

G1G126-AC13-51

# EC centrifugal fan

forward-curved, single-intake  
with housing (flange), Gas blower for condensing boilers



G1G126-AC13-51 ebmpapst Datasheet  
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## Nominal data

|                           |                   |          |
|---------------------------|-------------------|----------|
| Type                      | G1G126-AC13-51    |          |
| Motor                     | M1G055-AI         |          |
| Nominal voltage           | VDC               | 24       |
| Nominal voltage range     | VDC               | 16 .. 28 |
| Method of obtaining data  |                   | fa       |
| Speed (rpm)               | min <sup>-1</sup> | 4450     |
| Power consumption         | W                 | 50       |
| Current draw              | A                 | 2.35     |
| Min. ambient temperature  | °C                | -25      |
| Max. ambient temperature  | °C                | 70       |
| Min. temp. of flow medium | °C                | -25      |
| Max. temp. of flow medium | °C                | 80       |

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                                                     | 1.4 kg                                                                                                                           |
| Fan size                                                   | 126 mm                                                                                                                           |
| 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"                                                                                                                              |
| Max. permitted ambient temp. for motor (transport/storage) | + 80 °C                                                                                                                          |
| Min. permitted ambient temp. for motor (transport/storage) | - 40 °C                                                                                                                          |
| Installation position                                      | Any                                                                                                                              |
| Cooling hole/opening                                       | On rotor side                                                                                                                    |
| Mode                                                       | S1                                                                                                                               |
| Premixing                                                  | Suitable for premixing.                                                                                                          |
| Motor bearing                                              | Ball bearing                                                                                                                     |
| Technical features                                         | <ul style="list-style-type: none"> <li>- Tach output</li> <li>- Motor current limitation</li> <li>- PWM control input</li> </ul> |
| Motor protection                                           | Locked-rotor protection                                                                                                          |
| Approval                                                   | EAC                                                                                                                              |
| Comment                                                    | Complete unit must be tested for required approvals.                                                                             |

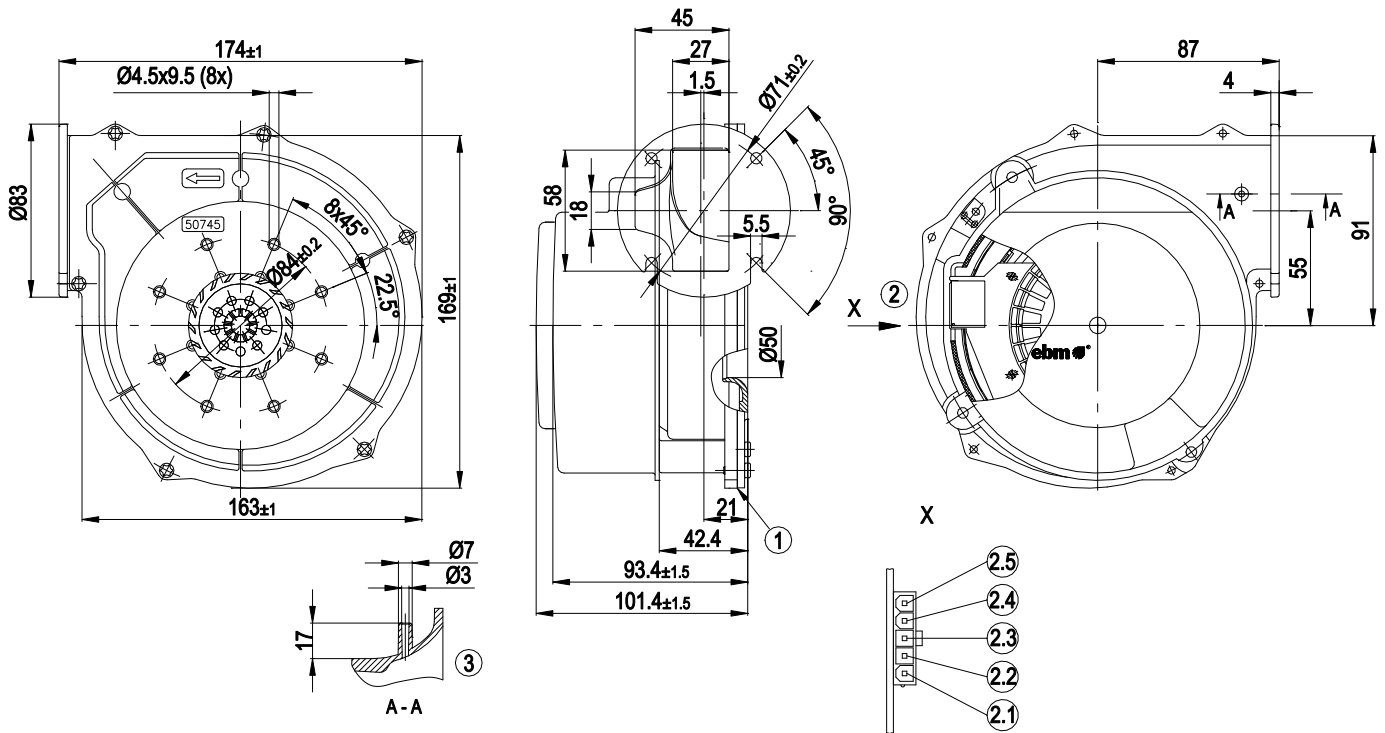


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## Product drawing



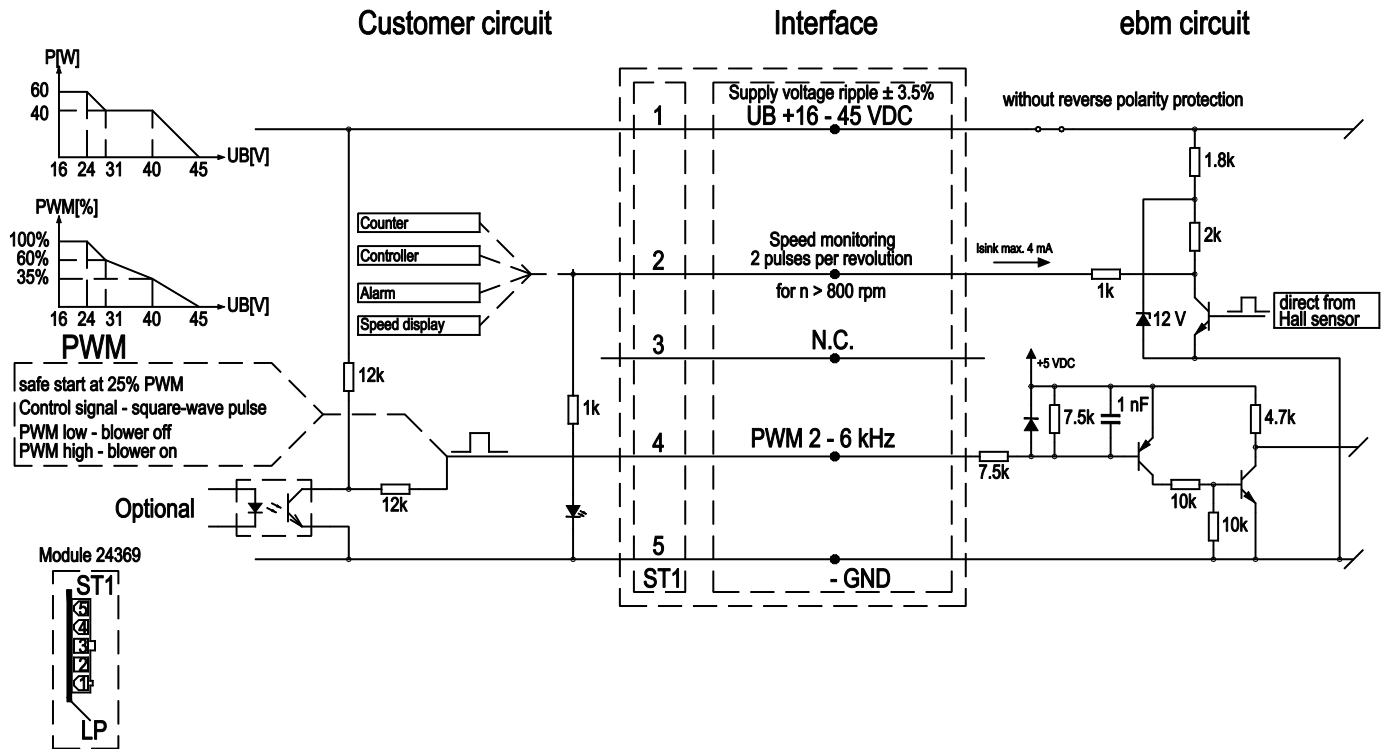
|     |                                                                                                                         |
|-----|-------------------------------------------------------------------------------------------------------------------------|
| 1   | Housing side parts sealed with NBR edge cord (pentane-resistant)                                                        |
| 2   | 5-pole header; mating connector (not included in scope of delivery): Molex no. 39-01-4050; socket: Molex no. 39-00-0059 |
| 2.1 | (+)                                                                                                                     |
| 2.2 | Speed monitoring                                                                                                        |
| 2.3 | not used                                                                                                                |
| 2.4 | PWM input                                                                                                               |
| 2.5 | (-)                                                                                                                     |
| 3   | Pressure tap sealed (drilled open if required)                                                                          |

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## Connection diagram

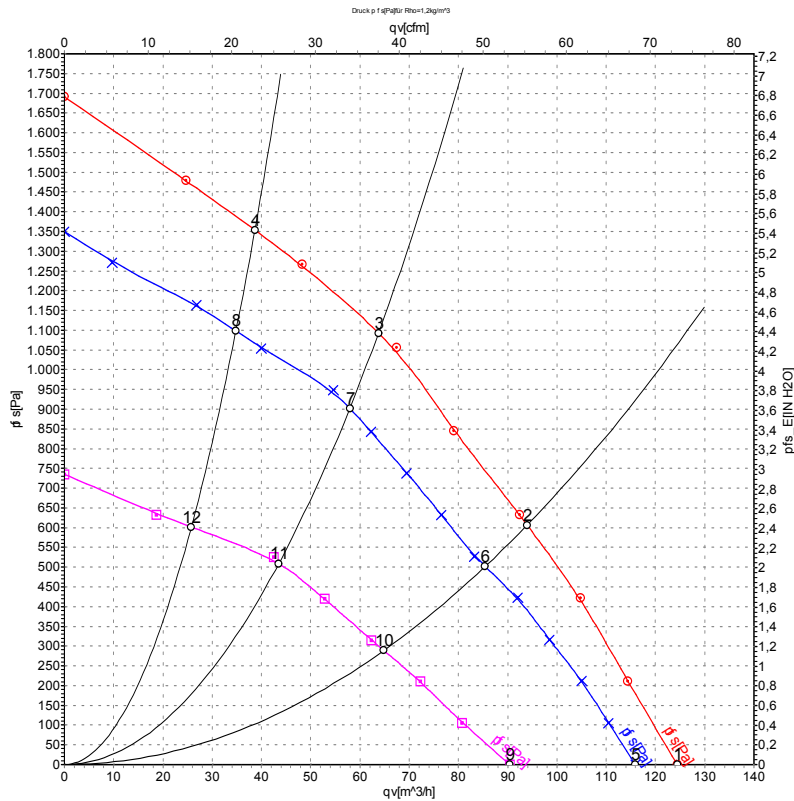


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## Curves: Air performance



Measurement: LU-54513-1  
Measurement: LU-54512-1  
Measurement: LU-54514-1

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  | n                 | P <sub>ed</sub> | I    | qv                | p <sub>fs</sub> | qv  | p <sub>fs</sub>    |
|----|----|-------------------|-----------------|------|-------------------|-----------------|-----|--------------------|
|    | V  | min <sup>-1</sup> | W               | A    | m <sup>3</sup> /h | Pa              | CFM | inH <sub>2</sub> O |
| 1  | 28 | 4810              | 62              | 2.62 | 125               | 0               | 75  | 0.00               |
| 2  | 28 | 5290              | 56              | 2.29 | 95                | 608             | 55  | 2.44               |
| 3  | 28 | 5820              | 49              | 1.96 | 65                | 1097            | 40  | 4.40               |
| 4  | 28 | 6280              | 40              | 1.62 | 40                | 1354            | 25  | 5.44               |
| 5  | 24 | 4450              | 50              | 2.35 | 115               | 0               | 70  | 0.00               |
| 6  | 24 | 4850              | 43              | 2.02 | 85                | 500             | 50  | 2.01               |
| 7  | 24 | 5255              | 36              | 1.69 | 60                | 900             | 35  | 3.61               |
| 8  | 24 | 5645              | 30              | 1.39 | 35                | 1100            | 20  | 4.42               |
| 9  | 16 | 3475              | 23              | 1.63 | 90                | 0               | 55  | 0.00               |
| 10 | 16 | 3710              | 20              | 1.40 | 65                | 289             | 40  | 1.16               |
| 11 | 16 | 3965              | 17              | 1.19 | 45                | 516             | 25  | 2.07               |
| 12 | 16 | 4200              | 14              | 1.01 | 25                | 601             | 15  | 2.41               |

U = Power supply · n = Speed (rpm) · P<sub>ed</sub> = Power consumption · I = Current draw · qv = Air flow · p<sub>fs</sub> = Pressure increase

