

K4E400-AA01-14

# AC centrifugal module

backward-curved  
with support plate

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## Nominal data

|                             |                   |      |
|-----------------------------|-------------------|------|
| Type                        | K4E400-AA01-14    |      |
| Motor                       | M4E074-GA         |      |
| Phase                       |                   | 1~   |
| Nominal voltage             | VAC               | 230  |
| Frequency                   | Hz                | 50   |
| Method of obtaining data    |                   | fa   |
| Valid for approval/standard |                   | -    |
| Speed (rpm)                 | min <sup>-1</sup> | 1350 |
| Power consumption           | W                 | 335  |
| Current draw                | A                 | 1.47 |
| Capacitor                   | µF                | 10   |
| Capacitor voltage           | VDB               | 400  |
| Min. back pressure          | Pa                | 0    |
| Min. back pressure          | in. wg            | 0    |
| Min. ambient temperature    | °C                | -25  |
| Max. ambient temperature    | °C                | 45   |

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



## Technical description

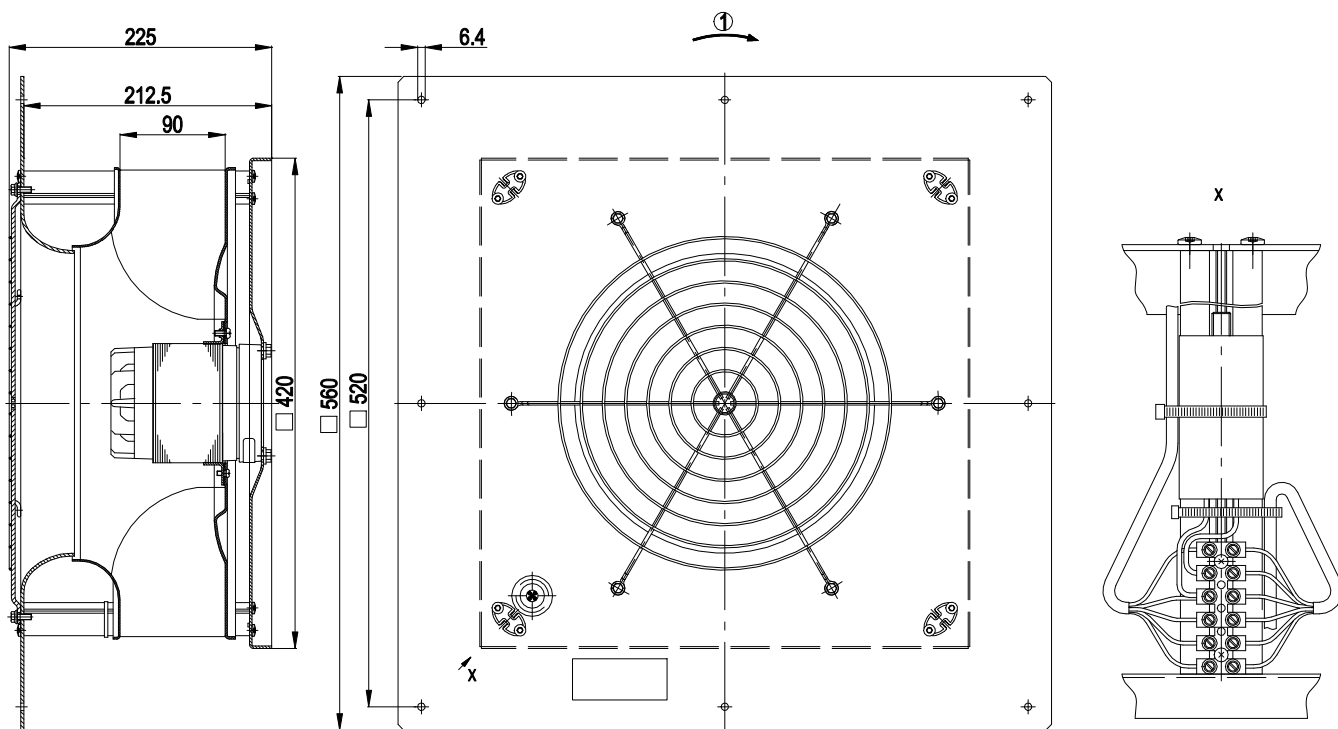
|                                                                            |                                                        |
|----------------------------------------------------------------------------|--------------------------------------------------------|
| Weight                                                                     | 9.6 kg                                                 |
| Size                                                                       | 400 mm                                                 |
| Motor size                                                                 | 74                                                     |
| Rotor surface                                                              | Painted black                                          |
| Impeller material                                                          | Sheet aluminum, joined by tabs                         |
| Spacer material                                                            | Aluminum                                               |
| Inlet nozzle material                                                      | Sheet aluminum                                         |
| Guard grille material                                                      | Steel, phosphated and coated with black plastic        |
| Direction of rotation                                                      | Clockwise, viewed toward rotor                         |
| Degree of protection                                                       | IP00                                                   |
| Insulation class                                                           | "F"                                                    |
| Moisture (F) / Environmental (H) protection class                          | H0+; F1-1                                              |
| 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                                                   |
| Mode                                                                       | S1                                                     |
| Motor bearing                                                              | Ball bearing                                           |
| Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system) | < 0.75 mA                                              |
| Electrical hookup                                                          | Via terminal strip, capacitor connected                |
| Motor protection                                                           | Thermal overload protector (TOP) with basic insulation |
| With cable                                                                 | Variable                                               |
| Protection class                                                           | I (with customer connection of protective earth)       |
| Motor capacitor according to EN 60252-1 in safety protection class         | S0                                                     |
| Conformity with standards                                                  | EN 60335-1                                             |



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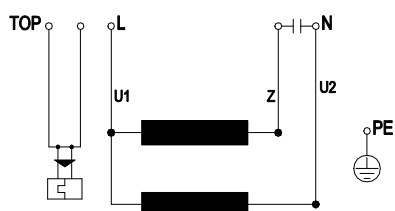
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## Product drawing



1 Direction of rotation clockwise, viewed toward rotor

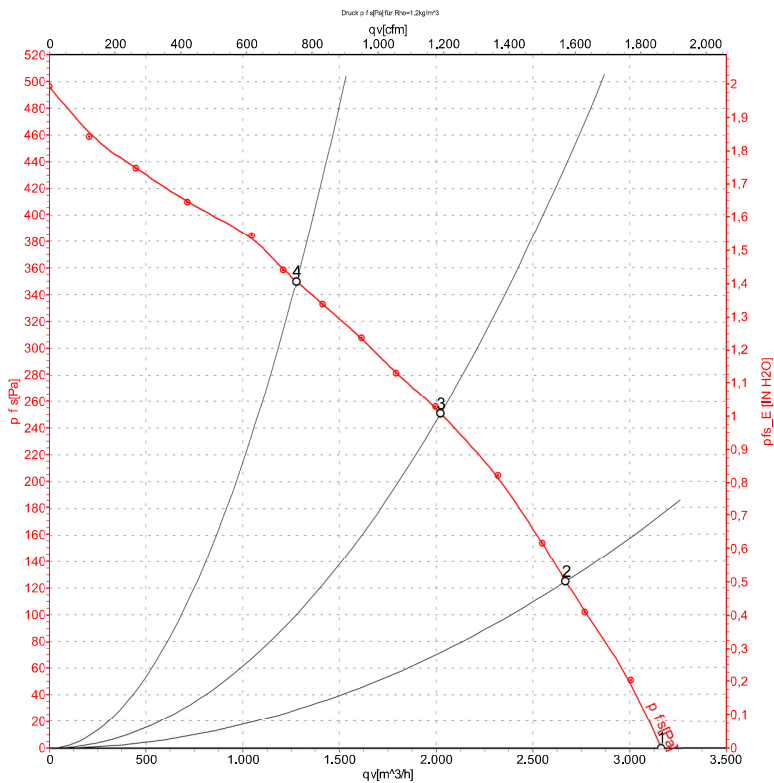
## Connection diagram



|     |         |    |              |   |       |
|-----|---------|----|--------------|---|-------|
| TOP | 2x gray | U1 | blue         | Z | brown |
| U2  | black   | PE | green/yellow |   |       |



## Curves: Air performance 50 Hz



Measurement: LU-34545-1

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>e</sub> | I    | 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 | 1360              | 315            | 1.40 | 3165           | 0               | 1865           | 0.00            |
| 2 | 230 | 50 | 1340              | 341            | 1.51 | 2670           | 125             | 1575           | 0.50            |
| 3 | 230 | 50 | 1315              | 364            | 1.60 | 2025           | 250             | 1190           | 1.00            |
| 4 | 230 | 50 | 1335              | 344            | 1.52 | 1280           | 350             | 750            | 1.41            |

U = Voltage · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · q<sub>v</sub> = Air flow · p<sub>fs</sub> = Pressure increase

