Remote control and monitoring GSM modem via SMS

Compliant with Italian CEI 0-16 Standard, paragraph 8.8.6.5 and annex M, resolution 421/2014 of the ARERA

To configure the EXC GSM 01 modem (using the RJ45-USB programming cable included), the EXC GSM SW software must be used. This can be downloaded for free from the www.LovatoElectric.com website.

The software allows you to set:

- the users enabled to exchange messages with the modem
- the identifier of the modem, for example the active customer code (POD) in CEI 0-16 applications;
- the functions assigned to the digital output and input and to analogic input;
- the texts of the SMS associated with the commands
- the logic of the actions taken following the SMS arrival, change of input status, alarm situations.

Configuration is also possible off-line, creating a file to transfer to the modem at another time.

Functional characteristics

- Connection to the GSM network for sending and receiving SMS messages
- Programmable message texts
- Command output piloted by SMS or internal logic, for example to decide specific actions (reply either by SMS or voice message, or by switching the relay output)
- Programmable digital input, for example to detect the status of the input or the arrival of an SMS with specific text), to which the user can send the remote disconnection command to the interface device CEI 0-16
- Programmable digital input, for example to detect the status of the Interface Device (DDI) and sending of successful DDI opening and closing SMSs
- POD management (active user code)
- Management of the list of caller IDs (CLI) up to 4000 callers
- Remote lighting and air conditioning system control;
- Time and date based load management;
- Fluid tank level alarms;
- Detection of boiler temperature thresholds;
- Hire equipment motion alarms.

Applications

- Remote lighting and air conditioning system control;
- Time and date based load management;
- Fluid tank level alarms;
- Detection of boiler temperature thresholds;
- Hire equipment motion alarms.

Use with CEI 0-16

The CEI 0-16 standard in paragraph 8.8.6.5 and in attachment M prescribes that the electricity production plants powered by wind or solar photovoltaic sources with power greater than or equal to 100kW, connected or to be connected to medium voltage grids, are equipped with GSM modem. Thanks to this modem it is possible to manage the disconnection of the generation through the messages sent by the energy distributor.

Operational characteristics

M O D E M

- 35mm DIN (IEC/EN 60715) rail fixing
- 4 modules
- Supply: 100...240VAC
- Consumption: 5VA
- 1 digital output 3A 250VAC
- 1 self-supplied digital input
- 1 analogic input 0...10V, 0...20mA, NTC
- Housing for 3V and 1.8V SIM card
- SIM PIN management
- Temperature sensor
- Update time, sunrise and sunset via GSM network
- Position update via SMS
- Certification according to EC rules, part 15B
- Operating temperature: -20...+60°C
- Protection rating: IP40 on front; IP20 on terminals.

A E RIAL

- Quad band 850/900/1800/1900MHz
- Exterior IP69K
- 2.5m cable
- Fixing via M10 hole:
  - with adhesive seal
  - with threaded pin and nut.

Compliance

Compliant with electrical safety standards: EN62368, EN62231.
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Wiring diagrams

Interface protection system units compliant with Italian CEI 0-16 standard - For medium voltage

PMVF 30... with EXC GSM 01

Connection through VTs in Medium Voltage

Direct connection in Low Voltage Three-phase connection

1 Only for PMVF 30 D048. 2 Local control choice. 3 VT in MV for residual voltage measurements.

The connections coloured in GREEN, in addition to the GSM Modem, represent the only wiring necessary for the adaptation.

EXC GSM 01 modem wiring diagram with other interface protections (PI) with self-supplied remote disconnection input

EXC GSM 01 modem wiring diagram with other interface protections (PI) with remote disconnection input to be supplied.

The connections coloured in GREEN, in addition to the GSM Modem, represent the only wiring necessary for the adaptation.
The products described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding. Remember also that the products themselves must be used by qualified personnel, in compliance with current plant engineering and installation standards, in order to avoid injury to persons or damage to property.