

D4E225-CC01-39

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

<https://www.incotric.com>

invotric@gmail.com

Nominal data

| | | | |
|-------------------------------|-------------------|---------|---------|
| Type | D4E225-CC01-39 | | |
| Motor | M4E074-LA | | |
| Phase | | 1~ | 1~ |
| Nominal voltage | VAC | 230 | 230 |
| Frequency | Hz | 50 | 60 |
| Type of data definition | | ml | ml |
| Valid for approval / standard | | CE | CE |
| Speed | min ⁻¹ | 1210 | 1300 |
| Power input | W | 540 | 625 |
| Current draw | A | 2.4 | 2.75 |
| Motor capacitor | µF | 16 | 16 |
| Capacitor voltage | VDB | 400 | 400 |
| Capacitor standard | | P2 (CE) | P2 (CE) |
| Min. back pressure | Pa | 250 | 300 |
| Min. ambient temperature | °C | -25 | -25 |
| Max. ambient temperature | °C | 30 | 30 |

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

Data according to ErP directive

| | |
|-----------------------|-------|
| Installation category | B |
| Efficiency category | Total |
| Variable speed drive | No |
| Specific ratio* | 1.00 |

* Specific ratio = $1 + p_f / 100\,000\text{ Pa}$

| | Actual | Request 2013 | Request 2015 |
|-----------------------------|-------------------|--------------|--------------|
| Overall efficiency η_e | 36.5 | 33.9 | 40.9 |
| Efficiency grade N | 44.6 | 42 | 49 |
| Power input P_e | kW | 0.53 | |
| Air flow q_v | m ³ /h | 1965 | |
| Pressure increase p_f | Pa | 361 | |
| Speed n | min ⁻¹ | 1335 | |

Data definition with optimum efficiency.

D4E225-CC01-39

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Technical features

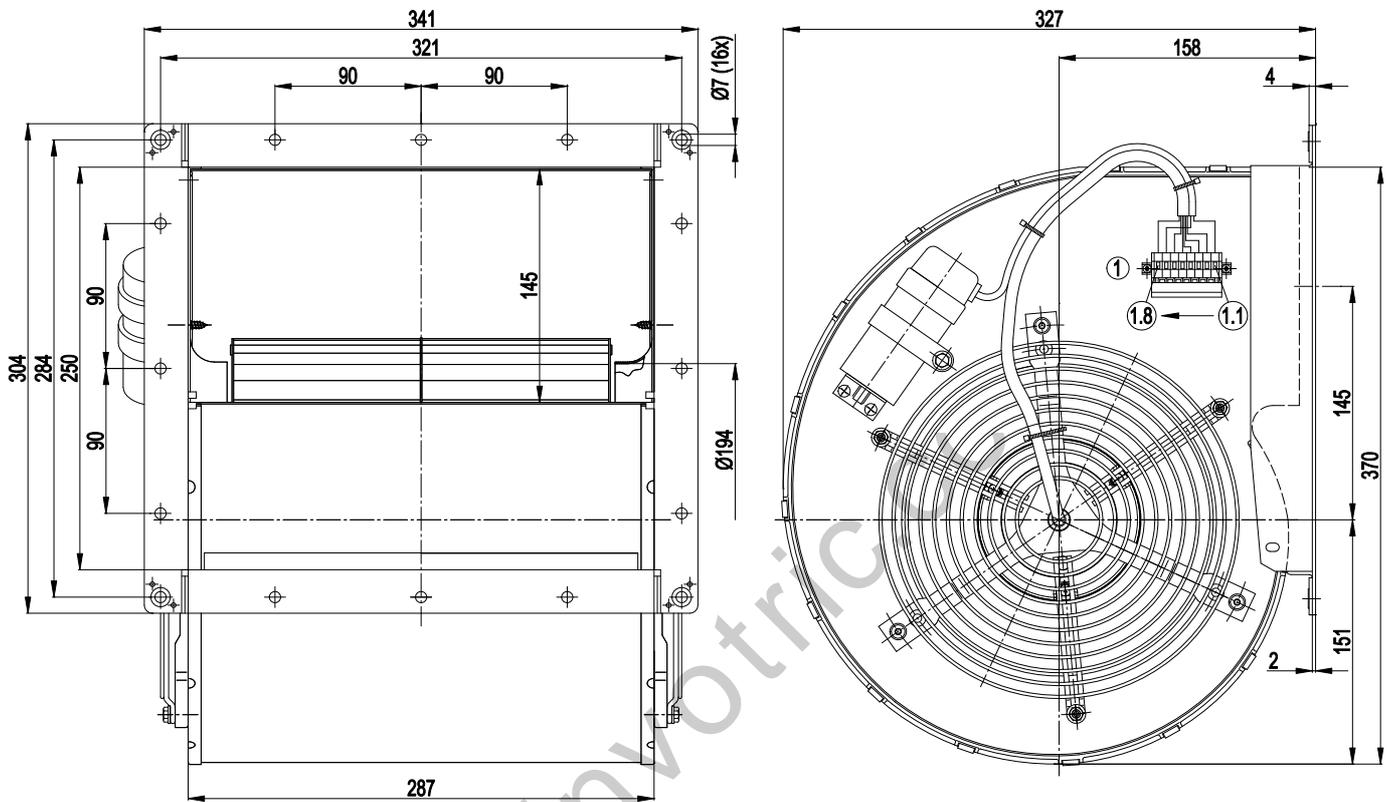
| | |
|---|--|
| Mass | 13.4 kg |
| Size | 225 mm |
| Surface of rotor | Coated in black |
| Material of impeller | Sheet steel, galvanised |
| Housing material | Sheet steel, galvanised |
| Material of guard grille | Steel, galvanised and plastic-coated in white aluminium (RAL 9006) |
| Motor suspension | Motor anti-vibration mounted on both sides |
| Direction of rotation | Counter-clockwise, seen on rotor |
| Type of protection | IP 22 |
| Insulation class | "B" |
| Humidity class | F2-1 |
| 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 |
| Touch current acc. IEC 60990 (measuring network Fig. 4, TN system) | < 0.75 mA |
| Motor protection | Thermal overload protector (TOP) brought out |
| Protection class | I (if protective earth is connected by customer) |
| Product conforming to standard | EN 60335-1; CE |
| Approval | CSA C22.2 Nr.100; UL 1004-1; CCC |

D4E225-CC01-39

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Product drawing



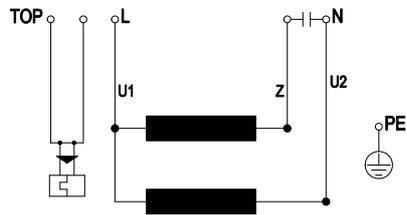
| | |
|-----|---|
| 1 | Connection line with connector housing WAGO 231-608/019-000 |
| 1.1 | Capacitor |
| 1.2 | Z |
| 1.3 | U1 |
| 1.4 | TOP |
| 1.5 | PE |
| 1.6 | TOP |
| 1.7 | Capacitor |
| 1.8 | U2 |

D4E225-CC01-39

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Connection screen



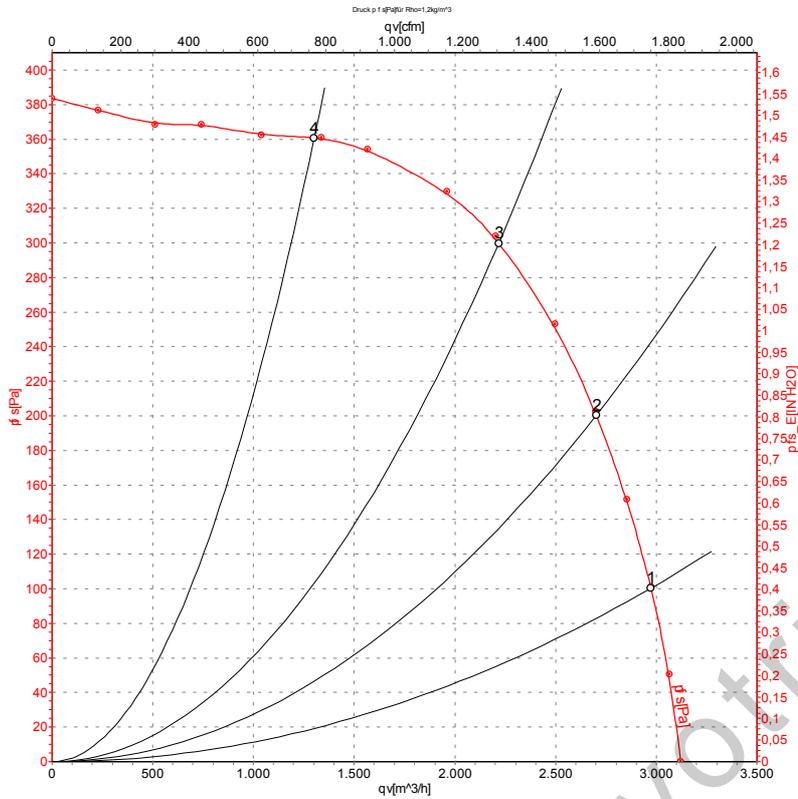
| | | | | | |
|-----|----------|----|----------------|---|-------|
| TOP | 2 x grey | U1 | blue | Z | brown |
| U2 | black | PE | green / yellow | | |

www.invotric.cc

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Charts: Air flow 50 Hz



Measurement: LU-35314

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

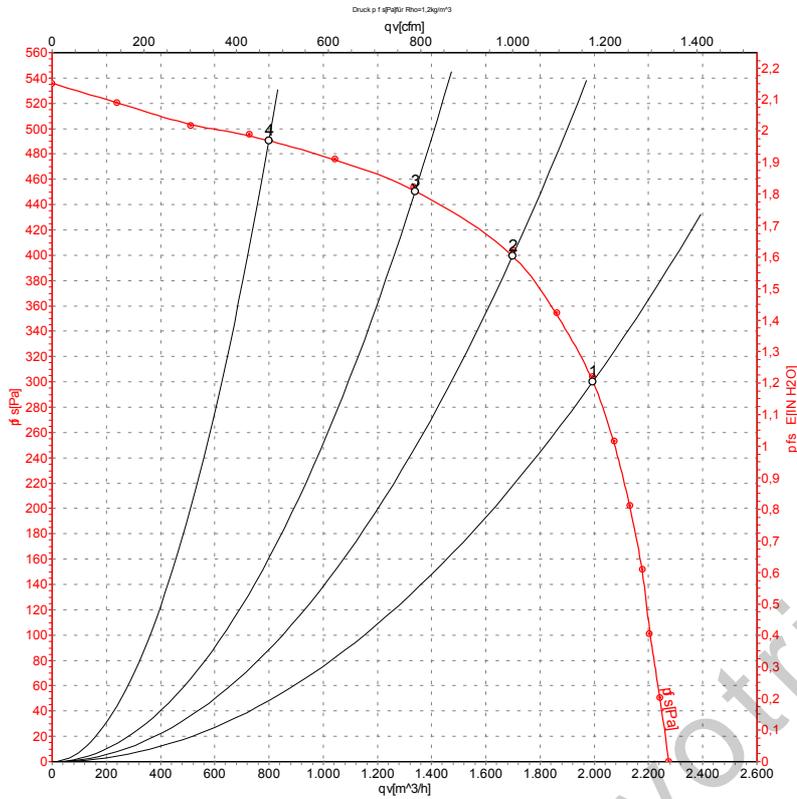
| | U | f | n | P _e | I | qv | p _{fs} |
|---|-----|----|-------------------|----------------|------|------|-----------------|
| | V | Hz | min ⁻¹ | W | A | m³/h | Pa |
| 1 | 230 | 50 | 1150 | 783 | 3.42 | 2975 | 100 |
| 2 | 230 | 50 | 1195 | 689 | 3.05 | 2700 | 200 |
| 3 | 230 | 50 | 1300 | 581 | 2.65 | 2215 | 300 |
| 4 | 230 | 50 | 1395 | 445 | 2.15 | 1300 | 360 |

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · p_{fs} = Pressure increase

AC centrifugal fan

forward curved, dual inlet
with housing (large flange)

Charts: Air flow 60 Hz



Measurement: LU-35316

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: LwA measured as per ISO 13347 /LpA 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 | f | n | P _e | I | qv | P _{fs} |
|---|-----|----|-------------------|----------------|------|-------------------|-----------------|
| | V | Hz | min ⁻¹ | W | A | m ³ /h | Pa |
| 1 | 230 | 60 | 1300 | 646 | 2.81 | 1995 | 300 |
| 2 | 230 | 60 | 1465 | 553 | 2.43 | 1700 | 400 |
| 3 | 230 | 60 | 1565 | 474 | 2.13 | 1340 | 450 |
| 4 | 230 | 60 | 1645 | 390 | 1.83 | 800 | 490 |

U = Supply voltage · f = Frequency · n = Speed · P_e = Power input · I = Current draw · qv = Air flow · P_{fs} = Pressure increase