**D4E240-AA01-07**

# AC centrifugal fan

forward-curved, dual-intake

with housing (without flange)

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## Nominal data

| | |
|---|---|
| **Type** | **D4E240-AA01-07** |
| **Motor** | **M4E094-IF** |

| | | |
|---|---|---|
| Phase | | 1~ |
| Nominal voltage | VAC | 230 |
| Frequency | Hz | 50 |
| Method of obtaining data | | fa |
| Valid for approval/standard | | CE |
| Speed (rpm) | $min^{-1}$ | 1300 |
| Power consumption | W | 1020 |
| Current draw | A | 4.45 |
| Capacitor | µF | 25 |
| Capacitor voltage | VDB | 400 |
| Capacitor standard | | S2 (CE) |
| Min. back pressure | Pa | 0 |
| Min. back pressure | inH2O | 0 |
| Min. ambient temperature | °C | -40 |
| Max. ambient temperature | °C | 70 |
| Starting current | A | 8.3 |

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

## Data according to ErP Directive

| | | Actual | Req. 2015 |
|---|---|---|---|
| 01 Overall efficiency $\eta_e$ | % | 41.7 | 41.7 |
| 02 Measurement category | | B | |
| 03 Efficiency category | | Total | |
| 04 Efficiency grade N | | 49 | 49 |
| 05 Variable speed drive | | No | |

| | | |
|---|---|---|
| 09 Power consumption $P_e$ | kW | 0.7 |
| 09 Air flow $q_v$ | $m^3/h$ | 2405 |
| 09 Pressure increase $p_f$ | Pa | 428 |
| 10 Speed (rpm) n | $min^{-1}$ | 1390 |
| 11 Specific ratio* | | 1.00 |

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = 1 + $p_f$ / 100 000 Pa

LU-155176

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## Technical description

| | |
|---|---|
| **Weight** | 14.1 kg |
| **Fan size** | 240 mm |
| **Impeller material** | Sheet steel, galvanized |
| **Housing material** | Sheet steel, galvanized |
| **Motor suspension** | Motor vibration-damped on both sides |
| **Direction of rotation** | Counterclockwise, viewed toward rotor |
| **Degree of protection** | IP00 |
| **Insulation class** | "F" |
| **Moisture (F) / Environmental (H) protection class** | F0 |
| **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)** | <= 3.5 mA |
| **Motor protection** | Thermal overload protector (TOP) with basic insulation |
| **With cable** | Lateral |
| **Protection class** | I (with customer connection of protective earth) |
| **Motor capacitor according to EN 60252-1 in safety protection class** | S2 |
| **Conformity with standards** | EN 60034-1 (2010); CE |



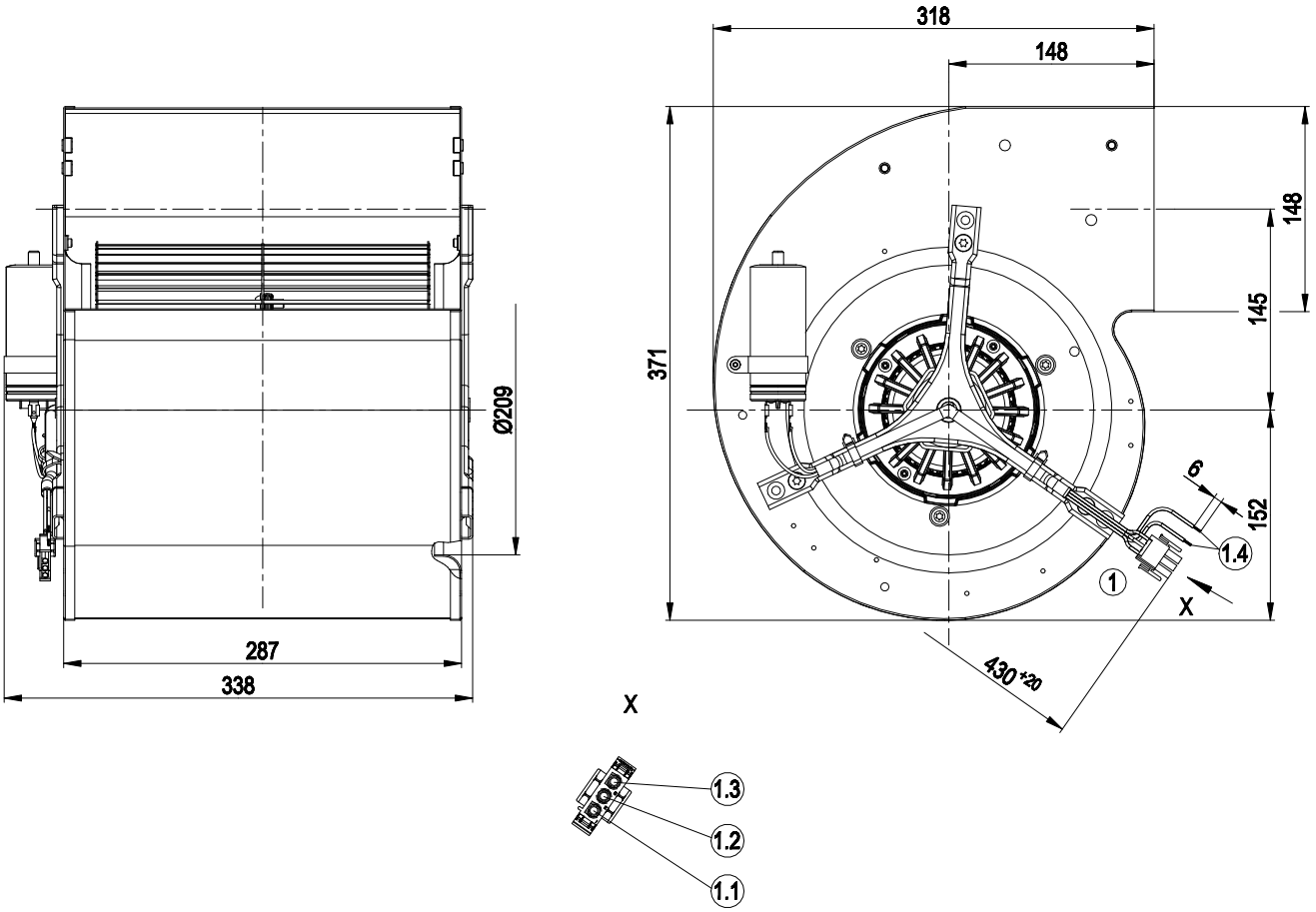
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## Product drawing




| | |
|---|---|
| 1 | Cable PVC AWG18 with connector housing AMP part number 350 766-4 with 3 x plug pin AMP part number 926 885-1, 2x crimped splices and 2x crimped flat push-on receptacles |
| 1.1 | PE (green/yellow) |
| 1.2 | U1 (blue) |
| 1.3 | U2 (black) |
| 1.4 | TOP 2x (gray) |



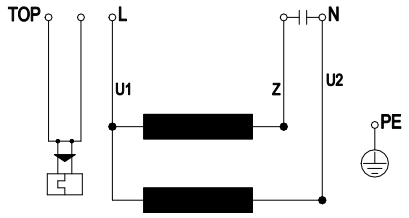
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## Connection diagram




| | | | | | |
|---|---|---|---|---|---|
| TOP | 2x gray | U1 | blue | Z | brown |
| U2 | black | PE | green/yellow | | |



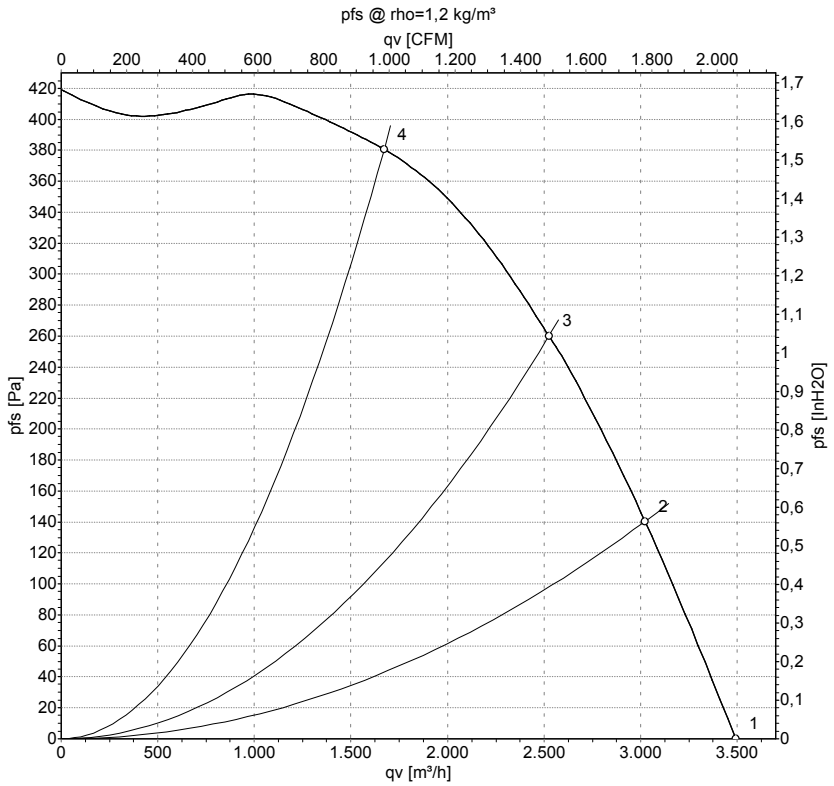
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## Curves: Air performance 50 Hz




Measurement: LU-66809-1

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 | inH2O |
| 1 | 230 | 50 | 1300 | 1020 | 4.45 | 3495 | 0 | 2055 | 0.00 |
| 2 | 230 | 50 | 1340 | 868 | 3.82 | 3025 | 140 | 1780 | 0.56 |
| 3 | 230 | 50 | 1375 | 749 | 3.33 | 2525 | 260 | 1485 | 1.04 |
| 4 | 230 | 50 | 1420 | 584 | 2.67 | 1670 | 380 | 985 | 1.53 |

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



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