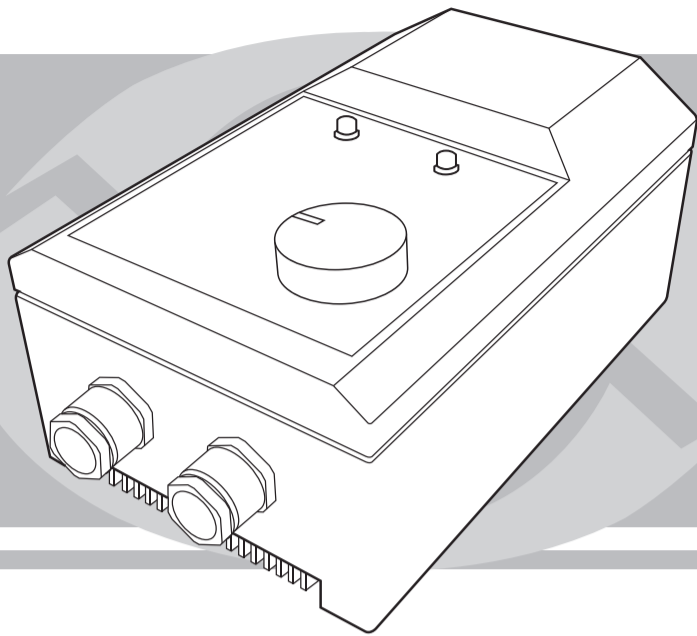


TRANSFORMER SPEED CONTROLLER

RSA5D-...-T SERIES

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PURPOSE

The **RSA5D-...-T** series controllers (hereinafter "Device") are used to control the output of three-phase fans by step changing of the supplied voltage.

The controller has five speed settings which correspond to five fixed positions of the rotating knob on the front panel.

PACKAGE CONTENTS

- Automatic transformer 1 piece
- User's Operation Manual 1 piece
- Packing 1 piece

Switch Position	Output Voltage, VAC
0	0
1	90
2	150
3	200
4	280
5	400

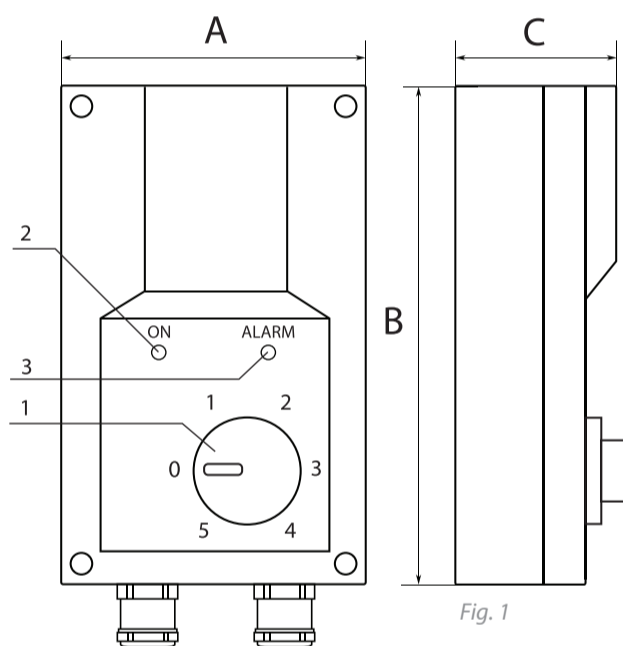


Fig. 1

TECHNICAL SPECIFICATIONS

- Supply Voltage: 400 V/50 Hz
- Fan Motor Nominal Voltage: 400 V/50 Hz
- Lead-In: screw terminal block 0.5 ... 4.0 mm²
- Operating Ambient Temperature: +5°C..+40 °C
- Protection Class: IP44

Designation	RSA5D-1.5-T	RSA5D-3.5-T
Max. Load Current (A)	1.5	3.5
Fuse (A)	1.5	3.5
Dimensions (mm)	305x200x180	305x200x180
Weight (kg)		

DESIGN AND OPERATING PRINCIPLE

The device is a three-phase transformer enclosed in an ABS plastic casing. The device front panel (see Fig. 1) features speed selector 1, signal lamp 2 which indicates normal operation of the controller, and signal lamp 3 which corresponds to controller operation in the emergency mode.

The controller has five speeds selectable by means of rotating knob 1 to one of the five fixed positions or "O" (Off). The controller is equipped with TK terminals (see Fig. 4) for connection of the thermal contact built into the fan motor. When actuated the thermal contact cuts voltage supply to the fan motor and switches on signal lamp 3 which indicates controller operation in the emergency mode. The controller also has terminals L1,N (230VAC/Max. 2A) for connection of external equipment (e.g. air damper actuators). Setting the controller knob to "O" cuts the voltage supply to the fan motor.

Fuse 6 (see Fig. 3) prevents the device and the connected fan from excessive current consumption.

SAFETY PRECAUTIONS AND WARNINGS

- ⚠ The controller application range is limited by the fan electric motor characteristics. The fan electric motor must be designed for voltage regulation by means of a transformer.
- ⚠ The speed controller and its connected equipment may present an electric shock hazard. Therefore, the device shall be connected and operated only by adequately qualified staff familiar with this manual. The speed controller belongs to electrical machinery with voltages up to 1,000 V. The device must be disconnected from the power mains for any and all operations with the device internals.
- ⚠ The speed controller shall only be used with single-phase motors. The total current consumption of the electrical appliances connected to the device shall not exceed the limit value (see Technical specifications). The speed controller must be properly earthed.
- ⚠ Use the device with due caution. Do not subject it to shocks and overloads or expose it to liquids and dirt. Should any foreign objects penetrate onto the controller circuit board, disconnect the unit from the mains and remove them.
- ⚠ Do not apply overvoltage to any of the speed controllers parts while testing the device (e.g. with a megohmmeter etc.). Disconnect the cable from the speed controller prior to any measurements on the cable or motor!

DO NOT:

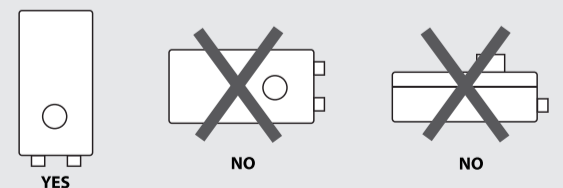
- ⊗ Operate the device in the presence of smoke or smell commonly associated with burning insulation, elevated noise or vibration, in case of structural integrity loss or formation of cracks in the casing or with broken connectors;
- ⊗ Cover the device with any materials, mount any gauges and objects on top, block the vents or fill them with any foreign objects; do not use the device in areas with an explosive or chemically aggressive environment detrimental to metals and insulation or under the influence of droplets or spray; do not use outdoors;
- ⊗ Connect any electric motors (individual or part of any equipment) with the phase current consumption (usually stated on the nameplate) in excess of the limit phase load current for the device;
- ⊗ Connect the device output terminals to the power mains.

INSTALLATION AND SETUP

ATTENTION! Following the device transportation or storage under temperatures below zero let the unit warm up in the specified operating conditions for at least 4 hours.

- Check the device visually for any damage to the casing;
- Remove the front panel by unscrewing self-tapping screws 7 (see Fig. 2);
- Fasten the controller to the mounting surface using mounting holes 8 (see Fig. 2) in the rear wall of the unit;

ATTENTION!
MOUNT THE DEVICE VERTICALLY FOR PROPER OPERATION



- Complete the electrical connections according to the wiring diagram (see Fig. 4). The external wires are connected to the device by means of bolt-and-nut terminals 5 (see Fig. 3). The cables are routed into the unit through sealed lead-ins 4 (see Fig.3). The external lead-in (220V/50Hz) must be equipped with an automatic switch built into the stationary wiring. Supply the power voltage and start the device.

