**R3G400-AD08-32**

# EC centrifugal fan

backward curved

R3G400-AD08-32 ebmpapst Datasheet
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ErP2015 EXCEEDS THE NORM

## Nominal data

| | | |
|---|---|---|
| **Type** | **R3G400-AD08-32** | |
| **Motor** | **M3G084-FA** | |
| Nominal voltage | VDC | 48 |
| Nominal voltage range | VDC | 36 .. 57 |
| Type of data definition | | fa |
| Speed | $min^{-1}$ | 1500 |
| Power input | W | 280 |
| Current draw | A | 5.9 |
| Min. ambient temperature | °C | -40 |
| Max. ambient temperature | °C | 40 |

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 | A |
| Efficiency category | Static |
| Variable speed drive | Yes |
| Specific ratio* | 1.00 |

* Specific ratio = 1 + $p_{fs}$ / 100 000 Pa

| | | Actual | Request 2013 | Request 2015 |
|---|---|---|---|---|
| Overall efficiency $\eta_{es}$ | | 61.9 | 42.7 | 46.7 |
| Efficiency grade N | | 77.2 | 58 | 62 |
| Power input $P_e$ | kW | 0.35 | | |
| Air flow $q_v$ | $m^3/h$ | 2405 | | |
| Pressure increase $p_{fs}$ | Pa | 295 | | |
| Speed n | $min^{-1}$ | 1440 | | |

Data established at point of optimum efficiency



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## Technical features

| | |
|---|---|
| **Mass** | 5.3 kg |
| **Size** | 400 mm |
| **Surface of rotor** | Coated in black |
| **Material of electronics housing** | Die-cast aluminium |
| **Material of impeller** | Sheet aluminium, laser-welded |
| **Number of blades** | 6 |
| **Direction of rotation** | Clockwise, seen on rotor |
| **Type of protection** | IP 42 |
| **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** | Shaft horizontal or rotor on top; rotor on bottom on request |
| **Condensate discharge holes** | None |
| **Operation mode** | S1 |
| **Motor bearing** | Ball bearing |
| **Technical features** | - Control input 0-10 VDC / PWM<br>- Output 10 VDC max. 1.1 mA<br>- Tach output |
| **EMC interference immunity** | Acc. to EN 61000-6-2 |
| **EMC interference emission** | Acc. to EN 55022 (Class B) |
| **Motor protection** | Thermal overload protector (TOP) wired internally |
| **Cable exit** | Variable |
| **Approval** | CCC; UL 1004-1; CSA C22.2 Nr.100 |

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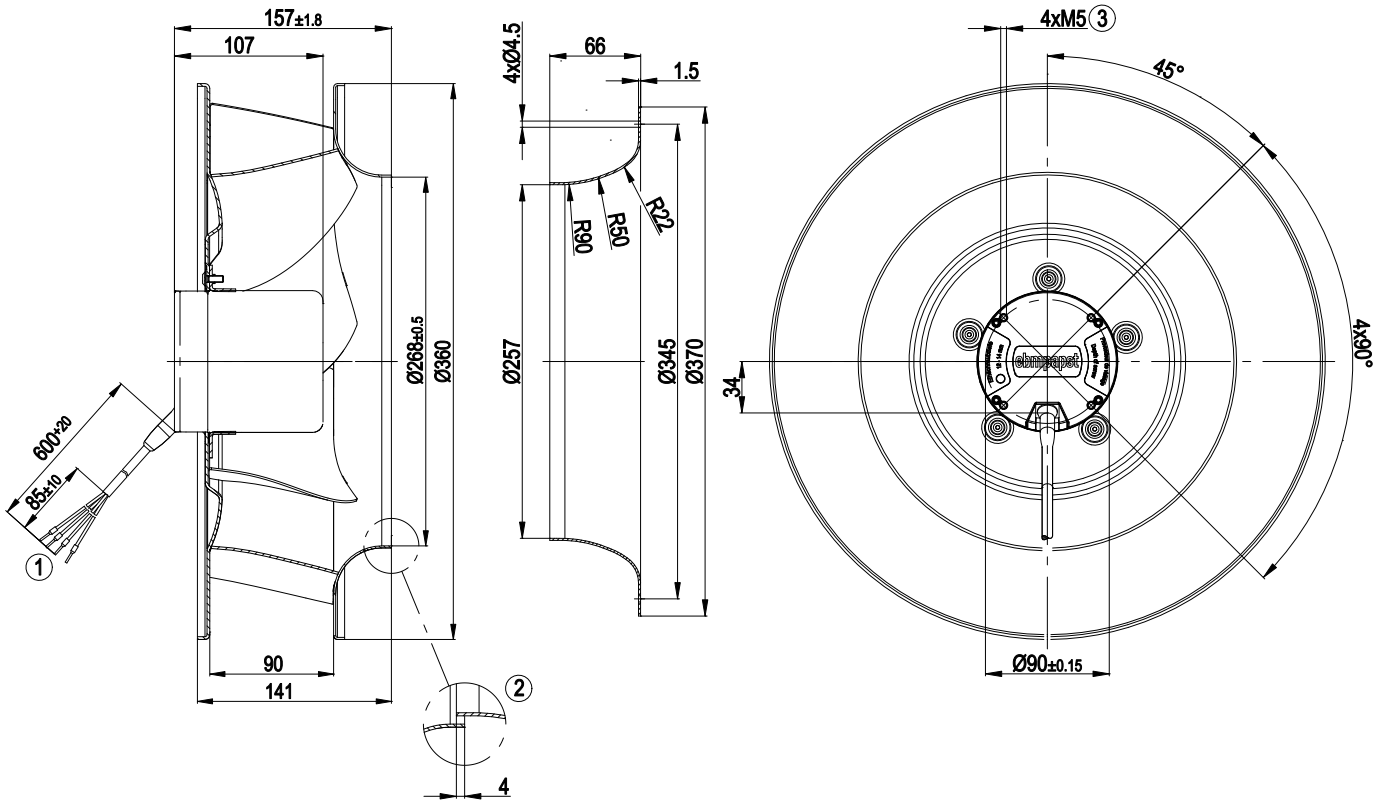
## Product drawing




| | |
|---|---|
| 1 | Connection line AWG 16, 4 x crimped core-end sleeves |
| 2 | Accessory part: inlet nozzle 54476-2-4013 not included in the standard scope of delivery; other inlet nozzles on request |
| 3 | Depth of screw 12 - 14 mm |

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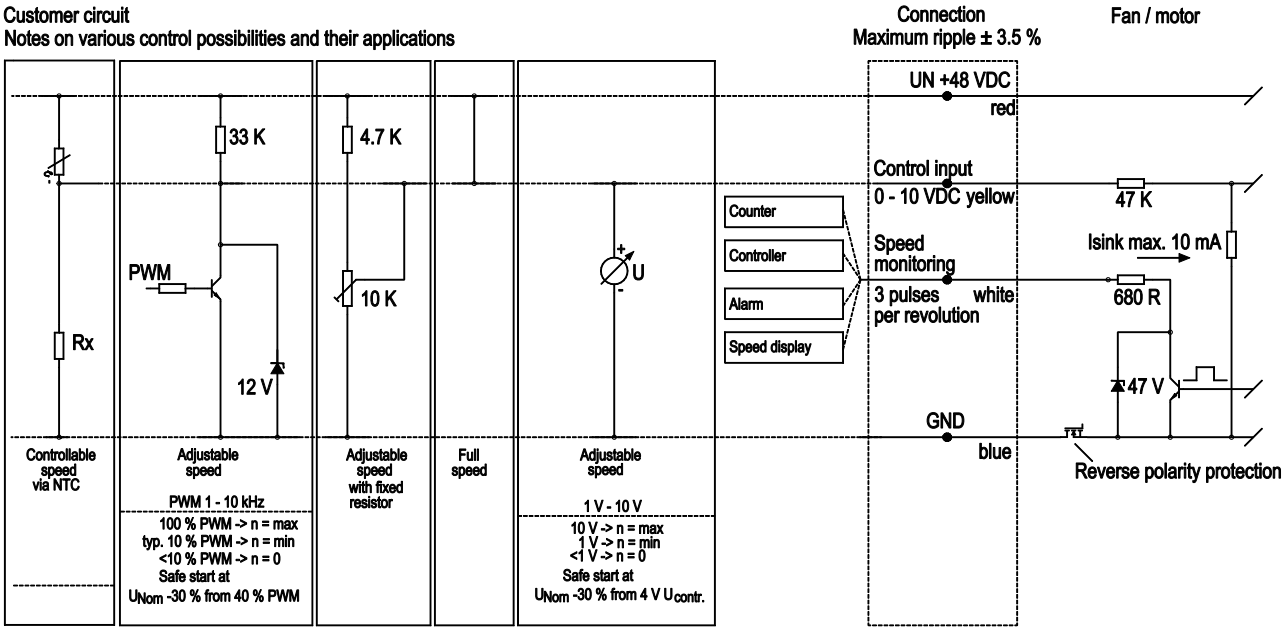
## Connection screen



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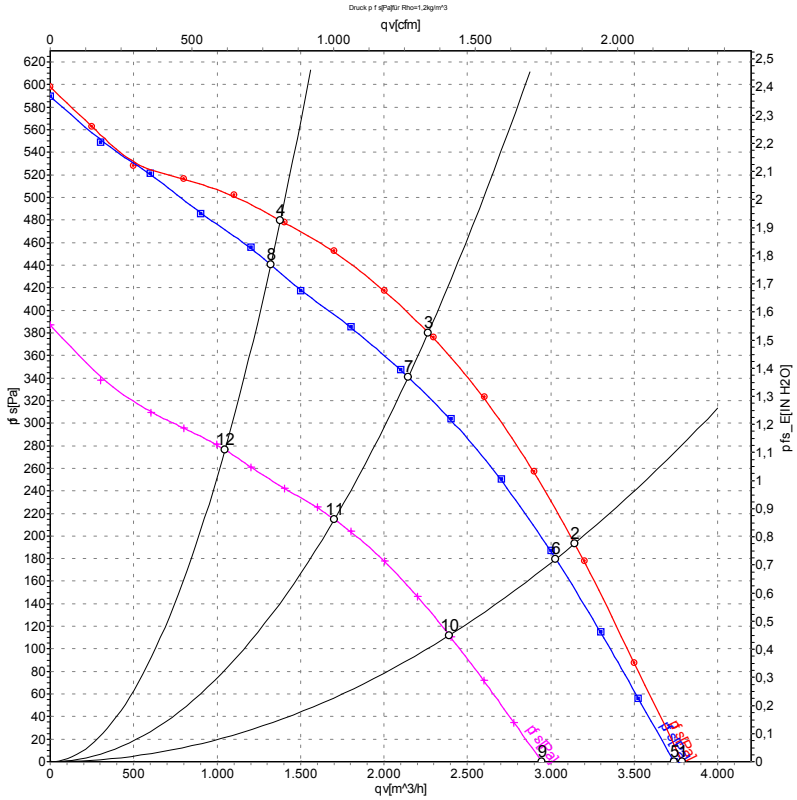
## Charts: Air flow




Measurement: LU-120913
Measurement: LU-120908
Measurement: LU-120909

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 | n | $P_{ed}$ | I | qv | $p_{fs}$ |
|---|---|---|---|---|---|---|
| | V | $min^{-1}$ | W | A | $m^3/h$ | Pa |
| 1 | 57 | 1520 | 293 | 5.19 | 3785 | 0 |
| 2 | 57 | 1510 | 374 | 6.64 | 3140 | 190 |
| 3 | 57 | 1515 | 424 | 7.56 | 2265 | 380 |
| 4 | 57 | 1520 | 377 | 6.69 | 1380 | 480 |
| 5 | 48 | 1500 | 280 | 5.90 | 3740 | 0 |
| 6 | 48 | 1460 | 330 | 6.96 | 3030 | 180 |
| 7 | 48 | 1435 | 355 | 7.50 | 2145 | 341 |
| 8 | 48 | 1465 | 328 | 6.91 | 1320 | 440 |
| 9 | 36 | 1185 | 138 | 3.87 | 2945 | 0 |
| 10 | 36 | 1160 | 164 | 4.59 | 2390 | 112 |
| 11 | 36 | 1145 | 177 | 4.96 | 1700 | 215 |
| 12 | 36 | 1160 | 163 | 4.56 | 1045 | 277 |

U = Supply voltage · n = Speed · $P_{ed}$ = Power input · I = Current draw · qv = Air flow · $p_{fs}$ = Pressure increase