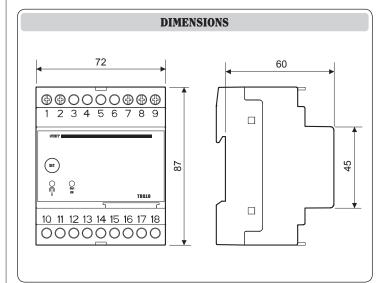
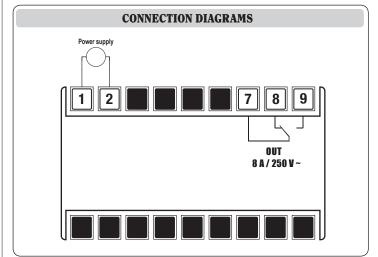


Mod. TRILLO TRILLO-R

I - 32032 Feltre (BL) • Via Camp Lonc, 16 Tel +39 0439 80638 • Fax +39 0439 80619 e-mail: info@vemer.it - web site: www.vemer.it





DEFAULT SETTING

Password	12345678
Relay output status	OFF
ADMIN number	Undefined
USER numbers	Not defined
Caller control	Active
Automatic call answer	Disabled
Response to sms commands	Active
Forward unknown sms	Active
Advise power fail (only Trillo-B)	Active

DEVICE STATUS

The status of the device is segnalated by the bicolor led \mathbb{P} :

OFF: → system not fed

BLINKING RED: → sim not inserted or pin code in activity

FIXED RED: → GSM field insufficient

FIXED GREEN: → starting system/network research

BLINKING GREEN: → connected to GSM network

QUICKLY BLINKING GREEN: \rightarrow arriving in command (ring or sms)

QUICKLY BLINKING RED: → programming mode active

BLINKING YELLOW → connected to gsm field but low level battery (Trillo-B only)

User manual **GSM COMMUNICATION INTERFACE**

Read all instructions carefully

■ The communication interfaces **Trillo** and **Trillo-B** gsm technology based permit the remote control of the electic services by own mobile phone. The output relay canbe controlled by sending a text message or by ringing from an enabled number, thus saving the cost of the text message. Both the instruments offer the option of receiving a text message confirming activation. Moreover, Trillo-B has a backup battery that permits to the instrument to operate for an hour in the case of power fail.

SAFETY WARNINGS

During the installation and operation of the device observe the following instructions:

- The device must be installed by a qualifi ed person
- 2) The device is aimed to be used in household premises and similar environments
- 3) Do not use the device for purposes other than indicated
 4) The device must be installed in a electric closed panel well protected.
- A two-pole disconnect device shall be provided as part of the building installation
- A protection device against over-currents should be installed in the electrical system,
- upstream of the device When installing the device, carefully respect the wiring diagrams
- Disconnect the device from the power supply before accessing to the terminals
- 9) Do not power or connect the instrument if any part of it is damaged 10) The use of a GSM device can cause interference with the functioning of electronic devices non-screened from radiofrequency signals (electromedical devices, pacemakers, hearing
- 11) In case of fault, do not service the device yourself but contact the after-sales service.
- 12) The device is aimed for use in place with over-voltage category III and pollution degree 2, as per standards EN 61010-1.

Code	Model	Description
VE245700	Trillo	GSM communication interface
VE293700	Trillo-B	GSM communication interface with backup battery

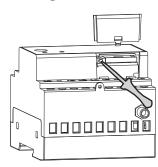
TECHNICAL CHARACTERISTICS

- TRILLO: 230V ac (-10% ÷ +10%) 50Hz - TRILLO-B: 15÷40V dc / 11÷28V ac 50Hz
- Consumption:
- TRILLO: 30mA max
- TRILLO-B: 100mA max
- Connection:
 cables with max 6 mm² section
- Output

 a bistable relay with exchange contact
- breaking capacity: 8(5)A / 250V ac
- red led for signal output status
 Signalling device status:
- multicolour green/red led (only Trillo)
 multicolour green/red/yellow led (only Trillo-B)
 GSM Dual Band module (900-1800 MHz)
- SMA-F connector for external aerial (included in the box)
- You can store up to 100 numbers
- Operating temperature: 0 ÷ 50 °C
- Operating humidity: 10 ÷ 90% noncondensing Storage temperature: -10 ÷ +65°C
- Protection: IP40
- Insulation class: II 🗆
- Container: 4 DIN modules
- Backup battery capacity: about 1 hour (Trillo-B only)

INSTALLATION

In order for the instrument to operate, a sim card enabled for telephone traffic needs to be inserted in the relative slot, with the pin code and the answerphone deactivated. To insert the sim card, remove the cover and use a sharp object to press the slot release mechanism, as illustrated in the alongside:



Attention. Ensure that the power cables are disconnected before inserting/remove the sim card.

Once it has been connected, the instrument will become fully operative within around 30 seconds, during which the instrument status LED will be a fixed green colour (the time needed to search for the network and initialise the instrument may vary on the basis of the GSM field in which the instrument is installed and the provider used).

Once the initialisation phase is completed, the green LED will start to flash with a frequency of 1Hz and the instrument will be ready to receive commands via text message or a ring on the

Note. If the device will be installed into a screened panel, it is possible to replace the antenna included in the kit with an another one with 3 meters cable. The longer antenna is available as optional. Ensure that the power cables are disconnected before replace the antenna.

OPERATION

TURN ON/OFF INSTRUMENT (only Trillo-B)

Trillo-B can be turn off without unlink the power cables simply pressing for at least 10 seconds for the key "Set" while all leds turn off. During the pression of the key, the output led blinks quickly and the led \P blinks green (or yellow) for the first 5 seconds and green/ red for the other 5 seconds. To turn on the instrument, press the key "Set".

RESET THE DEVICE

The reset cancels all data and the parameters saved and restore the default parameters (see the relative box).

To do a reset, proceed as follow:

• Trillo

Switch on the instrument and press the key "Set" shortly in 3 seconds. The led relative to the output will blink for few seconds.

• Trillo-B

Switch on the instrument and wait that the output led turn off. Then press the key "Set" shortly in 3 seconds. The led relative to the output will blink for few seconds.

SET THE CERTIFIED NUMBERS

In order to use the instrument, it is necessary to begin by setting the admin number and the users number enabled (if any). Pressing the key "Set" for a long time (at least 5 seconds) allows you to enter the programming mode, where you can enable/disable the various telephone services.

Setting the admin number

After switching the instrument on and after esch reset, for the first time and having entered programming mode, the first telephone number that makes a call will automatically be configured as the admin number. The admin number can be changed later on by sending a text message from the current admin number with the command:

ADMIN [new admin number] (the new admin number must be in international format +39...)

Nota. If you lose the admin number, it can only be changed by forcing an instrument reset. To retrieve automatically all the user numbers, see the section "Sim management".

Setting the user number (for admin only)

The user numbers can be entered/removed simply via a telephone call when the instrument is in programming mode. The caller's number will be entered/removed on the basis of whether it is respectively not present/present in the phone book. A confirmation text message will be sent to the caller, indicating the number of locations occupied out of the total number available. Alternatively, the user numbers can be added or removed by sending a text message from the admin number with the commands:

USERADD [list of numbers to be added] **USERDEL** [list of numbers to be removed]

The numbers to be added must be in international format +39... and separated by an empty space between each number.

Sim card managment (for admin only)

The certified numbers are saved in the device memory. For this, in case of reset, these numbers will be lose. To avoid to enter again all users numbers it is possible to create a backup copy in the sim card, using the follow commands:

STORE copy in sim card all the number saved in the device **RESTORE** restore only the numbers saved with the command STORE

For this, we raccomand you to do a STORE when all numbers are abilitated.

COMMANDS

It is possible to work on the output as follows:

- with the key present on the front panel
- with ring from a certified number
- with a sms from a certified number (without password) or not certified number (with password)

Sms syntax

The structure for all the commands is:

[password] [separator] [command] [separator] [parameter1] [separator]..[parameterN]

[password] → numerical field of a maximum of 8 figures

[separator] → comprised of one or more space characters [command] → command recognised by the device

[parameter..] → series of parameters relative to the command

Password can be omitted if the command is imparted from a certified number

Some commands can be give from the admin number only.

Several commands may be included in one text message. In this case, the commands executed will only be those whose response is contained in a standard message (160) characters). To enter numbers with the decimal separator, you need to use a full stop.

The structure of a response to a command is similar to the command itself, with the addition of the "=" symbol to indicate the current status. For example:

OUTKEY BLOCK → OUTKEY=BLOCK

If press shortly, the key permits to command the output relay. The admin number can set the output action.

Setting the output action mode (for admin only)

Send from admin number the follow command

OUTKEY [functionality] with functionality that can assume the values:

- RING → it reacts as it does to a call when the key is pressed
- TOGGLE → the key switches the output ON/OFF in bistable mode
- BLOCK → disables the key functionality (it is not possible to access programming mode when in this mode)

If the value is omitted, the current instrument status will be the response.

Enable/Disable caller number control (for admin only)

It is possible disable temporary the control of the caller number with the command:

RINGCONTROL [status] with status that can assume the values:

- ON \rightarrow controls the caller number to check whether it is enabled
- OFF \rightarrow disable the control

If the value is omitted, the current instrument status will be the response.

• Enable/Disable a caller response message (for admin only)

It is possible to send a text message confirming to the caller with the follow command:

RINGRISP [status] with status that can assume the values:

- ON → sends a text message confirming activation to the caller
- OFF → no confirmation text message to the caller

If the value is omitted, the current instrument status will be the response.

Setting the output mode after a ring (for admin only)

It is possible setting the output action mode in case of receive a ring from a certain number with the command:

OUTRING [output status] [status permanence time] [time unit of measurement] in which the parameters can assume the following values

- [output status] \rightarrow ON, OFF, TOGGLE, DISABLE
- [status permanence time] \rightarrow maximum (2³² -1) seconds (optional parameter)
- [time unit of measurement] → s seconds, m minutes, h hours (optional parameter)

Examples:

OUTRING ON when ring, the output turn on

the relay is turned OFF for 10 seconds when the call is received OUTRING OFF 10 S

Setting the output status (for admin only)

It is possible command the output with the command:

OUT [output status][status permanence time][time unit of measurement], where

- [output status] \rightarrow ON or OFF
- [status permanence time] \rightarrow maximum (2³² -1) seconds (optional parameter)
- [time unit of measurement] → s seconds, m minutes, h hours (optional parameter)

OUT OFF 10 S

output OFF for 10 second

Setting the sending of a caller response message (for admin only)

It is possible sending a response message to the caller with the command:

OUTRISP [status] with status that can assume the values:

- ON \rightarrow enables the sending of a text message in response to the caller
- OFF ightarrow disables the sending of a text message in response to the caller

If the status is omitted, the response will be the current instrument status.

Displaying the output status and the settings

It is possible to receive a message with the actual configuration of the instrument with the follow command:

OUTINFO

A possible answear could be the following:

OUT=ON OUTRING=ON 5 S OUTRISP=ON RINGRISP=OFF OUTKEY=TOGGLE

· Changing the output name (for admin only)

It is possible rename the output of the instrument with the command:

OUTTXT [output label]

Example:

OUTTXT porta assigns to the output the name porta

A string of a maximum of 10 characters with no spaces can be assigned as a name. To restore the original name, just write OUTTXT NO. If an alternative name is defined for the output, this name can be used instead of OUT1. For example:

valvola ON 10 M active output (valvola) for 10 minutes

Enabling the forwarding function (for admin only)

It is possible to receive the unkown commands in a specified number. The command is:

FORWARD [number]

Example:

FORWARD +393331234567

If not modified, the number that receive the unkown messages is the admin.

FORWARD OFF disabled this function.

The sms that are send from the instrument beginning with "FW: ".

Password management (for admin only)

It is possible to change the protection password of the instrument, useful in case of command with number not certified.

PASS [new password] with new password with a maximum of 8 figures

Example:

PASS 11223344

Sms power fail alert (only Trillo-B) (only admin)Trillo-B permits to the admin number to receive a sms if the power supply switch off or if the battery charge is low. The command is:

POWERFAIL [status] with status that can assume the state:

- ON \rightarrow send to admin a text message when the power supply switch on or off or low battery
- OFF → disabled the function

The device will send to the admin number the follow messages:

ALARM: POWER=OFF → means failure power supply ALARM: POWER=ON → means supply restoration ALARM: BATTERY=LOW → means low battery level

REFERENCE STANDARDS

Conformity to the EU directive: 1999/5/EC R&TTE is declared in reference to the Harmonised Standards:

- EN 60950-1
- EN 301489-1, EN 301489-7