

Single phase speed controller
RSA5E-...-M



Speed controls enables not only selecting the comfortable ventilation mode for the periodically visited premises but reducing the energy consumption for the ventilation.

■ **Applications**

RSA5E-...-M series speed controllers are applied for air flow control of single phase fans by means of step speed control. The controller has five speeds. Speed is set by means of rotating the control knob at the casing front panel. 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**

Casing is made of steel with polymeric coating. The controller has five speeds with the output voltage 110 V – 130 V – 160 V – 190 V – 230 V (for RSA5E-10-M and RSA5E-13-M – 110 V – 140 V – 170 V – 190 V – 230 V). The controller is equipped with an operation indication lamp, a speed control knob.

■ **Protection**

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:

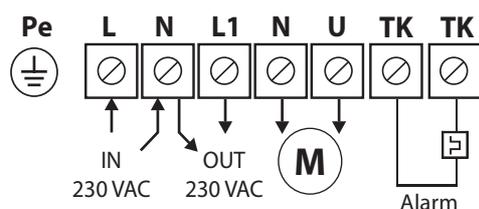
- ▶ terminals for connection to the room thermostat or to the icing protection thermostat. In case of the circuit breaking the power supply to the motor is cut, except for RSA5E-10-M and RSA5E-13-M;
- ▶ terminals of 230 V, max. 2A/3A/4A for connection and controlling such external equipment as actuator driven air damper;
- ▶ provision for remote speed control (refer the connection options), except for RSA5E-10-M and RSA5E-13-M.

■ **Mounting**

The controller is designed for indoor mounting. Installation shall be performed with respect to the free air circulation for inner circuit cooling.

Technical data

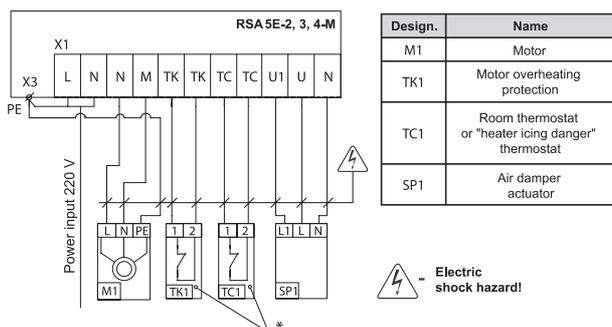
	RSA5E-2-M	RSA5E-3-M	RSA5E-4-M	RSA5E-10-M	RSA5E-13-M
Voltage [V/50(60) Hz]	1~230	1~230	1~230	1~230	1~230
Rated current [A]	2	3	4	10	13
Overall dimensions LxWxH [mm]	226x144x120	241x164x138	241x184x132	325x300x185	325x300x185
Maximum ambient temperature [°C]	40	40	40	35	35
Protection rating	IP21	IP21	IP21	IP54	IP54
Weight [kg]	3.4	4.1	4.5	13.2	17.4



Controller wiring diagram

RSA5E-10-M, RSA5E-13-M 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



Design.	Name
M1	Motor
TK1	Motor overheating protection
TC1	Room thermostat or "heater icing danger" thermostat
SP1	Air damper actuator

⚡ - Electric shock hazard!

* - Controller operation without thermal motor protection (TK1) is possible with the jumper between TK terminals. Controller operation without thermostat TS1 is possible in case of jumper installation between TS terminals.

Wiring diagram