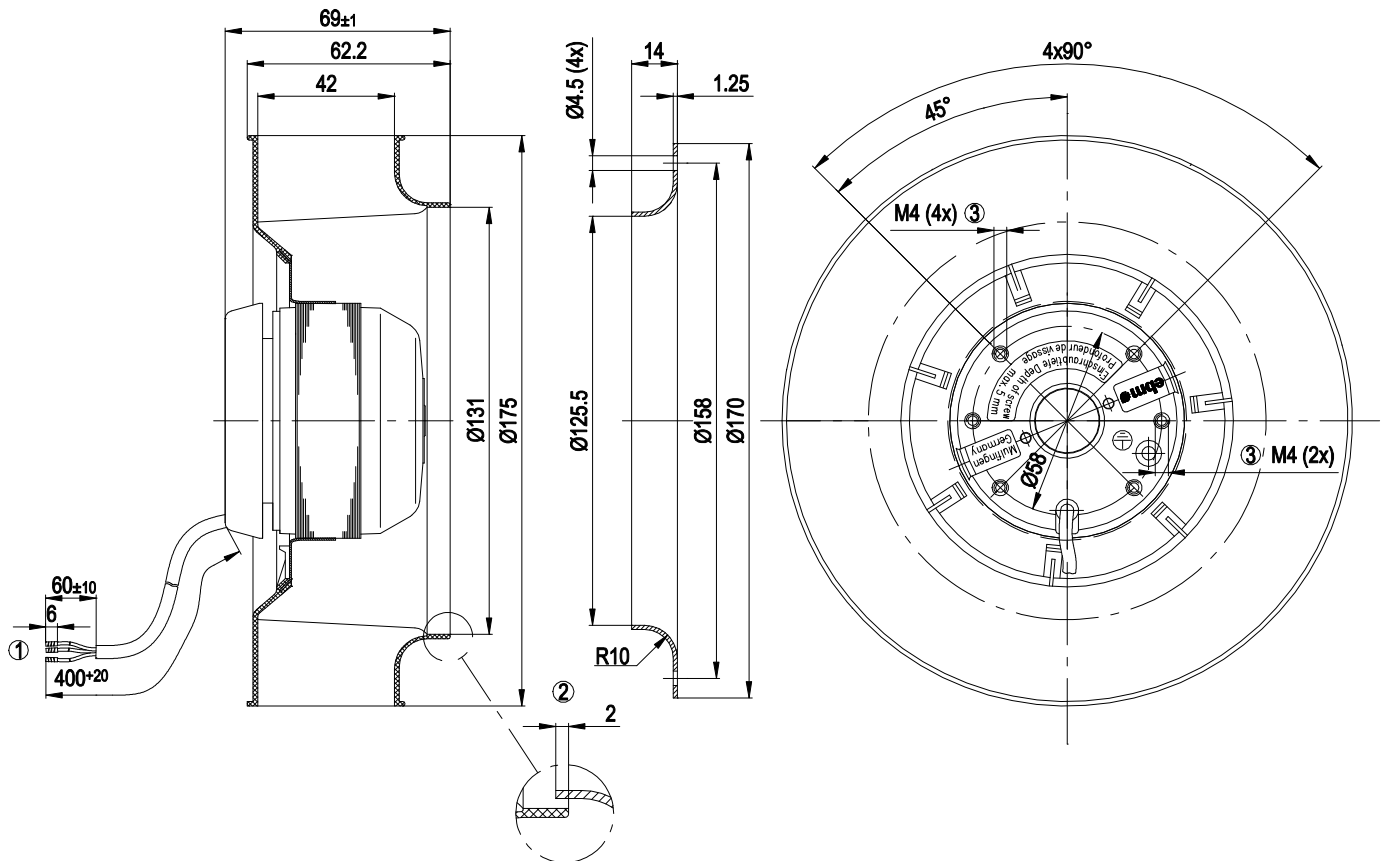


## Technical description

|                                                                            |                                                       |
|----------------------------------------------------------------------------|-------------------------------------------------------|
| Weight                                                                     | 0.9 kg                                                |
| Fan size                                                                   | 175 mm                                                |
| Rotor surface                                                              | Painted black                                         |
| Impeller material                                                          | PA 6 plastic, glass-fiber reinforced                  |
| Number of blades                                                           | 7                                                     |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                        |
| Degree of protection                                                       | IP20                                                  |
| Insulation class                                                           | "B"                                                   |
| 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, open rotor                                      |
| Mode                                                                       | S1                                                    |
| Motor bearing                                                              | Ball bearing                                          |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | < 0.75 mA                                             |
| Motor protection                                                           | Thermal overload protector (TOP) internally connected |
| With cable                                                                 | Axial                                                 |
| Protection class                                                           | I (with customer connection of protective earth)      |
| Conformity with standards                                                  | EN 60335-1; CE                                        |
| Approval                                                                   | CCC; EAC                                              |

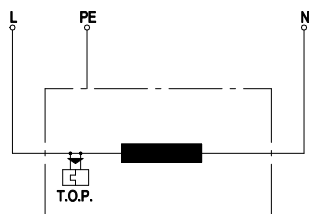


## Product drawing



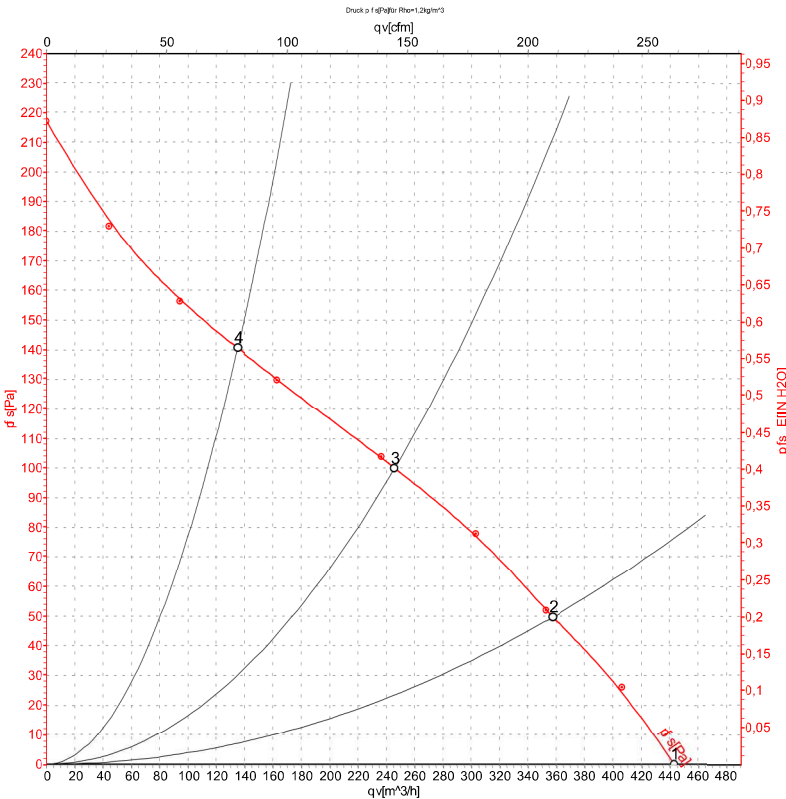
|   |                                                                            |
|---|----------------------------------------------------------------------------|
| 1 | Cable PVC, 3 x crimped splices                                             |
| 2 | Accessory part: Inlet ring 09576-2-4013, not included in scope of delivery |
| 3 | Max. clearance for screw 5 mm                                              |

### Connection diagram



|     |                              |
|-----|------------------------------|
| L   | = blue                       |
| PE  | = green/yellow               |
| N   | = brown                      |
| TOP | = thermal overload protector |

## Curves: Air performance 50 Hz



Measurement: LU-44427-1

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.

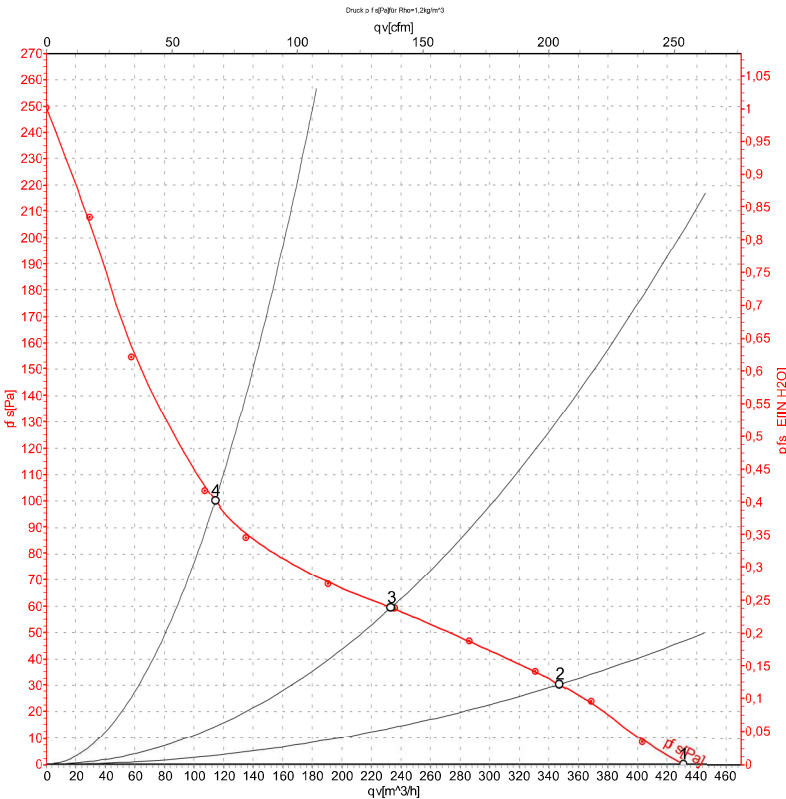
## Measured values

|   | U   | f  | n                 | P <sub>e</sub> | I    | qv   | p <sub>fs</sub> | qv  | p <sub>fs</sub>    |
|---|-----|----|-------------------|----------------|------|------|-----------------|-----|--------------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m³/h | Pa              | CFM | inH <sub>2</sub> O |
| 1 | 230 | 50 | 2350              | 53             | 0.33 | 445  | 0               | 260 | 0.00               |
| 2 | 230 | 50 | 2245              | 54             | 0.33 | 360  | 50              | 210 | 0.20               |
| 3 | 230 | 50 | 2120              | 57             | 0.34 | 245  | 100             | 145 | 0.40               |
| 4 | 230 | 50 | 2175              | 55             | 0.34 | 135  | 140             | 80  | 0.56               |

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase



Curves: Air performance 60 Hz



Measurement: LU-44428-1

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 <sub>e</sub> | I    | qv   | p <sub>fs</sub> | qv  | p <sub>fs</sub> |
|---|-----|----|-------------------|----------------|------|------|-----------------|-----|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W              | A    | m³/h | Pa              | CFM | inH2O           |
| 1 | 230 | 60 | 2300              | 51             | 0.29 | 430  | 0               | 255 | 0.00            |
| 2 | 230 | 60 | 2060              | 53             | 0.30 | 345  | 30              | 205 | 0.12            |
| 3 | 230 | 60 | 1775              | 55             | 0.31 | 235  | 60              | 135 | 0.24            |
| 4 | 230 | 60 | 1825              | 54             | 0.30 | 115  | 100             | 65  | 0.40            |

U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

