

## Single phase speed controller RSA5E-...-T



### ■ Applications

RSA5E-...T series speed controllers are applied for air flow control of single phase fans by means of motor step speed control. The controllers have five speeds. Speed is set by means of rotating the control knob at the casing front panel to one of five available fixed positions. Several fans can be controlled synchronously in case their total consumption current does not exceed the maximum permissible value of the controller current.

### ■ Design and control

The controller casing is made of flame-retardant thermoplastic. The controller has five speeds with the output voltage 110V – 140V – 170V – 190V – 230V. 80V output is available, but not connected by default. It is possible to change the output voltages by changing the internal wiring. The controller is equipped with a speed control knob, an operation

indication lamp. The integral motor protection device is included which cuts the supply voltage to the fan if the thermal contact in the fan motor is activated. After the temperature drops to the operating level the motor restarts.

The controller has the following supplementary functions:

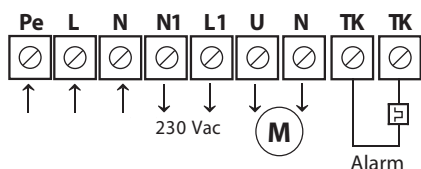
- ▶ terminals of 230 V, max. 2A for connection and controlling such external equipment as actuator driven air dampers.

### ■ Mounting

The controller is designed for indoor mounting. Installation shall be performed with respect to the free air recirculation for inner circuit cooling. The controller is for vertical installation. Do not install the controller above the heaters and in bad air convection areas.

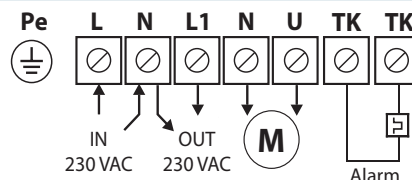
### Technical data

|                                  | RSA5E-1,5-T | RSA5E-3,5-T | RSA5E-5,0-T | RSA5E-7,5-T |
|----------------------------------|-------------|-------------|-------------|-------------|
| Voltage [V/50(60) Hz]            | 1~230       | 1~230       | 1~230       | 1~230       |
| Rated current [A]                | 1.5         | 3.5         | 5.0         | 7.5         |
| Overall dimensions LxWxH [mm]    | 205x115x100 | 255x170x140 | 255x170x140 | 305x200x140 |
| Maximum ambient temperature [°C] | -20...+35   | -20...+35   | -20...+35   | -20...+35   |
| Protection rating                | IP54        | IP54        | IP54        | IP54        |



#### RSA5E 1,5-T wiring diagram and connections

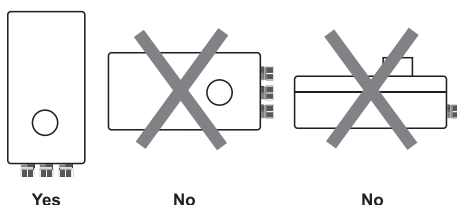
|    |   |
|----|---|
| Pe | Ground terminal                             |
| L  | Power (230 VAC/50-60 Hz)                    |
| N  | Power, neutral                              |
| N1 | Non-adjustable output, neutral              |
| L1 | Non-adjustable output                       |
| U  | Adjustable motor output, phase              |
| N  | Adjustable motor output, neutral            |
| TK | TK control for thermal protection of motors |



#### RSA5E 3,5; 5,0; 7,5-T wiring diagram and connections

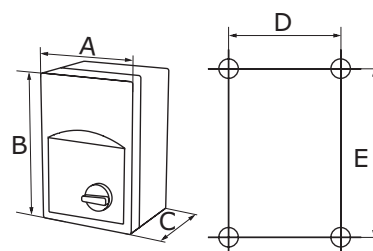
|    |   |
|----|---|
| L  | Power (230 VAC/50-60 Hz)                    |
| N  | Power, neutral                              |
| L1 | Non-adjustable output                       |
| N  | Adjustable motor output, neutral            |
| U  | Adjustable motor output, phase              |
| TK | TK control for thermal protection of motors |
| Pe | Ground terminal                             |

Controller wiring diagram



Device operating position

|             | A   | B   | C   | D   | E   |
|-------------|-----|-----|-----|-----|-----|
| RSA5E-1,5-T | 115 | 205 | 100 | 98  | 140 |
| RSA5E-3,5-T | 170 | 255 | 140 | 155 | 194 |
| RSA5E-5,0-T | 170 | 255 | 140 | 155 | 194 |
| RSA5E-7,5-T | 200 | 305 | 140 | 183 | 236 |



Overall dimensions [mm]