

# QUICK START GUIDE (VRT200 INSTALLATION NOTES)

## RULES FOR THE CORRECT INSTALLATION OF THE VRT200 CONTROL UNIT

In order to guarantee the correct and reliable operation of the ventilation control system, follow the instructions supplied in this document about the installation of the control unit and the connection of the fans.

### SAFETY REQUIREMENTS

#### ATTENTION:

Read the manual carefully before starting to use the control unit. Keep the instructions for future reference.

Do not open the device, touching any internal components can cause electric shock. Contact with 230 Volts AC can be fatal. To reduce the risk of electric shock, do not dismantle the back of the device for any reason. Moreover its opening would void the warranty.

Before connecting the device to the power supply, make sure that all the connections are correct. Always disconnect the unit from the supply before any cabling modification.

Any intervention on the equipment must be entrusted to a qualified repair engineer.

Failure to comply with these instructions can cause damages, fires or electric shock, and possible serious injuries!

### POWER SUPPLY

The VRT200 series can be supplied by 230Vac 50/60Hz. Before using it, make sure the power cable is not damaged, kinked or pinched. Do not tamper with the power cable. Never disconnect the unit by pulling the cable, avoid touching the pins. Do not carry out any connecting/disconnecting with wet hands. To disconnect the device, do not use objects such as levers. Immediately disconnect the device if you smell burning or see any smoke: contact technical service.

### LIQUIDS

Do not expose the equipment to splashes or drops, do not position it in places with humidity exceeding 90% and never touch with wet or humid hands during storms. If any liquid penetrates the control unit, disconnect it immediately and contact technical service.

### CLEANING

Disconnect the power cable before cleaning the control unit, use a dry cloth to dust it, without any solvent or detergents, and compressed air.

### OBJECTS

Never insert any objects into the cracks of the control unit. If this happens, disconnect the control unit and contact an engineer.

### USE RESERVED TO QUALIFIED PERSONNEL

The purchased goods are a sophisticated electronic device that is totally unsuitable to be used by non-qualified personnel. Any intervention must be carried out by a specialist engineer.

### ACCESSORIES

The use of non-original accessories or spare parts might damage the unit and endanger users' safety. In the event of faults, contact technical service.

### LOCATION

Install the control unit indoors, in a place protected from water splashes and sun rays. Do not place near heat sources exceeding the parameters stated in this manual. Position on a stable surface, far from any possible vibrations. Position the unit as far as possible from any intense magnetic fields.

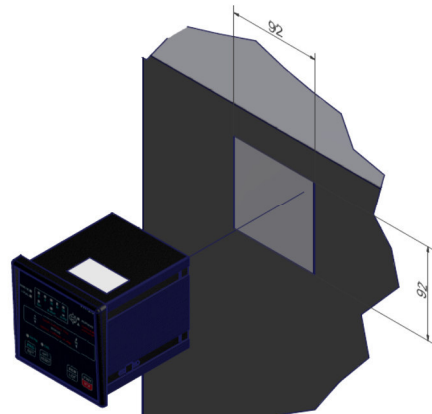
### REPAIRS

Do not open the control unit. For any fault, always use qualified personnel. The opening of the control unit and/or the removal of the series identifying label entails the automatic forfeiture of the warranty. The Warranty seal is applied to all devices, any attempt to open the unit would break the seal and cause the consequent automatic forfeiture of the warranty.

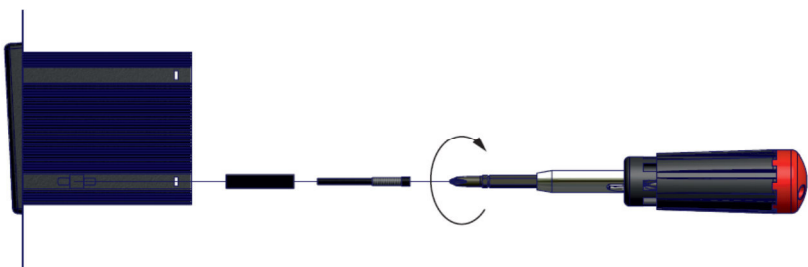
### FITTING THE CONTROL UNIT

The VRT200 control unit must be fitted on a panel complying with the following instructions:

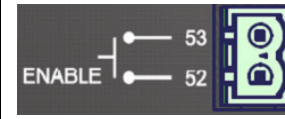
- The device is designed to be panel-mounted.
- Do not position the device near any heat sources or strong magnetic fields.
- Operating temperature from -20°C to 60°C
- Maximum humidity 90% (non-condensing)
- Indoor work environment (protected by splashes and sun rays)
- Make a 92 x 92mm hole (tolerance +0.8mm) in the panel metal sheet.



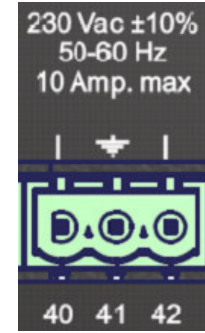
Fix the unit securely with the blocks supplied.



## ELECTRICAL CONNECTIONS



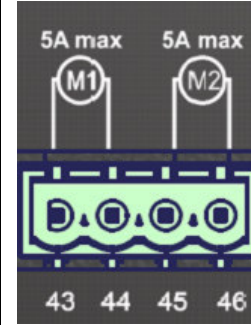
Enabling contact ENABLE, connection with FAN temperature control unit contact to enable M1 and M2 bars.



## POWER SUPPLY

VRT200 control unit is arranged on a power supply 230 Vac, 50/60Hz (40-42 terminals).

The ground must always be connected to terminal 41.



## TWO M1-M2 OUTPUTS

230Vac 5A max, for connection of ventilation bars M1 (43-44) M2 (45-46)



## RELAY FAULT

Output relay 5A-250VAC-res COSΦ=1 contacts.

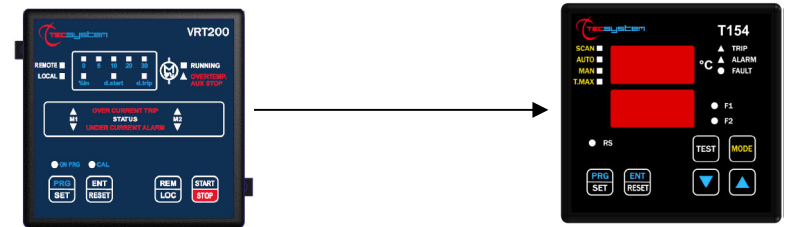
NOTE. A motor in a state of alarm or the interruption of supply to the device make contacts 8-9 of the FAULT relay close.



## CONNECTION AUX 1 AUX 2 (only for VRT200)

AUX 1- 2 (COM) inputs fan temperature control PTC sensor connection

## CONNECTING FROM VRT200 TO CONTROL UNIT



Connection ENABLE contact (VRT200) with FAN contact

## OPERATION

When switched on, the device carries out a LAMP TEST and is set either in REMOTE or LOCAL mode, according to how it was set before being switched off.

In REMOTE mode the fans are activated when contact 52-53 closes, which must be connected to the FAN contact of the temperature control unit.

In LOCAL mode the fans are activated by pressing the <START-STOP> button.

## HOW TO CHECK THE ALARM STATUS

- Running LED OFF: no ventilation activation control
- Running LED ON: REMOTE or LOCAL ventilation activation
- Over- and under-current LEDs OFF: motor operating correctly
- Over-current LED ON: motor stopped due to over-current
- Under-current LED ON: motor working + under-current alarm signal
- Over- and under-current LEDs ON + overtemp. aux stop: over temperature alarm
- Under-current LED flashing: motor disconnected while auto-tuning
- Over-current LED ON: motor consumption >5.5A (immediate trip without any delay)
- All LEDs flashing: corrupted memory error (ech); press reset and repeat the programming procedure

## PROGRAMMING SETTING

Before starting to use your device you have to check the correct connection of the ventilation bars and program the unit until LED CAL turns on.

Parameters to be programmed:

- %IN maximum variation of a percentage permissible current (5-10-20-30%)
- Start delay: fan start time during which no alarm generated (5-10-20-30 sec.)
- Trip delay: time during which the alarm persists, necessary for signaling (5-10-20-30 sec.)
- OVERTEMP-AUX STOP: by enabling this function it is possible to connect a PTC (or series of PTCs) to control the motor temperature. AUX1 for the M1 line and AUX2 for the M2.

Programming the device is the end user's responsibility: the set alarm thresholds and the enabled functions described in this manual must be checked (by a specialized technician) referring them to the application and system characteristics on which the control unit is installed.

TO DOWNLOAD THE COMPLETE "VRT200 INSTRUCTION MANUAL", USE\* THE QR CODE ON THE CONTROL UNIT OR CONNECT TO THE TECSYSTEM WEBSITE ([www.tecsystem.it](http://www.tecsystem.it))



## INSTRUCTION



## MANUAL

TECHNICAL INFORMATION : Mail: [ufficiotecnico@tecsystem.it](mailto:ufficiotecnico@tecsystem.it) — tel: 02/4581861

\*download the QR CODE READER application to your smartphone / tablet and you will be ready to read all Q codes