

# EC centrifugal fan

forward-curved, single-intake

with housing (flange)

G1G126-AA49-52 ebmpapst Datasheet

sales@fansco.com

www.fansco.com

## Nominal data

|                          |                   |       |
|--------------------------|-------------------|-------|
| Type                     | G1G126-AA49-52    |       |
| Motor                    | M1G055-BD         |       |
| Phase                    |                   | 1~    |
| Nominal voltage          | VAC               | 230   |
| Frequency                | Hz                | 50/60 |
| Method of obtaining data |                   | fa    |
| Speed (rpm)              | min <sup>-1</sup> | 5000  |
| Power consumption        | W                 | 75    |
| Current draw             | A                 | 0.5   |
| Min. back pressure       | Pa                | 0     |
| Min. back pressure       | in. wg            | 0     |
| Min. ambient temperature | °C                | -25   |
| Max. ambient temperature | °C                | 70    |

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



# EC centrifugal fan

forward-curved, single-intake  
with housing (flange)

## Technical description

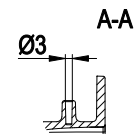
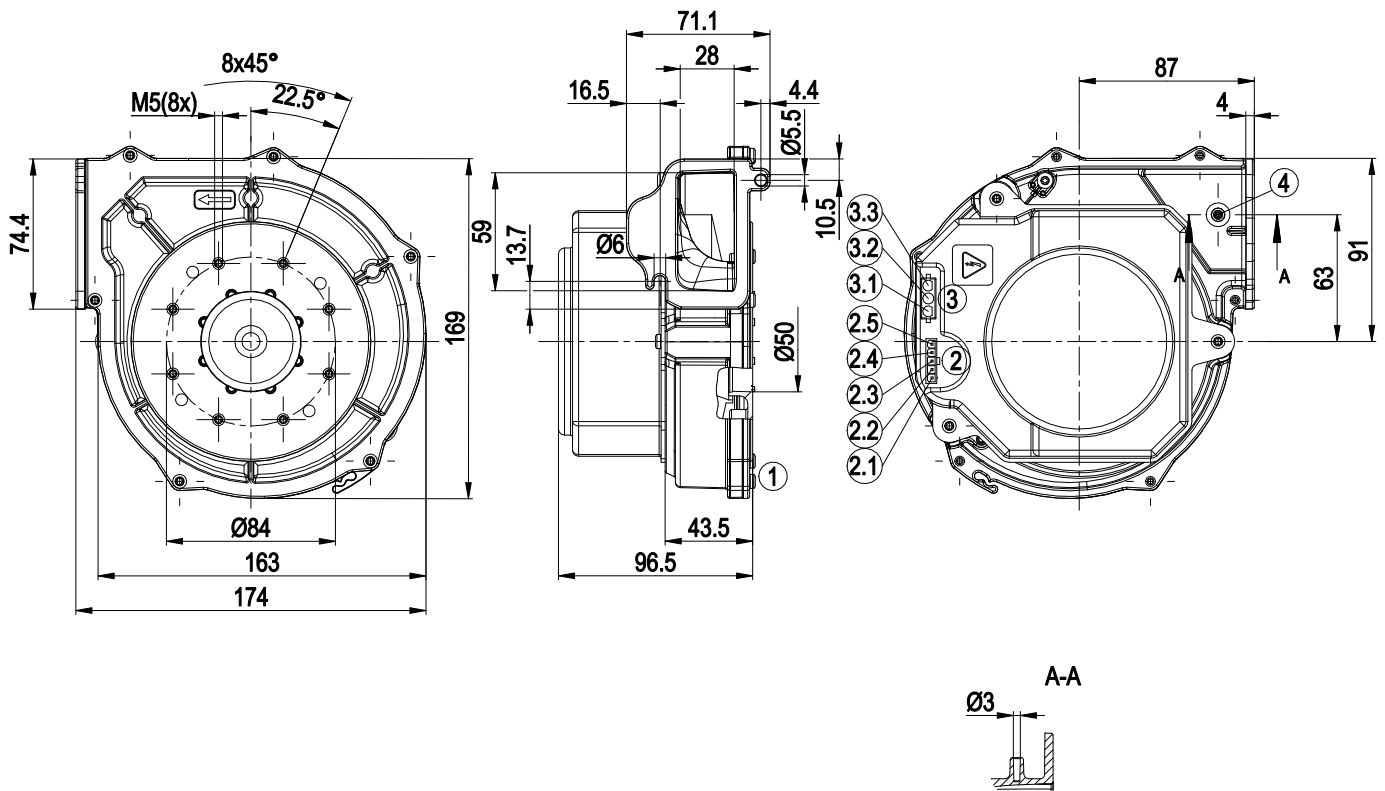
|                                                                            |                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Weight                                                                     | 1.4 kg                                                                                                                                                                                                                                                                                                        |
| Size                                                                       | 126 mm                                                                                                                                                                                                                                                                                                        |
| Motor size                                                                 | 55                                                                                                                                                                                                                                                                                                            |
| Rotor surface                                                              | Thick-film passivated                                                                                                                                                                                                                                                                                         |
| Cover material                                                             | PP plastic                                                                                                                                                                                                                                                                                                    |
| Impeller material                                                          | PA plastic                                                                                                                                                                                                                                                                                                    |
| Housing material                                                           | Die-cast aluminum                                                                                                                                                                                                                                                                                             |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                                                                                                                                                                                                                                                                                |
| Degree of protection                                                       | IP20                                                                                                                                                                                                                                                                                                          |
| 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                                                      | Any                                                                                                                                                                                                                                                                                                           |
| Mode                                                                       | S1                                                                                                                                                                                                                                                                                                            |
| Premixing                                                                  | Not suitable for premixing.                                                                                                                                                                                                                                                                                   |
| Motor bearing                                                              | Ball bearing                                                                                                                                                                                                                                                                                                  |
| Technical features                                                         | <ul style="list-style-type: none"> <li>- Tach output</li> <li>- Soft start</li> <li>- PWM control input</li> <li>- Control interface with SELV potential safely disconnected from the mains</li> </ul>                                                                                                        |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | <= 0.25 mA                                                                                                                                                                                                                                                                                                    |
| Motor protection                                                           | Reverse polarity and locked-rotor protection                                                                                                                                                                                                                                                                  |
| Protection class assignment                                                | <p>I; If a protective earth is connected by the customer</p> <p>This component for installation may have several local protection classes. This information relates to this component's basic design.</p> <p>The final protection class is based on the component's intended installation and connection.</p> |
| Conformity with standards                                                  | EN 60034-1; EN 60204-1; EN 60335-1; CE                                                                                                                                                                                                                                                                        |
| Approval                                                                   | EAC                                                                                                                                                                                                                                                                                                           |
| Comment                                                                    | Complete unit must be tested for required approvals.                                                                                                                                                                                                                                                          |



# EC centrifugal fan

forward-curved, single-intake  
with housing (flange)

## Product drawing

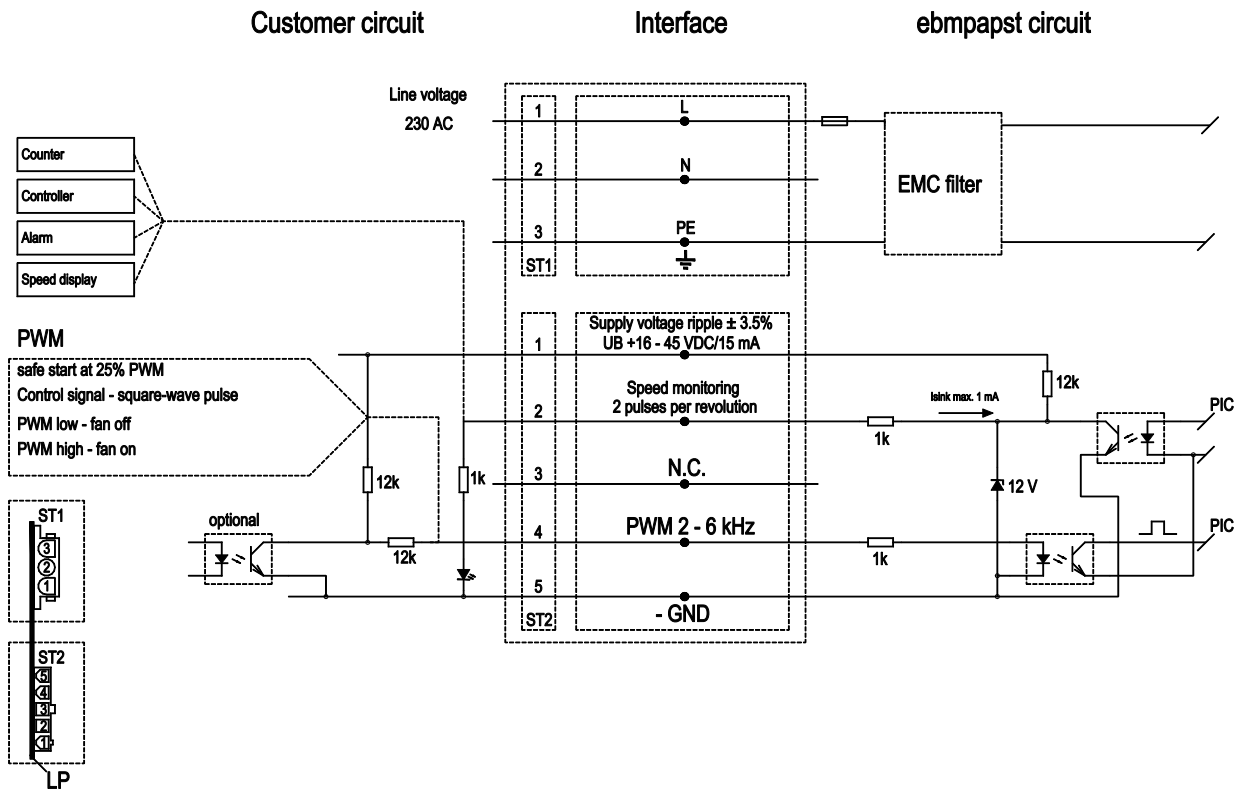


|     |                                                                   |
|-----|-------------------------------------------------------------------|
| 1   | Housing side parts sealed with NBR round cord (pentane-resistant) |
| 2   | 5-pole header Molex 39-30-2050                                    |
| 2.1 | +                                                                 |
| 2.2 | Speed monitoring                                                  |
| 2.3 | not used                                                          |
| 2.4 | PWM input                                                         |
| 2.5 | -                                                                 |
| 3   | 3-pole header Lonco Universal Mate-N-Lok C63502-3A                |
| 3.1 | L                                                                 |
| 3.2 | N                                                                 |
| 3.3 | PE                                                                |
| 4   | Pressure tap possible                                             |

# EC centrifugal fan

forward-curved, single-intake  
with housing (flange)

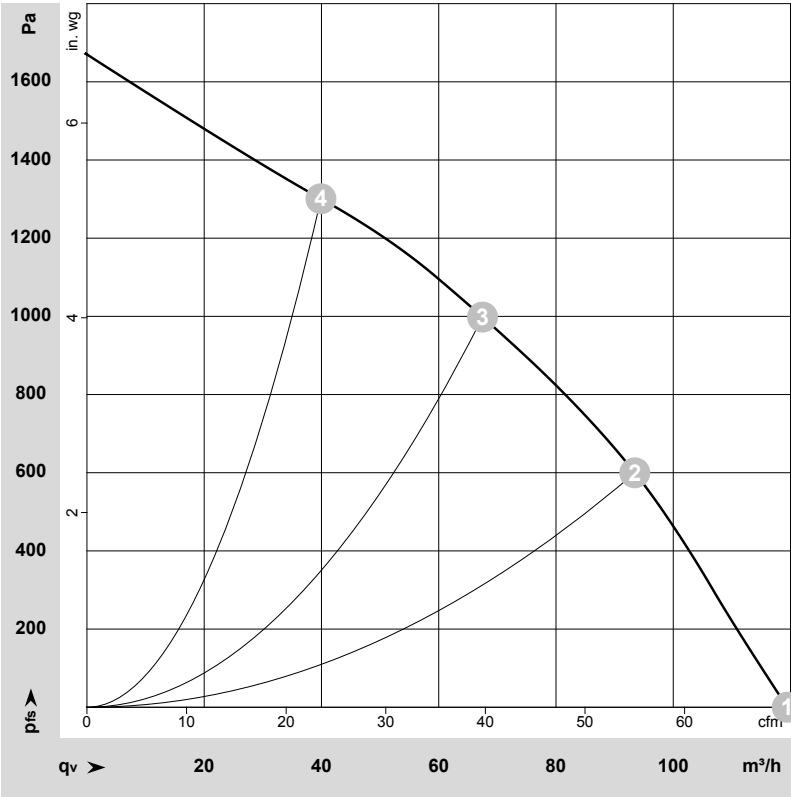
## Connection diagram



# EC centrifugal fan

forward-curved, single-intake  
with housing (flange)

## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-37520-1

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

|   | U   | f  | n                 | P <sub>ed</sub> | I    | η <sub>esd</sub> | q <sub>v</sub> | p <sub>fs</sub> | q <sub>v</sub> | p <sub>fs</sub> |
|---|-----|----|-------------------|-----------------|------|------------------|----------------|-----------------|----------------|-----------------|
|   | V   | Hz | min <sup>-1</sup> | W               | A    | %                | m³/h           | Pa              | cfm            | in. wg          |
| 1 | 230 | 50 | 5000              | 75              | 0.50 | 18               | 120            | 0               | 70             | 0.00            |
| 2 | 230 | 50 | 5385              | 70              | 0.50 | 32               | 95             | 600             | 55             | 2.41            |
| 3 | 230 | 50 | 5745              | 62              | 0.45 | 34               | 65             | 1000            | 40             | 4.01            |
| 4 | 230 | 50 | 6200              | 55              | 0.39 | 26               | 40             | 1300            | 25             | 5.22            |

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · η<sub>esd</sub> = Total efficiency of fan · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

