User's Manual
IP-12

CONTENTS

INFORMATION AND RECOMMENDATIONS

CE

- This product complies with the requirements of the 1999/5/ CEE R&TTE Directive, 2004/108/EC Directive on electromagnetic compatibility and 2006/95/EC on low voltage, insofar as the product is used correctly.

- **Cabling recommendations:** the cables used to connect readers, and the network and other peripherals must be installed in accordance with the instructions for Level 2 (protected environment) of standard NF EN 61000-4-4.

- **This product must be installed by an approved company.** Incorrect installation and use may result in electric shock or fire. Before installation, read the technical information and comply with the recommendations for assembling the product.

TECHNICAL CHARACTERISTICS

1) IP-12

Maximum power consumption ....300 mA
Supply voltage..9 – 14VDC
Weight with housing ....150 g
Housing dimensions....................................157 x 108 x 30 mm
Operating temperature ....- 20°C to + 50°C
Control relay...1A / 12V – 1A / 24V

2) PROTECTION

The unit is fitted with a 5x20 1A fuse on the 12V input inside the housing. If the power light does not come on when the unit is switched on, check this fuse.

CONNECTING A DEVICE USING THE WIEGAND OR CLOCK & DATA PROTOCOL
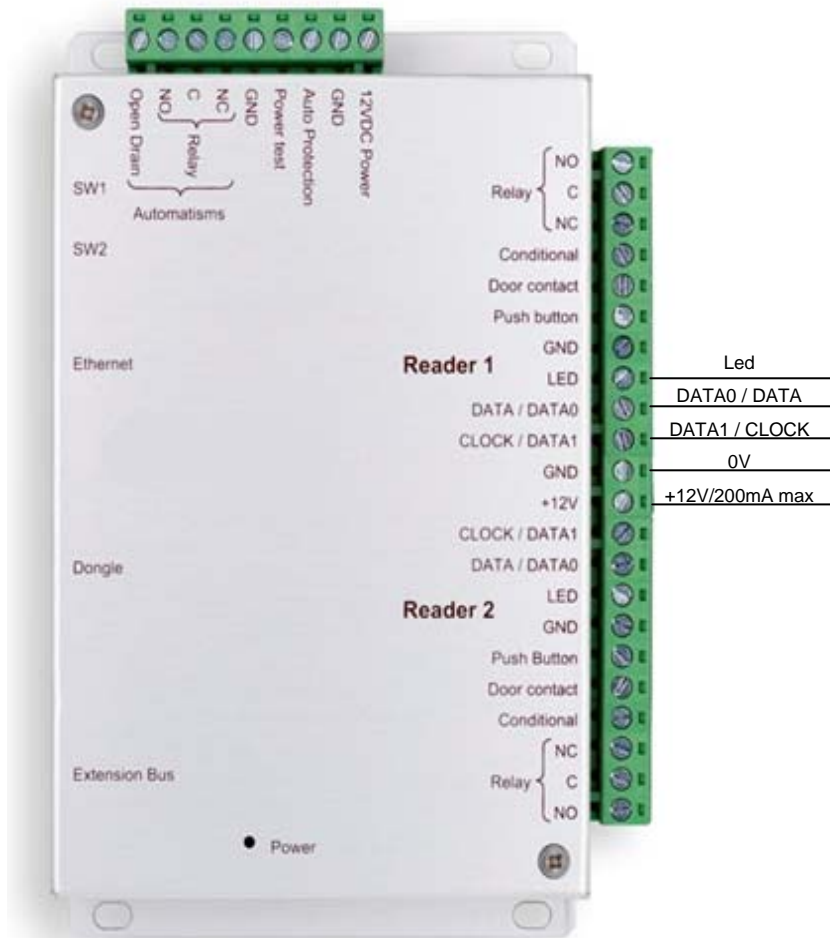
WIEGAND:
- *Proximity readers (HID, STID, DESTEIR, INDALA, etc.)*
- *Key pads (XPR, etc.)*
- *Biometric readers (SAGEM, etc.)*
- *Radio receivers (TECHNO EM, etc.)*
- *DALLAS (via interface)*

CLOCK & DATA:
- *Magnetic strip readers*
- *Barcode readers*
- *Proximity readers*
- *Radio receivers*

Information:

5 conductors (3 pairs recommended)

Max. distance: 150 m

Cable type: 0.6 mm (SYT recommended)

Shield: Optional

Warning: Do not install the unit-reader cables near other high voltage or high current cables, particularly 220V or higher.

Note: Each reader can have different technology (e.g. Reader 1 using Wiegand, Reader 2 using Clock & Data).
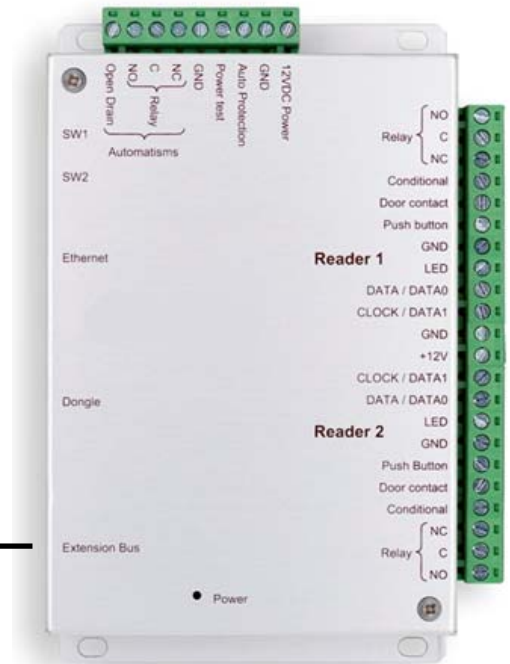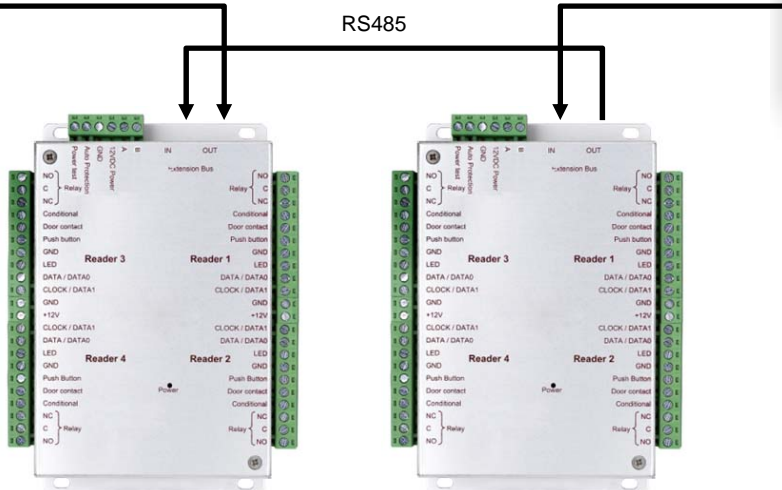
> **Warning:** *If you use an external power supply for your proximity readers, take care to **connect the various earths to that of the unit***.

CONNECTING IP-EXT4 MODULE
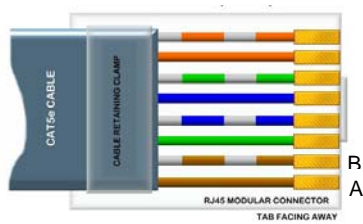
VERSO	V-EXT4
A	A
B	B

You can also use the A and B terminals on the IP-EXT4 modules to connect an RS485 bus.
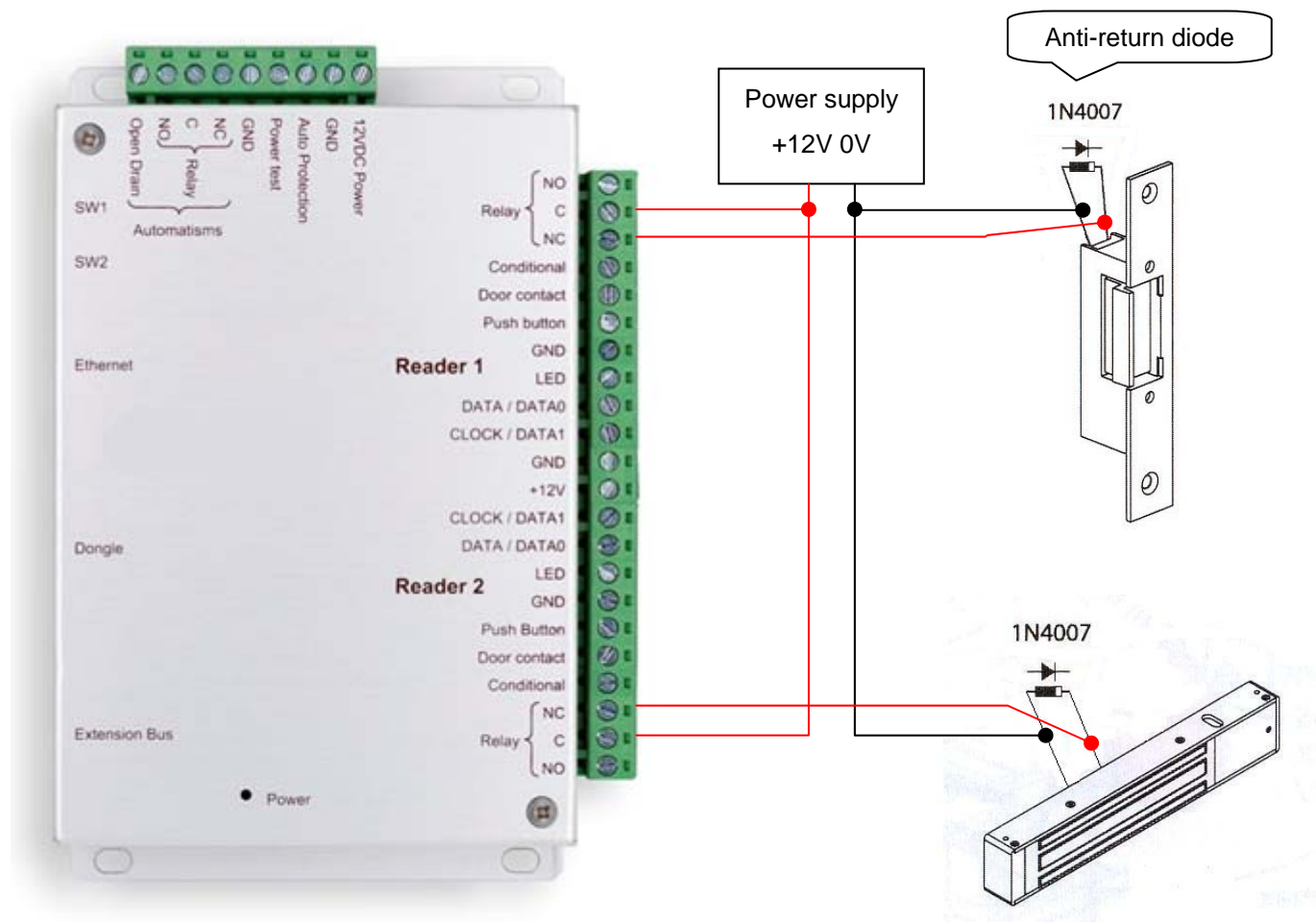
Information:

2 conductors (2 pairs recommended)

Max. distance: 750 m

Cable type: 0.6 mm (SYT recommended)

Warning: Do not install the cables near other high voltage or high current cables, particularly 220V or higher. Use the same pair for the A and B lines.

CONNECTING A POWER LOSS BOLT AND AN ELECTROMAGNETIC DOOR LOCK OPERATING ON POWER LOSS

Warning: In order to prevent random malfunctions that may interfere with proper system operation due to back-currents, it is imperative to use and connect the anti-back-current diodes supplied with the unit in compliance with the cabling diagram above.

Even when using an additional uninterruptible power supply for locking separate to that of the unit, it is obligatory to follow the above cabling diagram.

CONNECTING A STANDARD POWER-ON DOOR LOCK
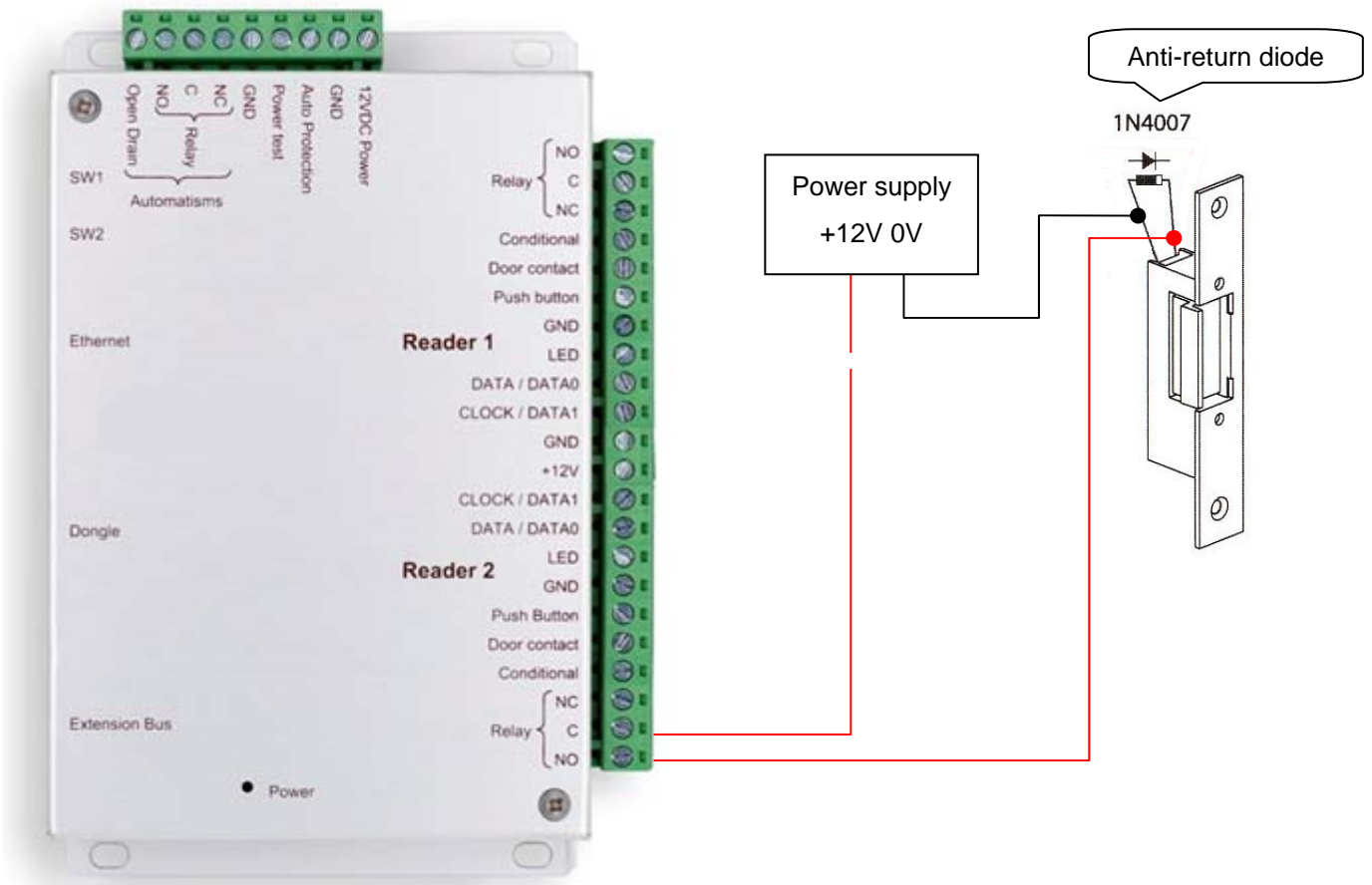
Warning: In order to prevent random malfunctions that may interfere with proper system operation due to back-currents, it is imperative to use and connect the anti-back-current diodes supplied with the unit in compliance with the cabling diagram above.

Even when using an additional uninterruptible power supply for locking separate to that of the unit, it is obligatory to follow the above cabling diagram.
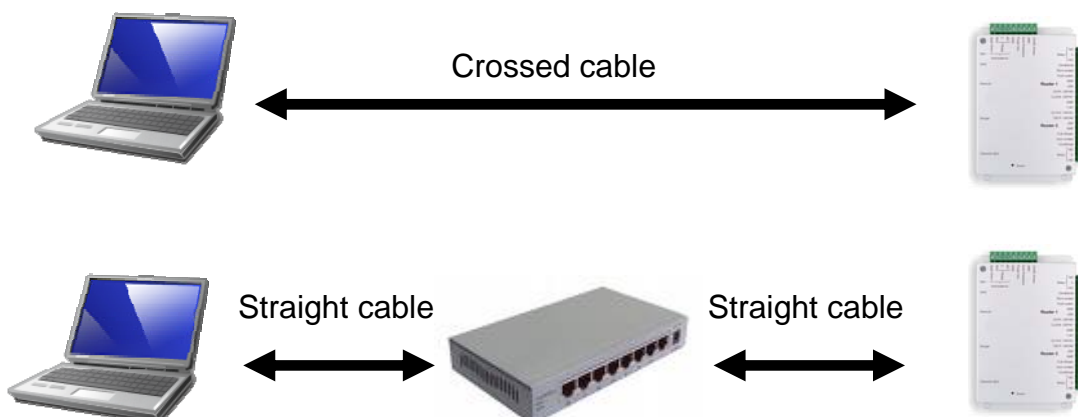
CONNECTING THE IP-12 UNIT TO AN ETHERNET NETWORK

Each IP-12 unit has an IP address. This address is printed on a sticker on the unit housing.

To configure a different IP address, you can use the "Automatic detection" menu in DOMOS. To do this, proceed as follows:

- After having created your installation, on first start up, DOMOS offers to create a new unit
- Click on the "Search" button
- A list of detected units will appear
- Double click on the unit you want to add
- Check the equipment list to confirm that your unit is properly connected.
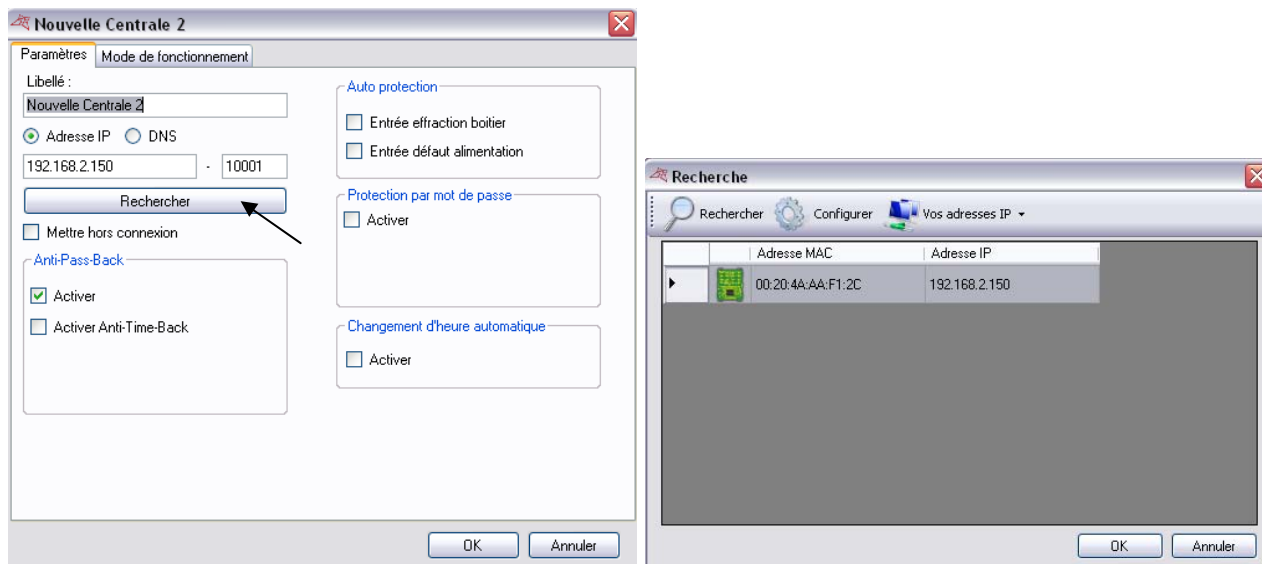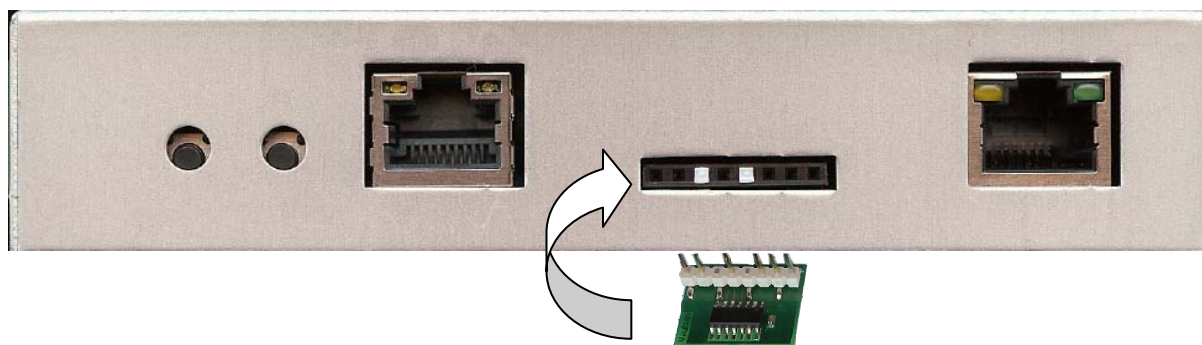

INSTALLATION OF DOMOS DONGLE

To use the DOMOS software, you must, in certain cases (see following table), install a dongle on your unit.

Use of the dongle

Number of readers in the installation	Software	Dongle
Up to 10 readers	DOMOS	Dongle required
Up to 40 readers	DOMOS-40	Dongle required
Up to 80 readers	DOMOS-80	Dongle required
Up to 140 readers	DOMOS-140	Dongle required
Up to 840 readers	DOMOS-840	Dongle required

Installation of dongle: **with the power off**, install the dongle as shown below:
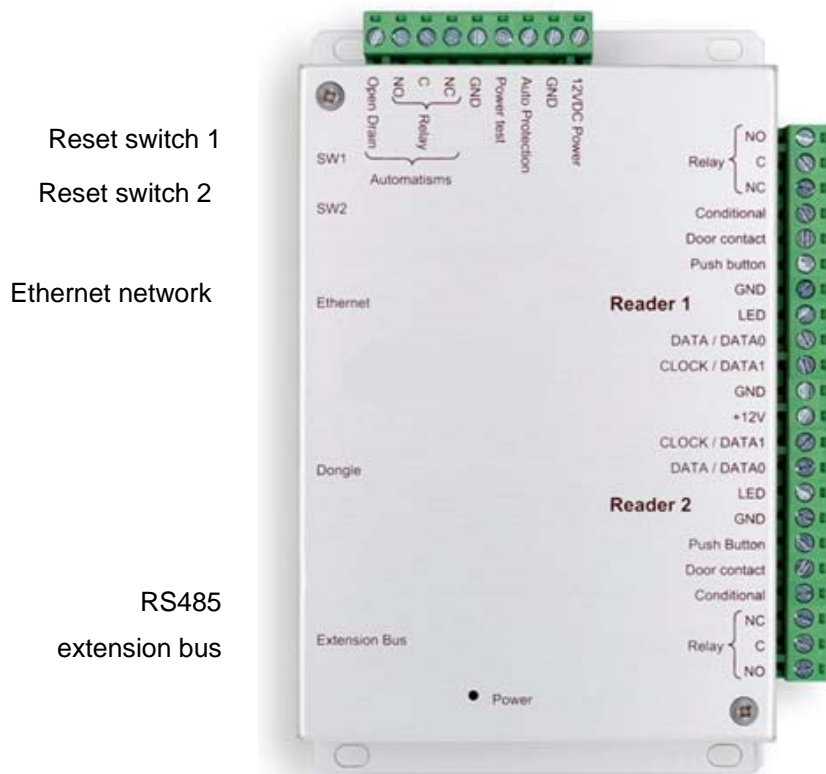

To confirm proper operation, DOMOS shows the version being used at the bottom of the main screen. Your unit must be rated for the dongle to be detected.

If you do not have the correct dongle for your installation type, your units will be displayed "rated" in the equipment list but no updates or event collection will be performed.

FUNCTIONS OF THE TERMINALS

Reset switch 1

Reset switch 2

Ethernet network

RS485
extension bus

Open Drain
NO
C
NC
GND
Power test
Auto Protection
GND
12VDC Power

SW1

Automatisms

SW2

Ethernet

Dongle

Extension Bus

Power

Relay
NO
C
NC

Conditional
Door contact
Push button
GND
LED
DATA / DATA0
CLOCK / DATA1
GND
+12V
CLOCK / DATA1
DATA / DATA0
LED
GND
Push Button
Door contact
Conditional
NC
C
NO

Reader 1

Reader 2

Relay

USE OF THE RESET BUTTONS

Use this switch to restore the factory network settings (IP address:
192.168.2.150, mask 255.255.255.0).

Turn off the power.

Hold the switch down while turning the power back on

Wait until the relays engage (about 20 seconds) holding the switch
down

Release the switch

Use this switch to clear the unit memory

Turn off the power.

Hold the switch down while turning the power back on

Wait until the relays engage (about 20 seconds) holding the switch
down

Release the switch