

# EC axial compact fan

sickled blades (S series)



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## Nominal data

|                          |                   |            |
|--------------------------|-------------------|------------|
| Type                     | W3G200-HD01-01    |            |
| Motor                    | M3G055-BD         |            |
| Phase                    |                   | 1~         |
| Nominal voltage          | VAC               | 230        |
| Nominal voltage range    | VAC               | 200 .. 240 |
| Frequency                | Hz                | 50/60      |
| Type of data definition  |                   | ml         |
| Speed                    | min <sup>-1</sup> | 2900       |
| Power input              | W                 | 54         |
| Current draw             | A                 | 0.55       |
| Max. back pressure       | Pa                | 96         |
| Min. ambient temperature | °C                | -25        |
| Max. ambient temperature | °C                | 60         |

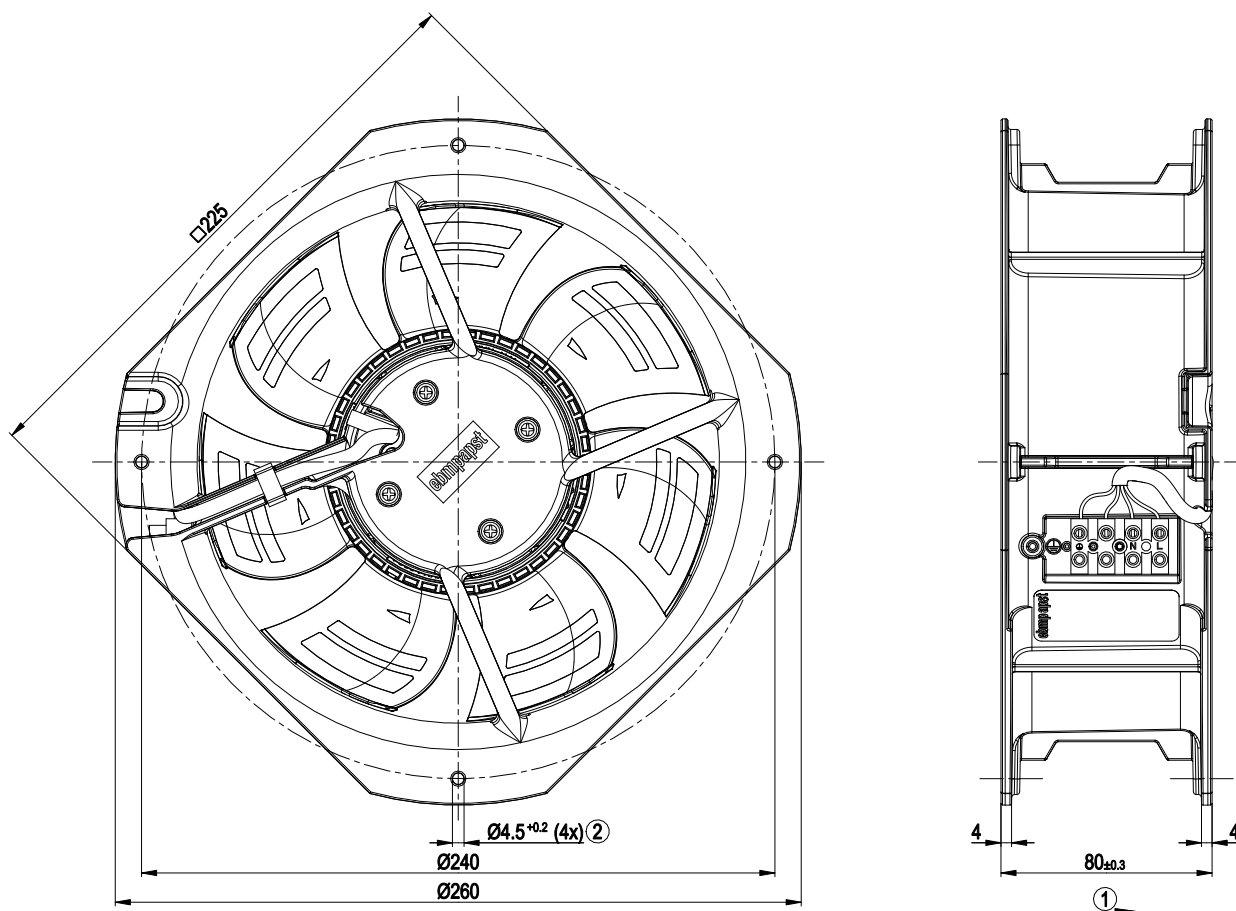
ml = Max. load · me = Max. efficiency · fa = Running at free air · cs = Customer specs · cu = Customer unit  
Subject to alterations



## Technical features

|                                                                    |                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mass                                                               | 1.6 kg                                                                                                                                                                                                                                                           |
| Size                                                               | 200 mm                                                                                                                                                                                                                                                           |
| Material of blades                                                 | Press-fitted sheet steel blank, sprayed with PP plastic                                                                                                                                                                                                          |
| Material of wall ring                                              | Die-cast aluminium                                                                                                                                                                                                                                               |
| Number of blades                                                   | 7                                                                                                                                                                                                                                                                |
| Direction of air flow                                              | "V"                                                                                                                                                                                                                                                              |
| Direction of rotation                                              | Counter-clockwise, seen on rotor                                                                                                                                                                                                                                 |
| Type of protection                                                 | IP 54                                                                                                                                                                                                                                                            |
| Insulation class                                                   | "B"                                                                                                                                                                                                                                                              |
| 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, open rotor                                                                                                                                                                                                                                                 |
| Operation mode                                                     | S1                                                                                                                                                                                                                                                               |
| Motor bearing                                                      | Ball bearing                                                                                                                                                                                                                                                     |
| Technical features                                                 | <ul style="list-style-type: none"> <li>- Speed adjustment input (230 V)</li> <li>- Output limit</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Over-temperature protected electronics / motor</li> <li>- Line undervoltage detection</li> </ul> |
| Speed steps                                                        | 2                                                                                                                                                                                                                                                                |
| EMC interference immunity                                          | Acc. to EN 61000-6-2 (industrial environment)                                                                                                                                                                                                                    |
| EMC harmonics                                                      | Acc. to EN 61000-3-2/3                                                                                                                                                                                                                                           |
| EMC interference emission                                          | Acc. to EN 61000-6-3 (household environment)                                                                                                                                                                                                                     |
| Touch current acc. IEC 60990 (measuring network Fig. 4, TN system) | <= 3.5 mA                                                                                                                                                                                                                                                        |
| Motor protection                                                   | Locked-rotor protection                                                                                                                                                                                                                                          |
| Cable exit                                                         | Variable                                                                                                                                                                                                                                                         |
| Protection class                                                   | I (if protective earth is connected by customer)                                                                                                                                                                                                                 |
| Product conforming to standard                                     | EN 60335-1; CE                                                                                                                                                                                                                                                   |
| Approval                                                           | CCC                                                                                                                                                                                                                                                              |

## Product drawing

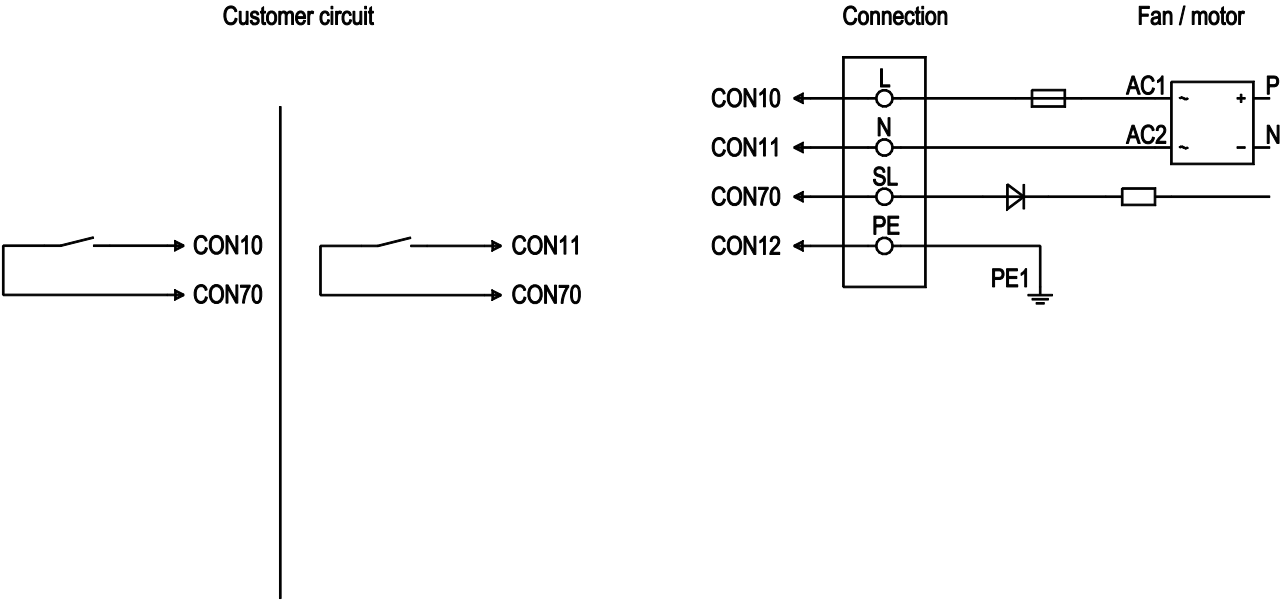


- |   |                            |
|---|----------------------------|
| 1 | Direction of air flow "V"  |
| 2 | For self-tapping M5 screws |

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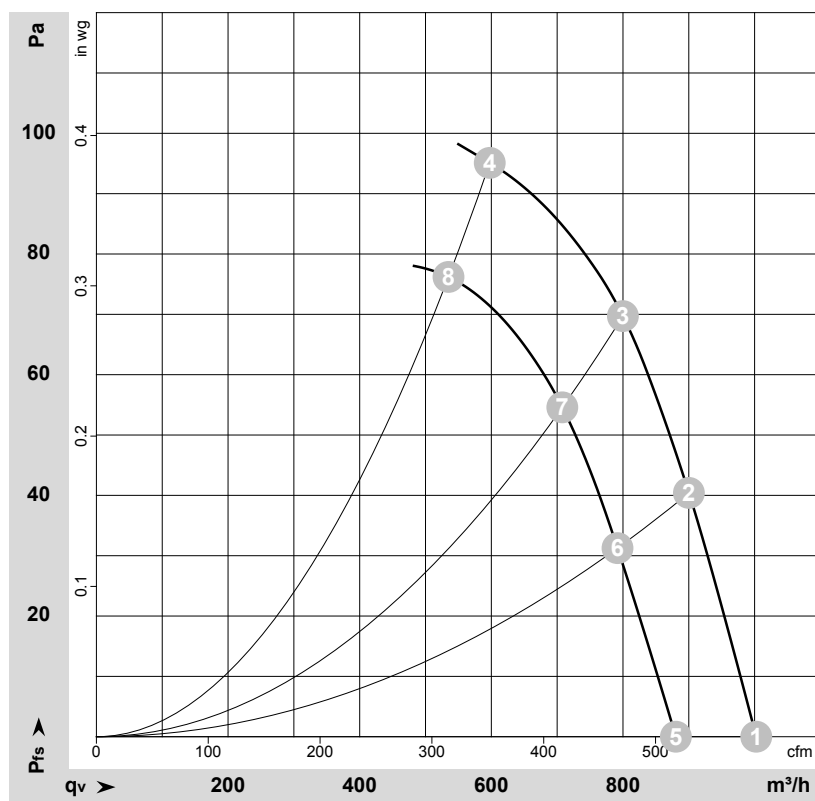
Connection screen



| No. | Conn.  | Designation | Colour       | Function / assignment                                              |
|-----|--------|-------------|--------------|--------------------------------------------------------------------|
|     | CON 10 | L           | black        | Power supply 230 VAC, 50 - 60 Hz, see type plate for voltage range |
|     | CON 11 | N           | blue         | Neutral conductor                                                  |
|     | CON 12 | PE          | green/yellow | Protective earth                                                   |
|     | CON 70 | SL          | brown        | Speed selection: switch open = speed 1; switch closed = speed 2    |



## Charts: Air flow 50 Hz



$$\rho = 1,15 \text{ kg/m}^3 \pm 2\%$$

Measurement: LU-155339  
Measurement: LU-154374

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 <sub>ed</sub> | I    | LpA <sub>in</sub> | LwA <sub>in</sub> | qv   | p <sub>fs</sub> |
|---|-----|----|-------------------|-----------------|------|-------------------|-------------------|------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W               | A    | dB(A)             | dB(A)             | m³/h | Pa              |
| 1 | 230 | 50 | 2970              | 50              | 0.49 | 58                | 65                | 1000 | 0               |
| 2 | 230 | 50 | 2885              | 55              | 0.53 | 57                | 64                | 900  | 40              |
| 3 | 230 | 50 | 2825              | 58              | 0.56 | 58                | 65                | 800  | 70              |
| 4 | 230 | 50 | 2900              | 54              | 0.55 | 64                | 71                | 600  | 96              |
| 5 | 230 | 50 | 2645              | 36              | 0.37 |                   |                   | 880  | 0               |
| 6 | 230 | 50 | 2575              | 39              | 0.40 |                   |                   | 790  | 32              |
| 7 | 230 | 50 | 2525              | 42              | 0.42 |                   |                   | 710  | 55              |
| 8 | 230 | 50 | 2510              | 42              | 0.43 |                   |                   | 535  | 76              |

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · LpA<sub>in</sub> = Sound pressure level inlet side · LwA<sub>in</sub> = Sound power level inlet side · qv = Air flow  
p<sub>fs</sub> = Pressure increase