Three phase speed controller

RSA5D-...-M

Applications

RSA5D-…M series speed controllers are applied for air flow control of three phase fans by means of step control of motor speed. 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

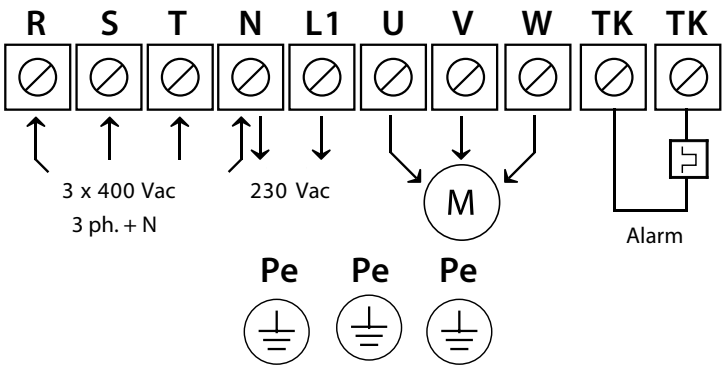
The controller casing is made of sheet steel. The controller has five speeds with the output power 130 V – 180 V – 230 V – 300 V – 400 V and incorporates control speed knob, light indication for operation. The controller has built-in motor overheating protection which cuts power supply in case of exceeding the set temperature threshold. After the temperature drops to the operating level the motor restarts. As an additional function, the controller has terminals (230 V, max. 2 A) for connecting external equipment (e.g. air damper actuators).

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.

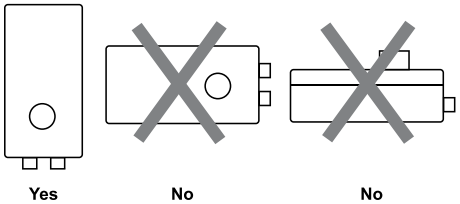
Technical data

	RSA5D-1,5-M	RSA5D-4,0-M	RSA5D-6,0-M	RSA5D-8,0-M	RSA5D-11,0-M	RSA5D-14,0-M
Voltage [V/50(60) Hz]	3~400	3~400	3~400	3~400	3~400	3~400
Rated current [A]	1.5	4.0	6.0	8.0	11.0	14.0
Overall dimensions LxWxH [mm]	325x300x185	325x300x185	425x300x235	425x300x235	430x400x235	425x300x250
Maximum ambient temperature [°C]	-20...+35	-20...+35	-20...+35	-20...+35	-20...+35	+5…+35
Protection rating	IP54	IP54	IP54	IP54	IP54	IP44



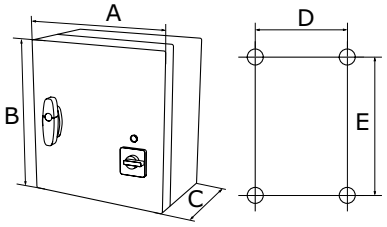
Controller wiring diagram

Wiring diagram and connections	
Pe	Ground terminals
R	3 x 400 VAC/50-60 Hz power supply
S	
T	
N	Neutral
L1	Non-adjustable output, phase (230 VAC/50-60 Hz/2 A)
U	
V	Adjustable motor output
W	
TK	TK control for thermal protection of motors



Device operating position

	A	B	C	D	E
RSA5D-1,5-M	300	325	185	255	255
RSA5D-4,0-M	300	425	185	255	355
RSA5D-6,0-M	300	425	235	255	355
RSA5D-8,0-M	300	425	235	255	355
RSA5D-11,0-M	400	430	235	355	355
RSA5D-14,0-M	400	430	235	355	355



Overall dimensions [mm]