**G4D225-GK10-10**

# AC centrifugal fan

forward-curved, single-intake

with housing (large flange)

G4D225-GK10-10 ebmpapst Datasheet
sales@fansco.com
www.fansco.com

## Nominal data

| | |
|---|---|
| **Type** | **G4D225-GK10-10** |
| **Motor** | **M4D094-FA** |

| | | | |
|---|---|---|---|
| Phase | | 3~ | 3~ |
| Nominal voltage | VAC | 400 | 400 |
| Wiring | | Y | Y |
| Frequency | Hz | 50 | 60 |
| Method of obtaining data | | fa | ml |
| Valid for approval/standard | | CE | CE |
| Speed (rpm) | $min^{-1}$ | 1310 | 1520 |
| Power consumption | W | 460 | 515 |
| Current draw | A | 0.85 | 0.9 |
| Min. back pressure | Pa | 0 | 200 |
| Min. back pressure | inH2O | 0 | 0.8 |
| Min. ambient temperature | °C | -40 | -40 |
| Max. ambient temperature | °C | 75 | 60 |
| Starting current | A | 2.8 | 2.7 |

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 $\eta_e$ | % | 40.3 | 38.4 |
| 02 Measurement category | | B | |
| 03 Efficiency category | | Total | |
| 04 Efficiency grade N | | 50.9 | 49 |
| 05 Variable speed drive | | No | |

| | | |
|---|---|---|
| 09 Power consumption $P_e$ | kW | 0.21 |
| 09 Air flow $q_v$ | $m^3/h$ | 910 |
| 09 Pressure increase $p_f$ | Pa | 340 |
| 10 Speed (rpm) n | $min^{-1}$ | 1430 |
| 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-56990



G4D225-GK10-10 ebmpapst Datasheet FansCo sales@fansco.com www.fansco.com

# AC centrifugal fan

forward-curved, single-intake

with housing (large flange)

## Technical description

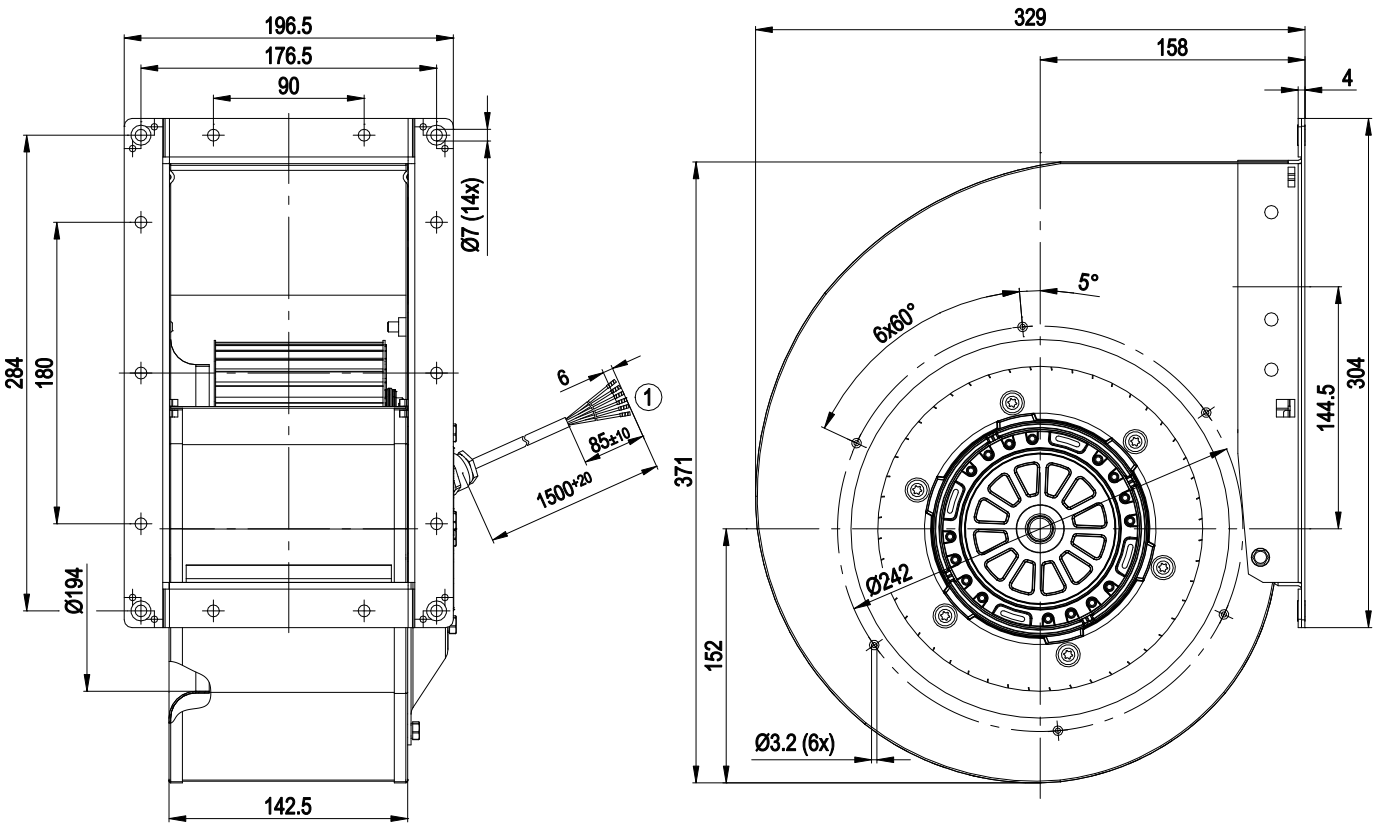
| | |
|---|---|
| **Weight** | 11 kg |
| **Fan size** | 225 mm |
| **Rotor surface** | Painted black |
| **Impeller material** | Sheet steel, hot-dip galvanized |
| **Housing material** | Sheet steel, hot-dip galvanized |
| **Direction of rotation** | Clockwise, viewed toward rotor |
| **Degree of protection** | IP54 |
| **Insulation class** | "F" |
| **Moisture (F) / Environmental (H) protection class** | F4-1 |
| **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** | Variable |
| **Protection class** | I (with customer connection of protective earth) |
| **Conformity with standards** | EN 60034-1 (2004); CE |
| **Approval** | UL 1004-1; CSA C22.2 No. 100 |

# AC centrifugal fan

forward-curved, single-intake

with housing (large flange)

## Product drawing



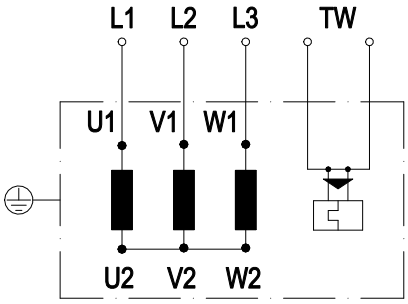

| | |
|---|---|
| 1 | Cable AWG18, 6x crimped splices |

# AC centrifugal fan

forward-curved, single-intake

with housing (large flange)

## Connection diagram




Note: Change of rotation direction by reversing two phases

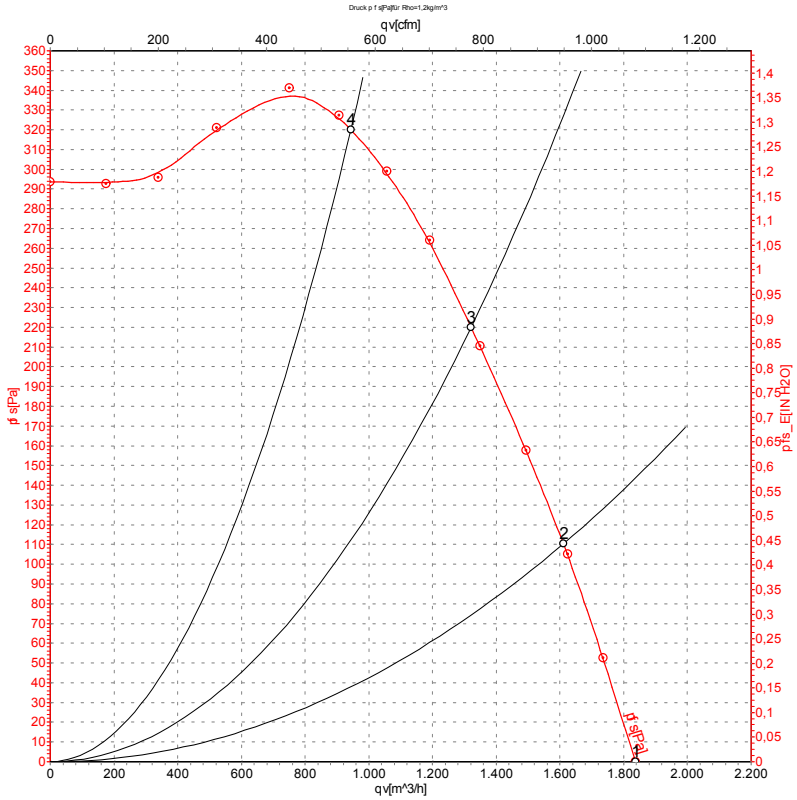
| | | | | | |
|---|---|---|---|---|---|
| Y | Star connection | L1 | black | L2 | black |
| L3 | black | TOP | 2 x black | | |

# AC centrifugal fan

forward-curved, single-intake

with housing (large flange)

## Curves: Air performance 50 Hz Y




Measurement: LU-56990-1

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

| | Wired | U | f | n | $P_e$ | I | qv | $p_{fs}$ | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | CFM | inH2O |
| 1 | Y | 400 | 50 | 1310 | 460 | 0.85 | 1835 | 0 | 1080 | 0.00 |
| 2 | Y | 400 | 50 | 1350 | 385 | 0.76 | 1610 | 110 | 950 | 0.44 |
| 3 | Y | 400 | 50 | 1390 | 304 | 0.67 | 1320 | 220 | 780 | 0.88 |
| 4 | Y | 400 | 50 | 1425 | 219 | 0.60 | 945 | 320 | 555 | 1.28 |

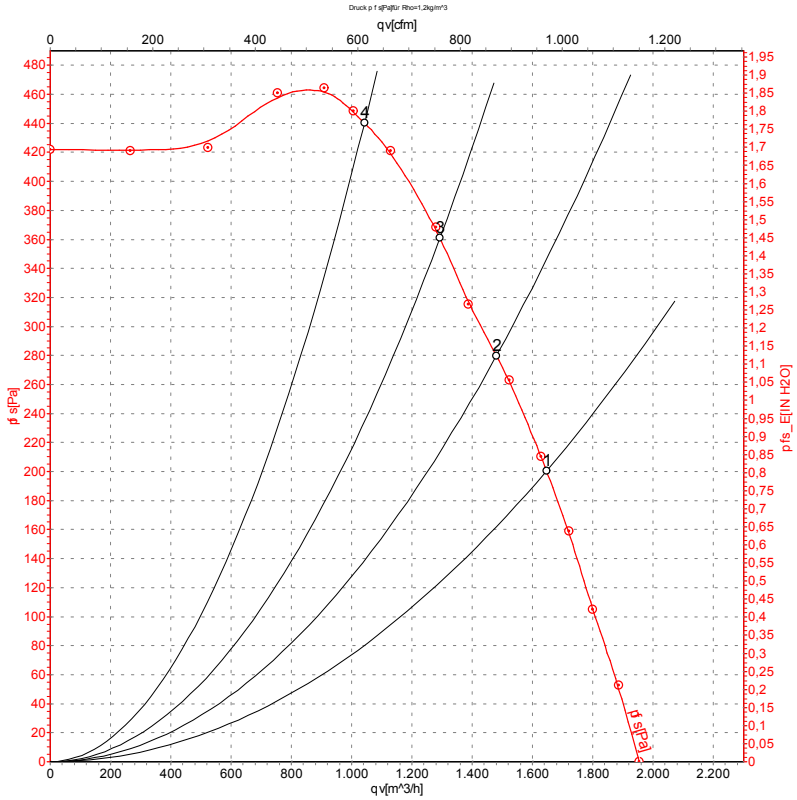
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · $P_e$ = Power consumption · I = Current draw · qv = Air flow · $p_{fs}$ = Pressure increase

# AC centrifugal fan

forward-curved, single-intake

with housing (large flange)

## Curves: Air performance 60 Hz Y




Measurement: LU-56991-1

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

| | Wired | U | f | n | $P_e$ | I | qv | $p_{fs}$ | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | V | Hz | $min^{-1}$ | W | A | $m^3/h$ | Pa | CFM | inH2O |
| 1 | Y | 400 | 60 | 1520 | 515 | 0.90 | 1645 | 200 | 970 | 0.80 |
| 2 | Y | 400 | 60 | 1555 | 466 | 0.82 | 1480 | 280 | 870 | 1.12 |
| 3 | Y | 400 | 60 | 1605 | 390 | 0.70 | 1290 | 360 | 760 | 1.45 |
| 4 | Y | 400 | 60 | 1655 | 312 | 0.60 | 1040 | 440 | 615 | 1.77 |

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