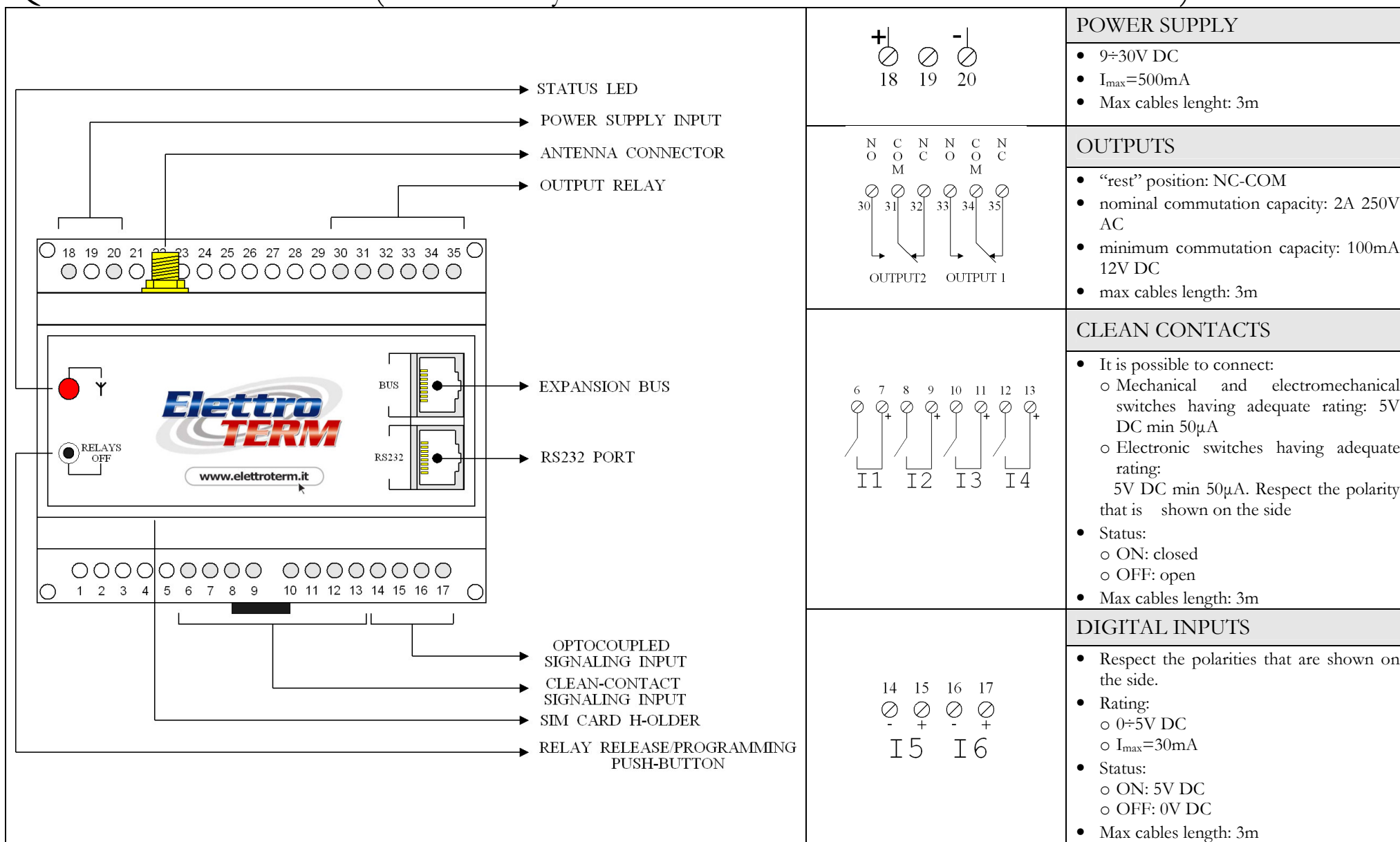


ELETTROTERM SRL

Quick Reference EL35.005 (Read carefully the manual contained in the attached CD Rom.)



SETTINGS

The EL35.005 device requires the use of a SIM Card which has to be inserted into the proper holder. First, the PIN Code of the SIM Card must be disabled. Then, the following data should be inserted:

SIM CARD DIRECTORY	LOCATION	CONTENT		MEAN
	1	Name:	PW	password
		Number:	P ₁ P ₂ P ₃ P ₄	
	2	Name:	LOCAL	Local inputs events
		Number:	11I ₆ I ₅ I ₄ I ₃ I ₂ I ₁	
	3♦	Name:	EXP1	<i>Expansion 1</i> inputs events
		Number:	I ₁₄ I ₁₃ I ₁₂ I ₁₁ I ₁₀ I ₉ I ₈ I ₇	
	4♣	Name:	EXP2	<i>Expansion 2</i> inputs events
		Number:	I ₂₂ I ₂₁ I ₂₀ I ₁₉ I ₁₈ I ₁₇ I ₁₆ I ₁₅	
	⋮			Not used

Note:

- P_x: is a digit that is comprised between 0 and 9
- I_x: is a digit that can only be 0 or 1. Its meaning is the following:
 - 0: the sms signal which is associated with input “X” is sent only after an ON→OFF transition has taken place at the “X” input connectors
 - 1: the sms signal which is associated with input “X” is sent only after an OFF→ON transition has taken place at the “X” input connectors
- ♦ location 3 has to be filled in only when an input expansion is connected
- ♣ location 4 has to be filled in only when two input expansions are connected

In order to insert the setting parameters it is possible to use:

- either a cellular phone
- or the serial port of the device

When a cellular phone is being used, the following procedure should be followed:

- insert the setting parameters in the SIM Card by using a cellular phone
- the EL35.005 device has to be disconnected from the power
- insert the SIM Card into the SIM Card holder
- push the “Relays OFF” push-button, and keep it pushed
- connect the EL35.005 device to the power
- as soon as the signal led flashes, release the “Relays OFF” push-button
- wait 1 minute
- push the “Relays OFF” push-button to complete the setting procedure

- wait 1 minute
- use the M command to insert the signalling sms’s

When the serial port of the EL35.005 device is used, the following procedure should be followed:

- disconnect the device from the power.
- insert the SIM Card into the SIM Card holder
- connect the EL35.005 device to the serial port of a PC (9600,8,N,1)
- push the “Relays OFF” push-button and keep it pushed
- connect the EL35.005 device to the power
- as soon as the signal led flashes, release the “Relays OFF” push-button
- wait 30 seconds
- use HyperTerminal, or the Elettroterm CelSoft5 program, in order to insert the setting parameters and the signaling sms’s
- push the “Relays OFF” push-button to complete the setting procedure

After the setting procedure has been completed, the EL35.005 device is ready to receive or send sms messages.

An sms is associated with each signaling input. The signaling sms are stored in the SIM Card memory.

The association between each signaling input and the location where an sms is memorized, is the following:

- the sms which is stored in position “X” is associated with signaling input nr. “X”.

During the programming phase it is of capital importance that the signaling sms’s are inserted by starting from the first input and gradually proceeding to the last available input.

It is important to take care that:

- the SIM Card is not protected by a PIN Code
- the SIM Card has to contain the Sms Service Centre Address
- the SIM card has not to have additional functions activated (e.g. call deviation,...)

COMMAND SMS

The commands have to be directed to the phone number of the SIM Card inserted in the EL35.005 device.

OUTPUTS STATUS MODIFICATION

Single output activation (command 1, one):

PW	#	1	#	OUTPUT N°
----	---	---	---	-----------

This command is used to activate only the output indicated by “OUTPUT N°” (e.g. 1234#1#2).

Single output deactivation (command 0, zero):

PW	#	1	#	OUTPUT N°
----	---	---	---	-----------

This command is used to deactivate only the output indicated by “OUTPUT N°” (e.g. 1234#0#1).

Simultaneous outputs status modification (Command O, like Otello):

PW	#	O	#	U ₂ U ₁	#	U ₁₀ U ₉ U ₈ U ₇ U ₆ U ₅ U ₄ U ₃
----	---	---	---	-------------------------------	---	--

where:

- PW: is the password that has been inserted
- #: is a separator
- O: is the command
- #: is a separator
- U_X: is the desired status of output number X
- #: is a separator (it has to be only used when an output expansion is connected)
- U_Y: is the desired status of output number Y (it has to be only used when an output expansion is connected)

This command is used to simultaneously change all outputs status.

U_X ed U_Y can only assume the following values (meaning):

- 0: the “X” (or “Y”) relay output is set on “NC” (NC and COM are short-circuited)
- 1: the “X” (or “Y”) relay output is set on “NA” (NA and COM are short-circuited)

After executing the command, the EL 35.005 device sends an sms to the sender phone number, confirming the status of the output.

STATUS QUERY

This command is used to ask the present status of the outputs.

The command format is the following:

PW	#	S
----	---	---

Where:

- PW: is the Password that has been inserted
- #: is a separator
- S: is the command

After receiving the command, the EL 35.005 device sends an sms to the sender phone number, confirming the actual status of the outputs.

MODIFICATION OF A SIGNALING SMS

This command is used to modify the setting of a signaling sms.

The command format is the following:

PW	#	M	Pos	“	Text	“	Addressee
----	---	---	-----	---	------	---	-----------

where:

- PW: is the Password that has been inserted
- #: is a separator
- M: is the command
- “: is a separator
- Text: is the text of the message (signal sms) that we wish to insert (max 20 characters, either letters [without any accent] or digits)
- “: is a separator
- addressee: is the number of the cellular phone to whom we want to send the message.

After executing the command, the EL 35.005 device sends an information sms to the sender phone number. The sms includes the text that has been inserted, the position where it was inserted, and the addressee phone number.

The command can be used during the programming phase to insert the signal sms’s. When used for this purpose, it is important to start from Pos=1 and then proceed with Pos=2, Pos=3 and so on.

USER INTERFACE

SIGNALLING LED

The signalling led which is placed on the front panel of the EL35.005 device supplies the following information:

LED INDICATION	STATUS OF THE SYSTEM
Off	The device is not connected to the power
The led is flashing with long duration flashes (the led is almost always on)	<ul style="list-style-type: none">• the SIM Card is not properly inserted• the SIM Card is protected by a PIN code• the device is not connected to the GSM network and is searching the field
The led is flashing with very short duration flashes (the led is almost always off)	The device is connected to the GSM network and is ready to receive commands
On (continuous light)	A data transfer connection is in progress

PUSH-BUTTON

The push-button, identified by the writing “Relays OFF”, that is placed on the front panel of the EL35.005 device, can be used to:

- reset all the relay outputs of the device (including any eventual expansion) to the “rest” state (NC and COM are short-circuited)
- program the EL35.005 device during the setup phase.

WARNING

The device EL35.005 (the device and its associates cabling) must to be installed in a location free of, or placed near:

- dust, humidity, high temperature;
- exposure to direct sunlight;
- heating or cooling apparatus;
- devices producing high electromagnetic radiation;
- liquid or chemical substances;
- vibration and mechanical shocks.

Attention: When installing the EL35.005 device, the following Index of Protection Ratings (IP) must be observed:

- IP40 standard: minimum grade of protection that must be respected at all times
- IP54 standard: protection grade to be guaranteed in case of outdoors applications.

NOTES

Read carefully the manual contained in the CD Rom.

DECLARATION OF CONFORMITY

Hereby, **ELETTROTERM SRL**, declares that the device **EL35.005** is in compliance with the essential requirements and other relevant provision of Directive 1999/5/EC; as having designed in conformity with the requirements of following Reference Standard:

- EN 301 489-7 V1.1.1 (2000-09)
- EN 301 511 V7.0.1 (2000-12)
- EN 60950 (2000)



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