

W3G300-CL11-32

## EC axial fan - HyBlade®

sickled blades (S series), single inlet

Wall ring with guard grille

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## Nominal data

|                          |                   |            |
|--------------------------|-------------------|------------|
| Type                     | W3G300-CL11-32    |            |
| Motor                    | M3G055-DF         |            |
| Phase                    |                   | 1~         |
| Nominal voltage          | VAC               | 230        |
| Nominal voltage range    | VAC               | 200 .. 240 |
| Frequency                | Hz                | 50/60      |
| Type of data definition  |                   | ml         |
| State                    |                   | prelim.    |
| Speed                    | min <sup>-1</sup> | 1660       |
| Power input              | W                 | 98         |
| Current draw             | A                 | 0.8        |
| Max. back pressure       | Pa                | 80         |
| 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



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## Technical features

|                                                                    |                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                                               | 300 mm                                                                                                                                                                                                                                                                                              |
| Surface of rotor                                                   | Passivated                                                                                                                                                                                                                                                                                          |
| Material of impeller                                               | PP-GF40 plastic                                                                                                                                                                                                                                                                                     |
| Material of wall ring                                              | Sheet steel, pre-galvanised and coated in black plastic                                                                                                                                                                                                                                             |
| Material of guard grille                                           | Steel, phosphated and coated in black plastic                                                                                                                                                                                                                                                       |
| 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>- Output 10 VDC, max. 1.1 mA</li> <li>- Tach output</li> <li>- Motor current limit</li> <li>- Soft start</li> <li>- Control input 0-10 VDC / PWM</li> <li>- Over-temperature protected electronics / motor</li> <li>- Line undervoltage detection</li> </ul> |
| 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                                                                                                                                                                                                                                                                                                 |

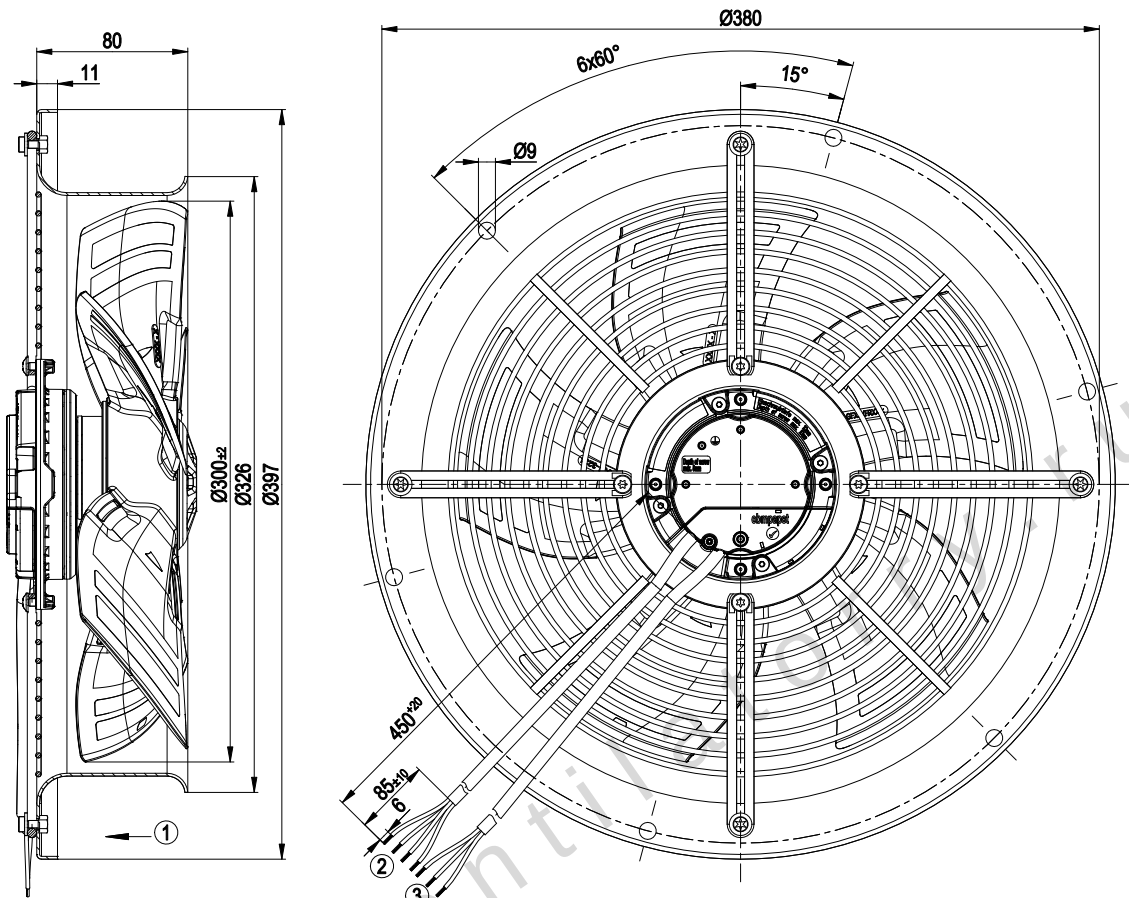
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## Product drawing



|   |                                                                         |
|---|-------------------------------------------------------------------------|
| 1 | Direction of air flow "V"                                               |
| 2 | Connection line PVC 4X 0.5 mm <sup>2</sup> ; 4x brass lead tips crimped |
| 3 | Connection line PVC 3G 0.5mm <sup>2</sup> , 3x brass lead tips crimped  |

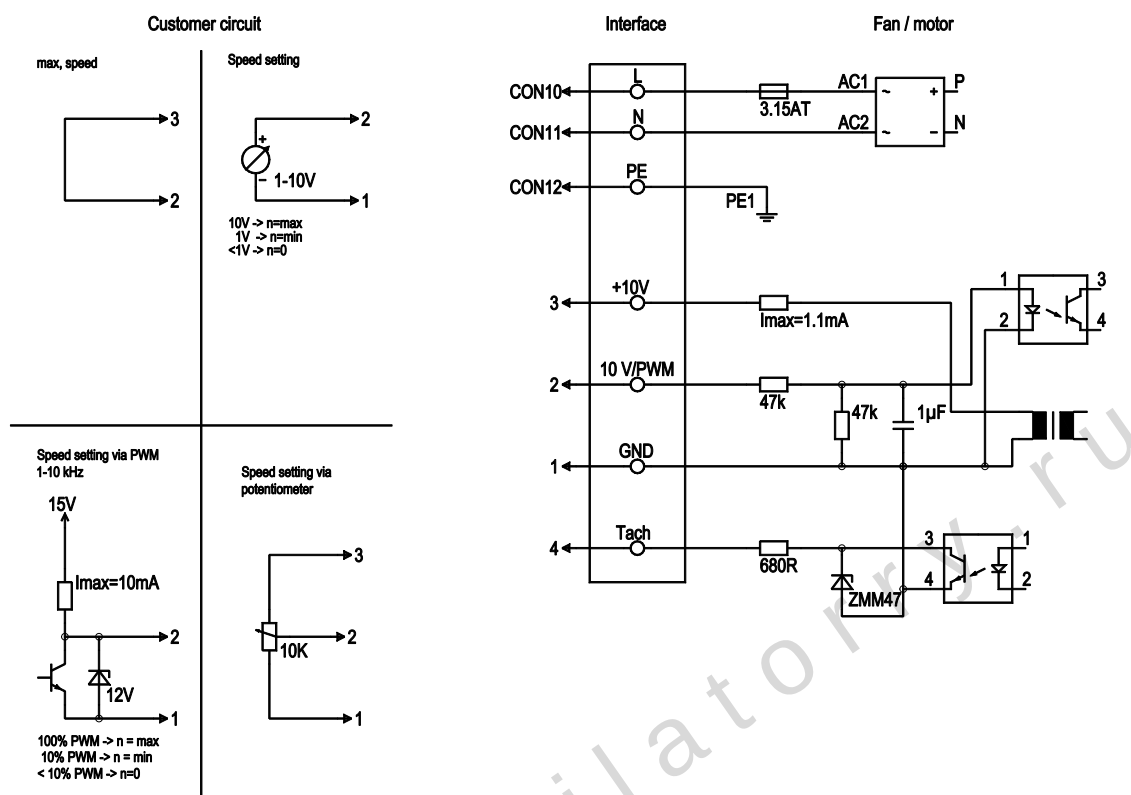
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## Connection screen



| No. | Conn. | Designation    | Colour       | Function / assignment                                                      |
|-----|-------|----------------|--------------|----------------------------------------------------------------------------|
|     | CON10 | L              | black        | Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate    |
|     | CON11 | N              | blue         | Neutral conductor                                                          |
|     | CON12 | PE             | green/yellow | Protective earth                                                           |
|     | 1     | GND            | blue         | GND - Connection for control interface                                     |
|     | 2     | 0- 10V PWM     | yellow       | Control input 0 - 10 V or PWM, electrically isolated                       |
|     | 3     | 10V/ max 1.1mA | red          | Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof. |
|     | 4     | Tach           | white        | Tach output: open collector, 1 pulse per revolution, electrically isolated |

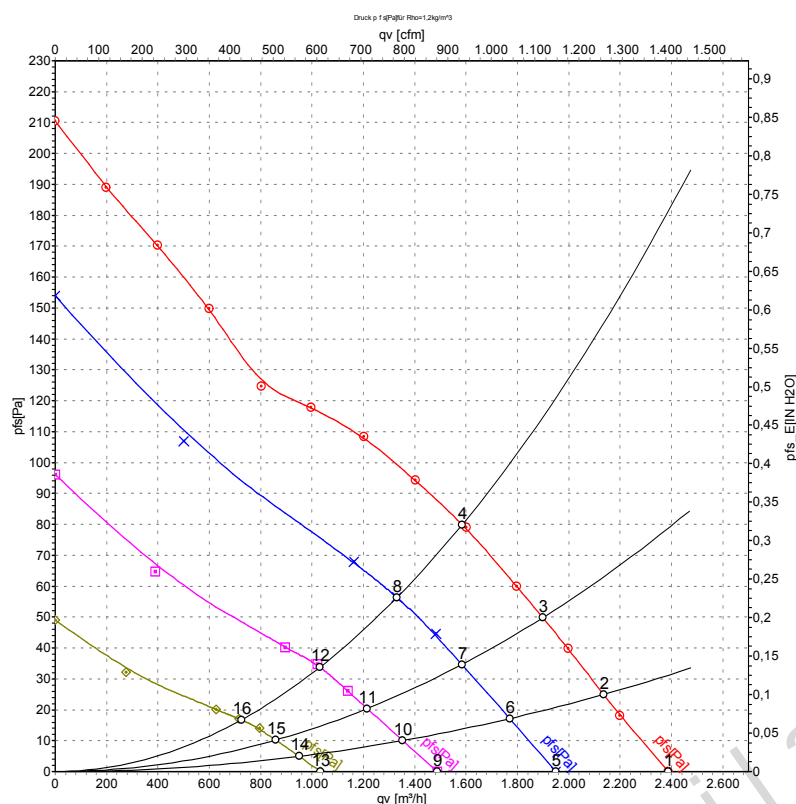
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## Charts: Air flow 50 Hz



Measurement: LU-136633  
 Measurement: LU-137015  
 Measurement: LU-137016  
 Measurement: LU-137017

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<sub>wA</sub> measured as per ISO 13347 /  
 L<sub>pA</sub> 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    | L <sub>pA<sub>in</sub></sub> | L <sub>wA<sub>in</sub></sub> | q <sub>v</sub> | p <sub>ts</sub> |
|----|-----|----|-------------------|-----------------|------|------------------------------|------------------------------|----------------|-----------------|
|    | V   | Hz | min <sup>-1</sup> | W               | A    | dB(A)                        | dB(A)                        | m³/h           | Pa              |
| 1  | 230 | 50 | 1740              | 81              | 0.67 | 59                           | 66                           | 2390           | 0               |
| 2  | 230 | 50 | 1710              | 88              | 0.74 | 59                           | 66                           | 2135           | 25              |
| 3  | 230 | 50 | 1690              | 93              | 0.77 | 59                           | 66                           | 1900           | 50              |
| 4  | 230 | 50 | 1660              | 98              | 0.80 | 59                           | 66                           | 1585           | 80              |
| 5  | 230 | 50 | 1430              | 46              | 0.43 | 54                           | 61                           | 1950           | 0               |
| 6  | 230 | 50 | 1415              | 49              | 0.46 | 54                           | 61                           | 1770           | 17              |
| 7  | 230 | 50 | 1400              | 51              | 0.49 | 54                           | 61                           | 1585           | 35              |
| 8  | 230 | 50 | 1390              | 55              | 0.50 | 54                           | 62                           | 1330           | 56              |
| 9  | 230 | 50 | 1090              | 23              | 0.23 | 47                           | 54                           | 1485           | 0               |
| 10 | 230 | 50 | 1085              | 24              | 0.25 | 47                           | 54                           | 1355           | 10              |
| 11 | 230 | 50 | 1075              | 25              | 0.26 | 46                           | 54                           | 1215           | 20              |
| 12 | 230 | 50 | 1070              | 27              | 0.28 | 47                           | 54                           | 1030           | 34              |
| 13 | 230 | 50 | 755               | 10              | 0.12 | 36                           | 44                           | 1035           | 0               |
| 14 | 230 | 50 | 755               | 11              | 0.12 | 36                           | 44                           | 950            | 5               |
| 15 | 230 | 50 | 750               | 11              | 0.13 | 36                           | 44                           | 860            | 10              |
| 16 | 230 | 50 | 750               | 12              | 0.14 | 36                           | 44                           | 725            | 17              |

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · L<sub>pA<sub>in</sub></sub> = Sound pressure level inlet side · L<sub>wA<sub>in</sub></sub> = Sound power level inlet side · q<sub>v</sub> = Air flow  
 p<sub>ts</sub> = Pressure increase