



## Nominal data

|                          |                   |            |
|--------------------------|-------------------|------------|
| Type                     | K3G250-RE07-12    |            |
| Motor                    | M3G055-DF         |            |
| Phase                    |                   | 1~         |
| Nominal voltage          | VAC               | 230        |
| Nominal voltage range    | VAC               | 200 .. 240 |
| Frequency                | Hz                | 50/60      |
| Method of obtaining data |                   | ml         |
| Speed                    | min <sup>-1</sup> | 2510       |
| Power consumption        | W                 | 170        |
| Current draw             | A                 | 1.4        |
| Min. ambient temperature | °C                | -25        |
| Max. ambient temperature | °C                | 60         |

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

## Data according to ErP Directive

|                                   |   | Actual | Req. 2015 |
|-----------------------------------|---|--------|-----------|
| 01 Overall efficiency $\eta_{es}$ | % | 57.8   | 43.1      |
| 02 Measurement category           |   | A      |           |
| 03 Efficiency category            |   | Static |           |
| 04 Efficiency grade N             |   | 76.7   | 62        |
| 05 Variable speed drive           |   | Yes    |           |

Data obtained at optimum efficiency level.

The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

|                               |                   |      |
|-------------------------------|-------------------|------|
| 09 Power consumption $P_{ed}$ | kW                | 0.16 |
| 09 Air flow $q_v$             | m <sup>3</sup> /h | 800  |
| 09 Pressure increase $p_{fs}$ | Pa                | 380  |
| 10 Speed n                    | min <sup>-1</sup> | 2535 |
| 11 Specific ratio*            |                   | 1.00 |

\* Specific ratio =  $1 + p_{fs} / 100\,000\text{ Pa}$

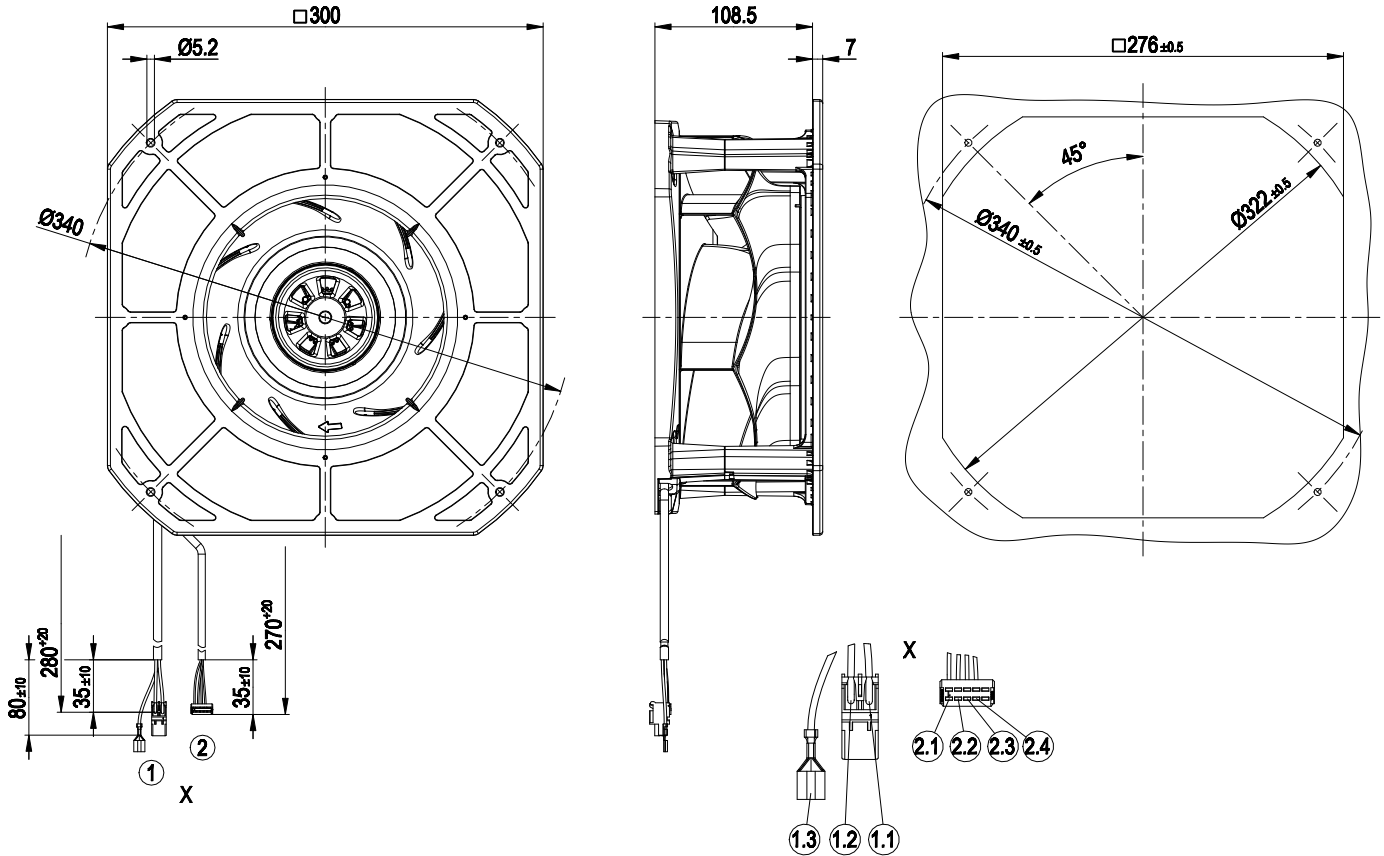
LU-153273



## Technical description

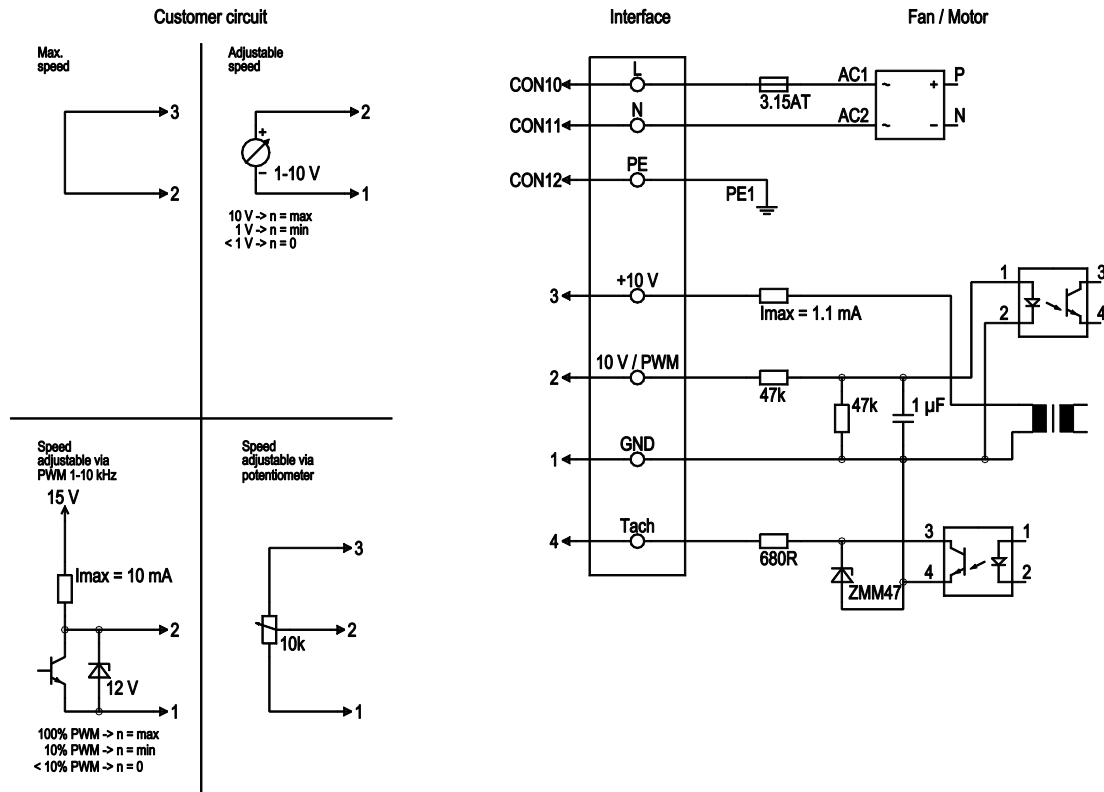
|                                                                            |                                                  |
|----------------------------------------------------------------------------|--------------------------------------------------|
| Weight                                                                     | 2.75 kg                                          |
| Fan size                                                                   | 250 mm                                           |
| Rotor surface                                                              | Thick-film passivated                            |
| Electronics housing material                                               | Die-cast aluminum                                |
| Impeller material                                                          | PA plastic                                       |
| Housing material                                                           | PA plastic                                       |
| Number of blades                                                           | 7                                                |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                   |
| Degree of protection                                                       | IP54                                             |
| 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                                              |
| Condensation drainage holes                                                | None, open rotor                                 |
| Mode                                                                       | S1                                               |
| Motor bearing                                                              | Ball bearing                                     |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | <= 3.5 mA                                        |
| Electrical hookup                                                          | With plug                                        |
| Motor protection                                                           | Locked-rotor protection                          |
| With cable                                                                 | Variable                                         |
| Protection class                                                           | I (with customer connection of protective earth) |
| Conformity with standards                                                  | EN 60335-1; CE                                   |
| Approval                                                                   | VDE                                              |

## Product drawing



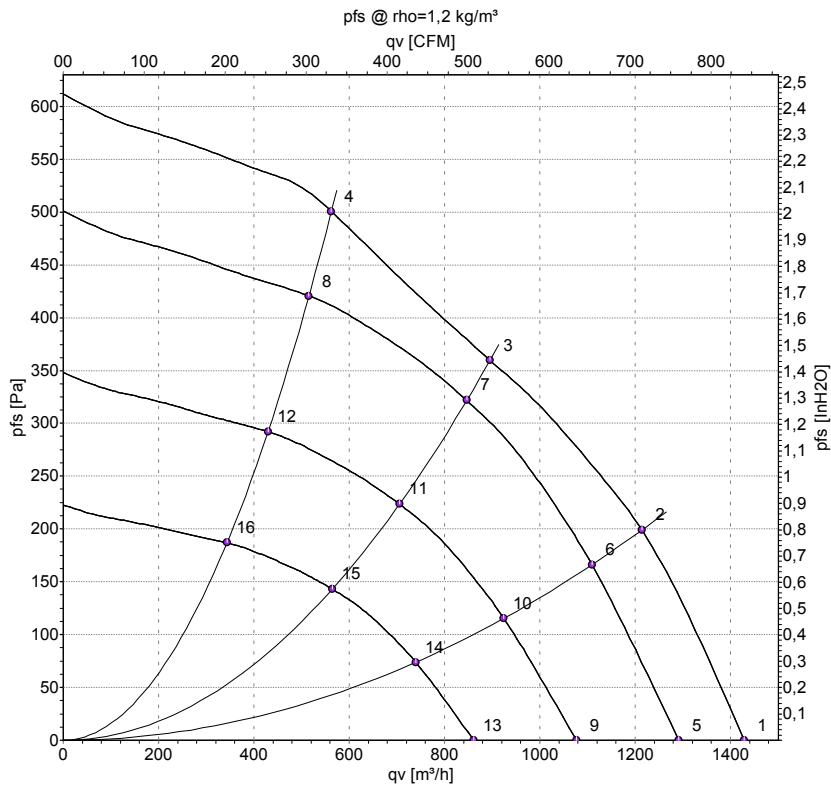
|     |                                                                                                                            |
|-----|----------------------------------------------------------------------------------------------------------------------------|
| 1   | Cable PVC AWG20, 1x 2-pole connector housing STOCKO MFMP 9590-02-BB01-000-960-000-00, 1x flat push-on receptacle 6.3 x 0.8 |
| 1.1 | blue                                                                                                                       |
| 1.2 | black                                                                                                                      |
| 1.3 | green/yellow                                                                                                               |
| 2   | Cable PVC AWG22, 1x 5-pole connector housing STOCKO MFMP 7238-005-060-960-000-00-G                                         |
| 2.1 | white                                                                                                                      |
| 2.2 | blue                                                                                                                       |
| 2.3 | red                                                                                                                        |
| 2.4 | yellow                                                                                                                     |

## Connection diagram



| No. | Conn. | Designation    | Color        | Function/assignment                                                           |
|-----|-------|----------------|--------------|-------------------------------------------------------------------------------|
|     | CON10 | L              | black        | Power supply 230 VAC, 50-60 Hz, see nameplate for voltage range               |
|     | 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 10 V / 1.1 mA, electrically isolated, not short-circuit-proof. |
|     | 4     | Tach           | white        | Tach output: open collector, 1 pulse per revolution, electrically isolated    |

## Curves: Air performance 50 Hz



Measurement: LU-154717-1

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    | 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 | 2655              | 143             | 1.18 | 68                | 76                | 1430 | 0               |
| 2  | 230 | 50 | 2630              | 170             | 1.40 | 64                | 72                | 1215 | 200             |
| 3  | 230 | 50 | 2510              | 170             | 1.40 | 60                | 67                | 895  | 360             |
| 4  | 230 | 50 | 2620              | 168             | 1.39 | 65                | 73                | 560  | 500             |
| 5  | 230 | 50 | 2400              | 105             | 0.87 | 66                | 73                | 1290 | 0               |
| 6  | 230 | 50 | 2400              | 129             | 1.07 | 62                | 69                | 1110 | 168             |
| 7  | 230 | 50 | 2400              | 144             | 1.19 | 59                | 66                | 845  | 322             |
| 8  | 230 | 50 | 2400              | 129             | 1.07 | 63                | 70                | 515  | 421             |
| 9  | 230 | 50 | 2000              | 61              | 0.51 | 61                | 69                | 1075 | 0               |
| 10 | 230 | 50 | 2000              | 75              | 0.62 | 57                | 65                | 925  | 116             |
| 11 | 230 | 50 | 2000              | 83              | 0.69 | 54                | 62                | 705  | 224             |
| 12 | 230 | 50 | 2000              | 75              | 0.62 | 59                | 66                | 430  | 292             |
| 13 | 230 | 50 | 1600              | 31              | 0.26 | 55                | 63                | 860  | 0               |
| 14 | 230 | 50 | 1600              | 38              | 0.32 | 52                | 59                | 740  | 75              |
| 15 | 230 | 50 | 1600              | 43              | 0.35 | 48                | 56                | 565  | 143             |
| 16 | 230 | 50 | 1600              | 38              | 0.32 | 53                | 60                | 345  | 187             |

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