

# EC centrifugal fan

forward-curved, single-intake  
with housing (without flange), Gas blower for conventional heating

G1G108-BD41-05 ebmpapst Datasheet  
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## Nominal data

|                          |                   |          |
|--------------------------|-------------------|----------|
| Type                     | G1G108-BD41-05    |          |
| Motor                    | M1G055-AI         |          |
| Phase                    |                   | 1~       |
| Nominal voltage          | VAC               | 24       |
| Nominal voltage range    | VAC               | 16 .. 28 |
| Frequency                | Hz                | 50       |
| Speed (rpm)              | min <sup>-1</sup> | 3600     |
| Power consumption        | W                 | 19       |
| Current draw             | A                 | 1        |
| Min. ambient temperature | °C                | -25      |
| Max. ambient temperature | °C                | 100      |

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment  
Subject to change



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## Technical description

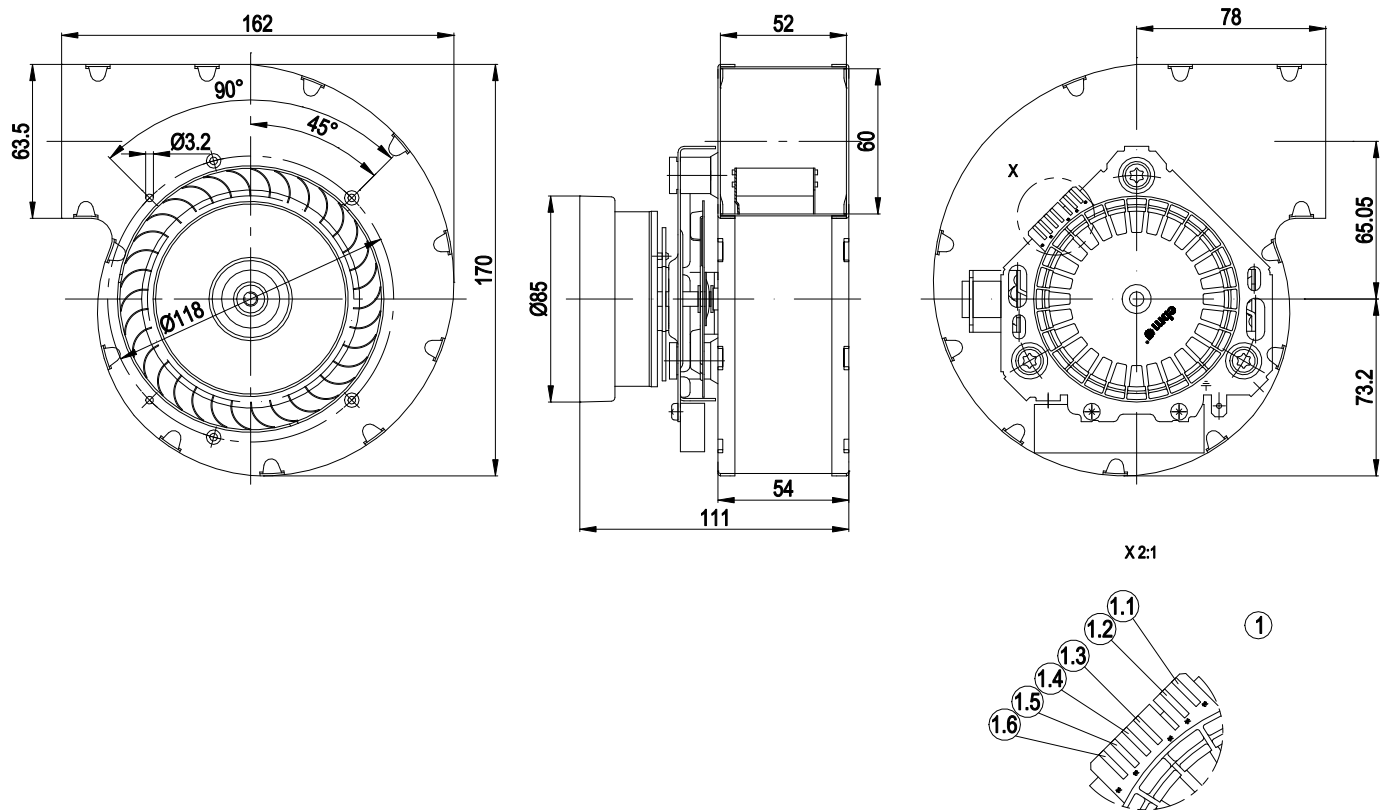
|                                                                            |                                                                                    |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Weight                                                                     | 1.1 kg                                                                             |
| Fan size                                                                   | 108 mm                                                                             |
| Rotor surface                                                              | Thick-film passivated                                                              |
| Impeller material                                                          | Sheet steel, galvanized                                                            |
| Housing material                                                           | Sheet steel, galvanized                                                            |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                                                     |
| Degree of protection                                                       | IP00                                                                               |
| Insulation class                                                           | "B"                                                                                |
| Moisture (F) / Environmental (H) protection class                          | H0 - dry environment                                                               |
| Max. permitted ambient temp. for motor (transport/storage)                 | +80 °C                                                                             |
| Min. permitted ambient temp. for motor (transport/storage)                 | -40 °C                                                                             |
| Installation position                                                      | Shaft 45° and rotor on bottom; outlet 45° upward                                   |
| Condensation drainage holes                                                | None                                                                               |
| Cooling hole/opening                                                       | On rotor side                                                                      |
| Mode                                                                       | S1                                                                                 |
| Premixing                                                                  | Not suitable for premixing.                                                        |
| Motor bearing                                                              | Ball bearing                                                                       |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | <= 3.5 mA                                                                          |
| Motor protection                                                           | Reverse polarity and locked-rotor protection                                       |
| Protection class                                                           | I (if protective earth is connected by customer to the housing's connection point) |
| Conformity with standards                                                  | EN 60335-1                                                                         |



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## Product drawing



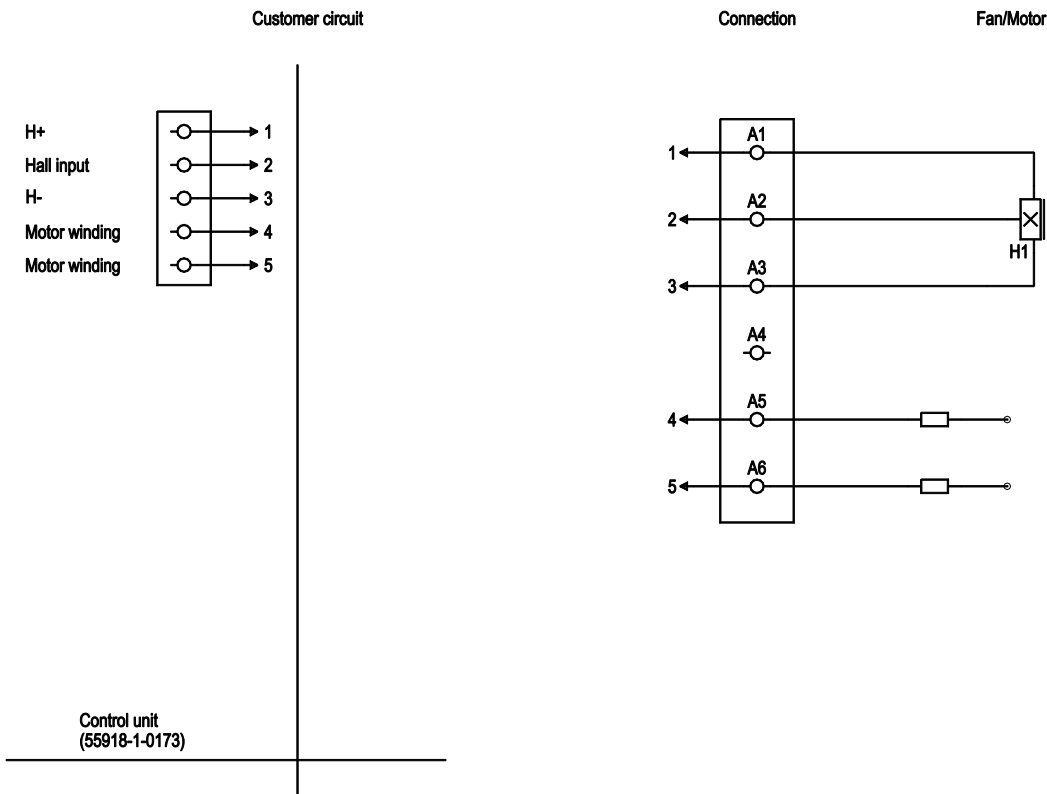
|                                                                                                                                                                                                                                 |                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 1                                                                                                                                                                                                                               | Motor circuit board edge connection |
| 1.1                                                                                                                                                                                                                             | Hall IC + (red)                     |
| 1.2                                                                                                                                                                                                                             | Hall IC input (white)               |
| 1.3                                                                                                                                                                                                                             | Hall IC - (blue)                    |
| 1.4                                                                                                                                                                                                                             | not used                            |
| 1.5                                                                                                                                                                                                                             | Motor winding (black)               |
| 1.6                                                                                                                                                                                                                             | Motor winding (brown)               |
| Accessory parts: Wire 63845-4-1040 and control unit 55918-1-0173 not included in scope of delivery; gas blower G1G108BD4105 is only to be operated with specified accessories (accessories: cable and control unit - not shown) |                                     |



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## Connection diagram



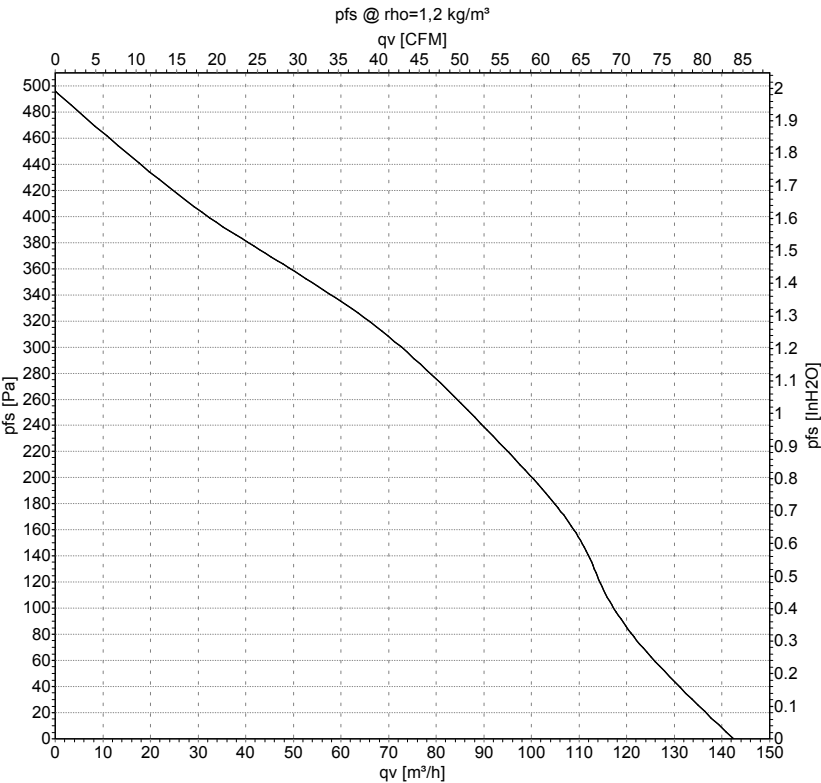
| No. | Conn. | Designation | Function/assignment   |
|-----|-------|-------------|-----------------------|
| 1   | A1    | 1           | Hall IC + (red)       |
| 1   | A2    | 2           | Hall IC input (white) |
| 1   | A3    | 3           | Hall IC - (blue)      |
| 1   | A4    | -           | not used              |
| 1   | A5    | 4           | Motor winding (black) |
| 1   | A6    | 5           | Motor winding (brown) |



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Curves: Air performance 50 Hz



Measurement: LU-43754-1

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.

