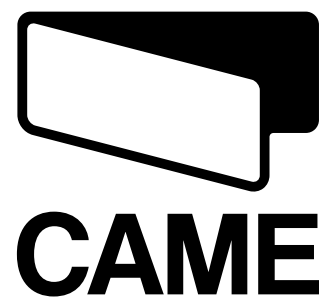


PARKING
CONTROL SYSTEM



FA00720-EN



INSTALLATION MANUAL
PS4000 - HW

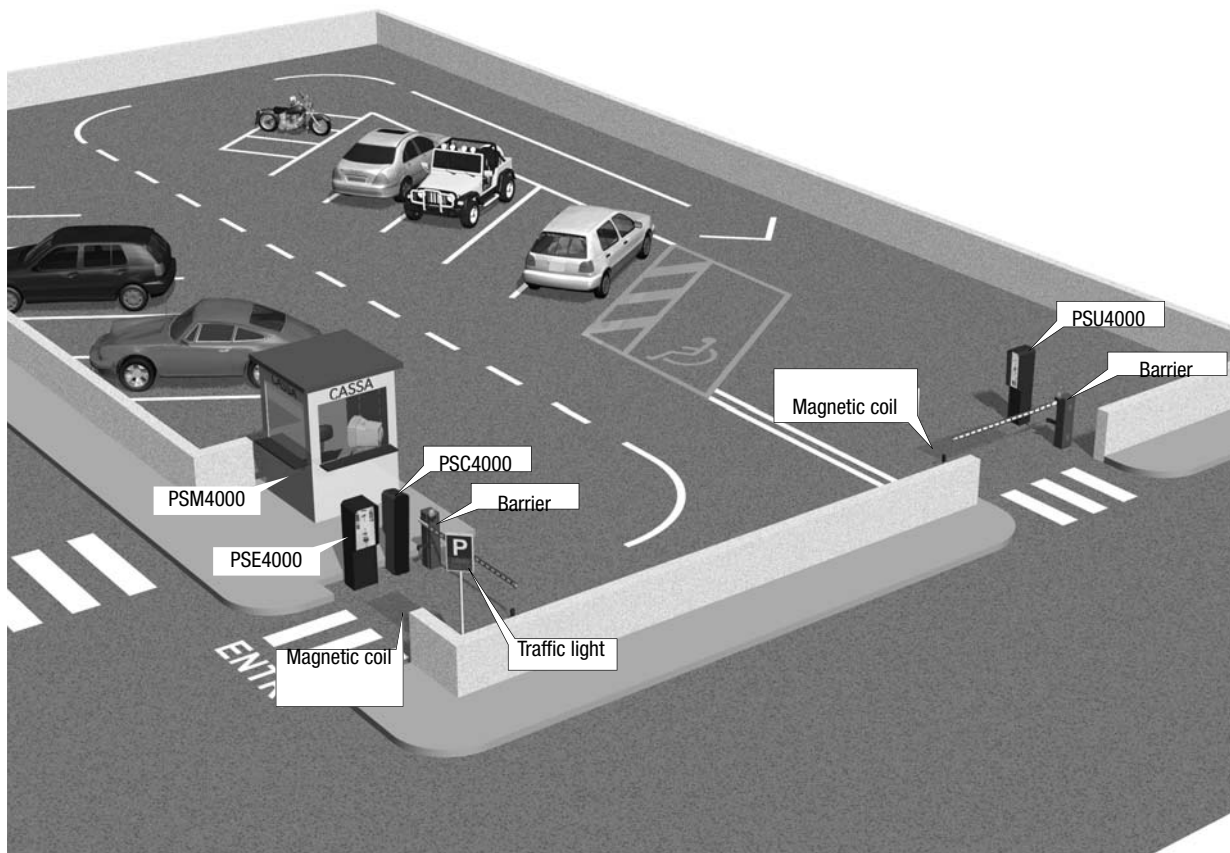
EN English

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Parking system diagram and technical notes



The system and its software are able to manage up to 10,000 parking places, with a maximum of 2,500 registered users and 7,500 non-registered users.

When designing a parking system one must take into account certain construction factors, in order to achieve maximum usability and safety for users.

For example, planning for enough space for cars to steer in and out of the parking space. When driving into the parking lot, there needs to be enough room for the driver to pull up and collect a token or check into the system as a registered user. It is advisable to keep a distance of 2.5 m between the PSE4000 and the barrier.

Also, there need to be clearly marked pedestrian transit lanes, featuring both horizontal and vertical signage. This is to prevent accidents and make pedestrian access quick and orderly, which in turn makes it easier for vehicles to access the parking lot.

In any event, it is necessary to evaluate the morphology of the system (height differences, low visibility areas and so on) to try and prevent any collisions and dangerous steering, as well as dangerous situations for people in the parking lot. If needed, see to installing (zebra crossings, signage, mirrors, photocells, sensors, etc.) to reduce danger levels.



Set up, upstream to the system, a dual-pole cut-off switch, with sectioned off power supply; (magnetothermic switch + differential switch) that has the following characteristics:

Magnetothermic switch with maximum cut-off current of 6 A (230 V) or 10 A (120 V);
 • differential switch with 30 mA of sensitivity.

Use 4 mm² cables or greater when connecting the single devices to the site's grounding terminal.

Description of the units making up the PS BARCODE system

PSM4000 - Manned cash register, complete with RBMP1 electronic control unit, management software, DISPLAY and PC30 interface for connecting up to a PC.

PSE4000 - Entrance unit complete with sensor for transponder cards and key-fobs and (GET) token dispenser.

PSU4000 - Steel exit unit complete with sensor for transponder cards and keyfobs and (GET) token collector.

PSC4000 - Automatic cash register complete with sensor for transponder cards and key-fobs, accepts coins, with (GET) token reader and display; no change return device, with receipt dispenser.

PSC6000 - Automatic cash register complete with personal computer, coin and banknote reader with change return device and credit card reader.

PSC6001 - Automatic cash register complete with personal computer, coin and banknote reader with change return device.

PSI16 - Interface for connecting up maximum 16 PSC1 units.

PSC1 - Manual auxiliary cash register. Together with the PSI16 it provides a pay station without a permanently connected personal computer.

PSIO1 - Auxiliary device controller for connecting up to PSSRV traffic lights, PSINS luminous signs, magnetic sensor and safety sensors (8 outputs max.).

GET - Gettone transponder.

PSINS - Double-sided vacant/full luminous sign.

PSSRV - Traffic light with red-green lights, Ø 200 mm.

SMA - Single-channel magnetic sensor for detecting metallic masses.

SMA2 - Dual-channel magnetic sensor for detecting metallic masses.

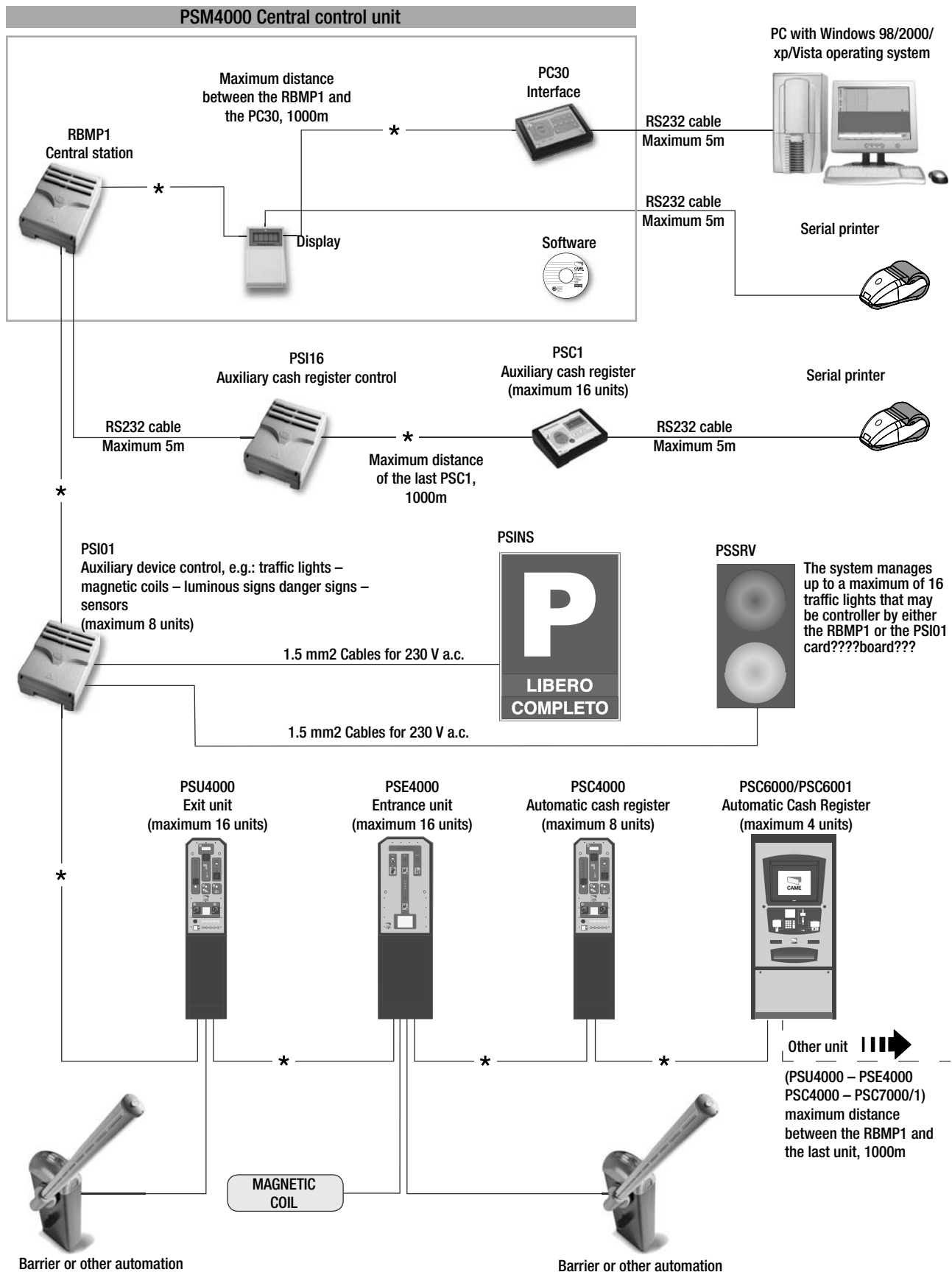
Technical data

PS TOKEN	Power source	Draw when idle	Maximum power draw	Max power output	Protection rating	Working temperature
PSM4000	RBMP1	230 V AC 50/60 Hz	35 mA AC	-	-	-
	PC30	12 V AC	175 mA AC	-	-	IP20
	DISPLAY	12 V AC	150 mA AC	-	-	-
PSE4000	230 V AC 50/60 Hz	98 mA AC	* 180 mA AC	*42 W	IP54	- 20° / 55 °C
PSU4000	230 V AC 50/60 Hz	72 mA AC	* 235 mA AC	*55 W	IP54	
PSC4000	230 V AC 50/60 Hz	125 mA AC	* 200 mA AC	*46 W	IP40	
PSC6001	230 V AC 50/60 Hz	360 mA AC	* 400 mA AC	*92 W	IP40	
PSI16	230 V AC 50/60 Hz	35 mA AC	-	-	-	
PSC1	12 V AC 50/60 Hz	135 mA AC	-	-	-	
PSIO1	230 V AC 50/60 Hz	60 mA AC	-	-	-	

* With the heating unit active, the heating coil absorbs an extra 500 mA and requires an extra 90 W of power.

** PSC6000 also featuring a credit card reader.

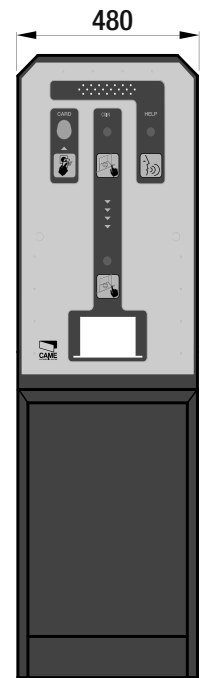
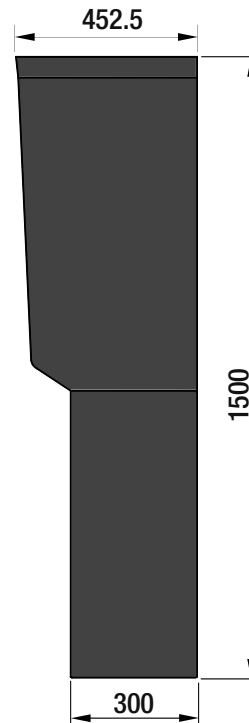
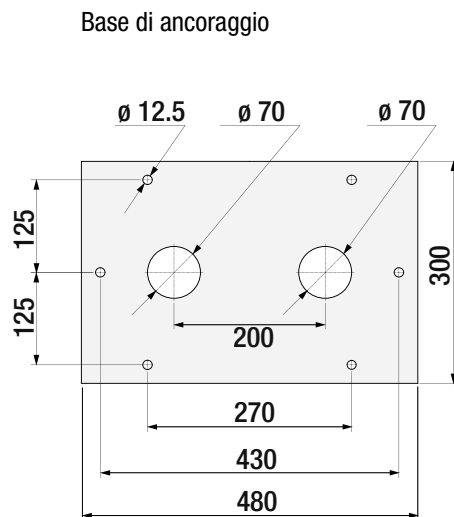
Wiring Diagram



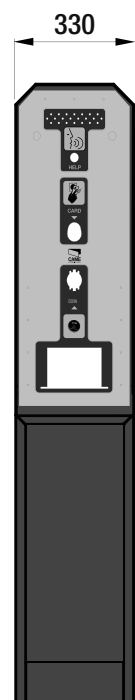
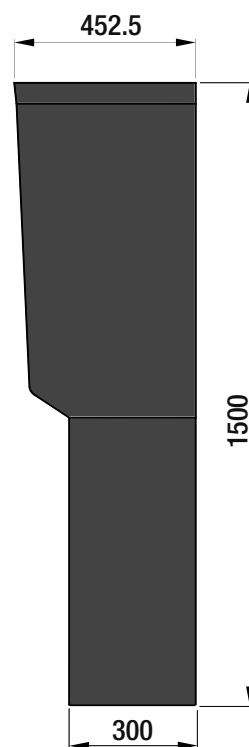
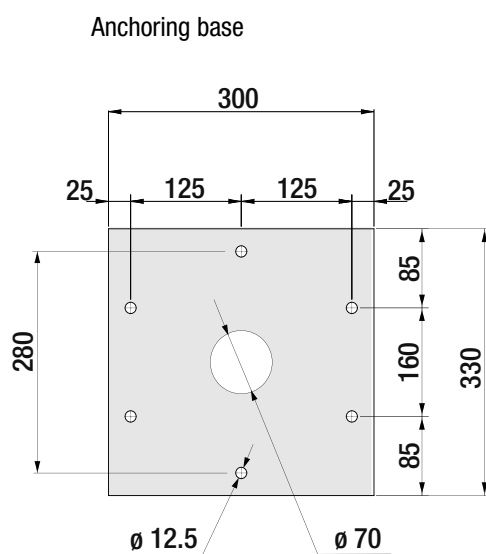
* Suggested cable non-screened multi-pair braided (CAT 5 - U/UTP - AWG 24) - ** Cable RS232, max 5 m - *** Cable Cross Null Modem, max 1.5 m.
N.B. Computers and serial printers with relative cables are not supplied by Came.

Dimensions, and anchoring bases

PSE4000

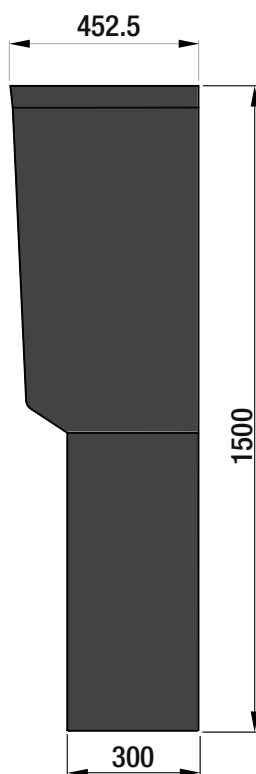
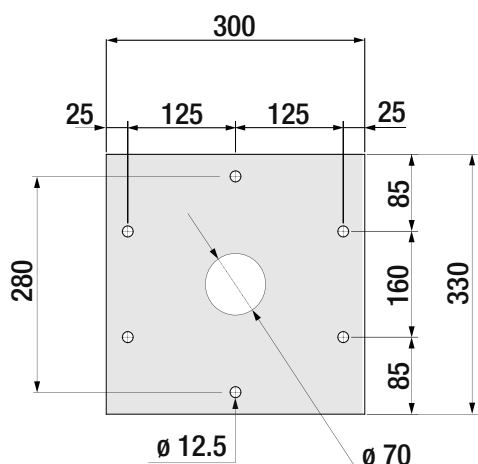


PSU4000



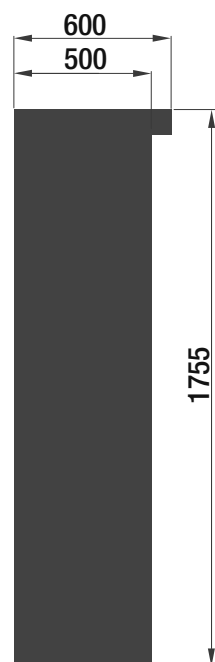
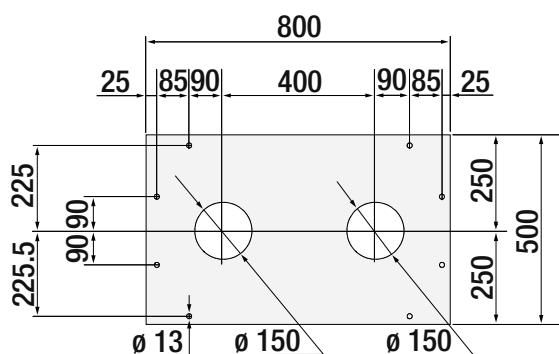
PSC4000

Anchoring base



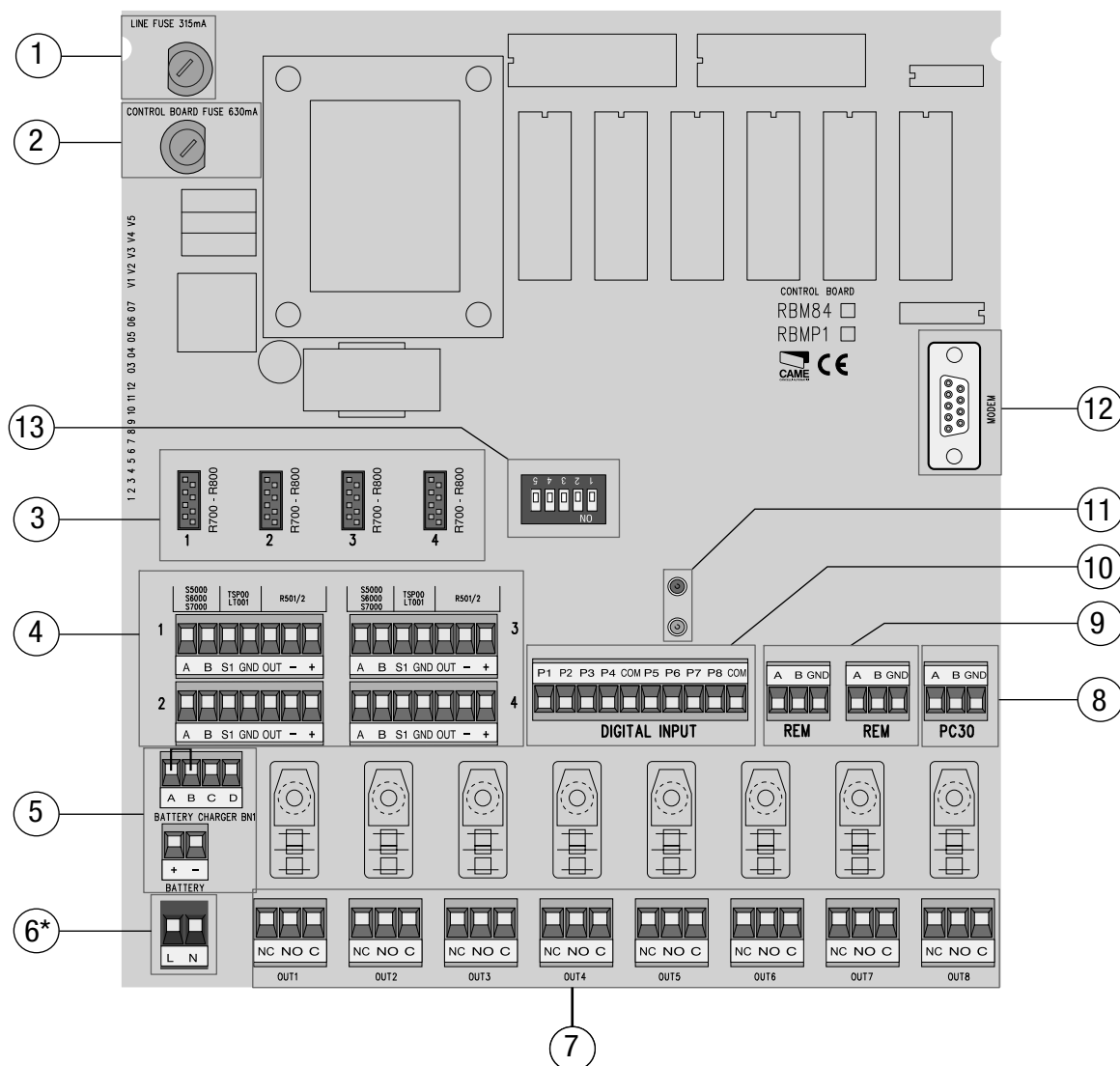
PSC6000/6001

Anchoring base



Secure, in stable fashion, the cabinets on suitable foundation concrete slabs.
Use proper size dowels, in terms of diameter and length.
Warning: a loose fitting may compromise the proper use of the tools and constitute a hazard

RBMP1 standard card – description

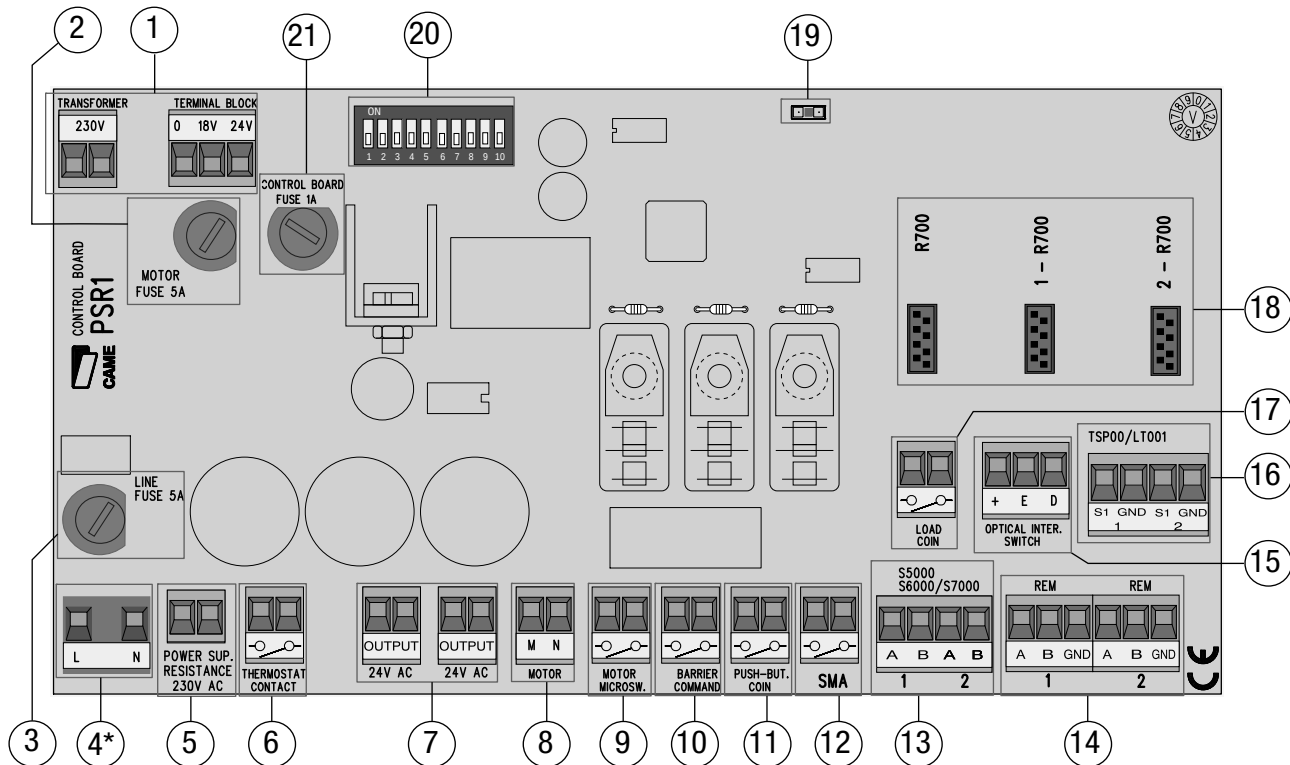


- | | |
|---|---|
| 1- Line fuse 315mA | 8- Terminal for connecting the PC30 |
| 2- Circuit protection fuse 630mA | 9- Terminal for connecting the PSE/PSU units |
| 3- Not used | 10- Terminals for connecting incoming digital devices |
| 4- Not used | 11- Warning LED light for "circuit on" and "communication underway" |
| 5- Terminal for connecting up the battery and battery charger (BN1 optional) | 12- Modem connection (or PSI16 if used) |
| 6- Power source terminal * board | 13- 5-way DIP Switch (for function detailed on page 45) |
| 7- Terminals for connecting devices to be managed (i.e. automation devices, alarms, traffic lights, etc.) | |



The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

PSR1 (PSE4000 – PSU4000) basic card – description

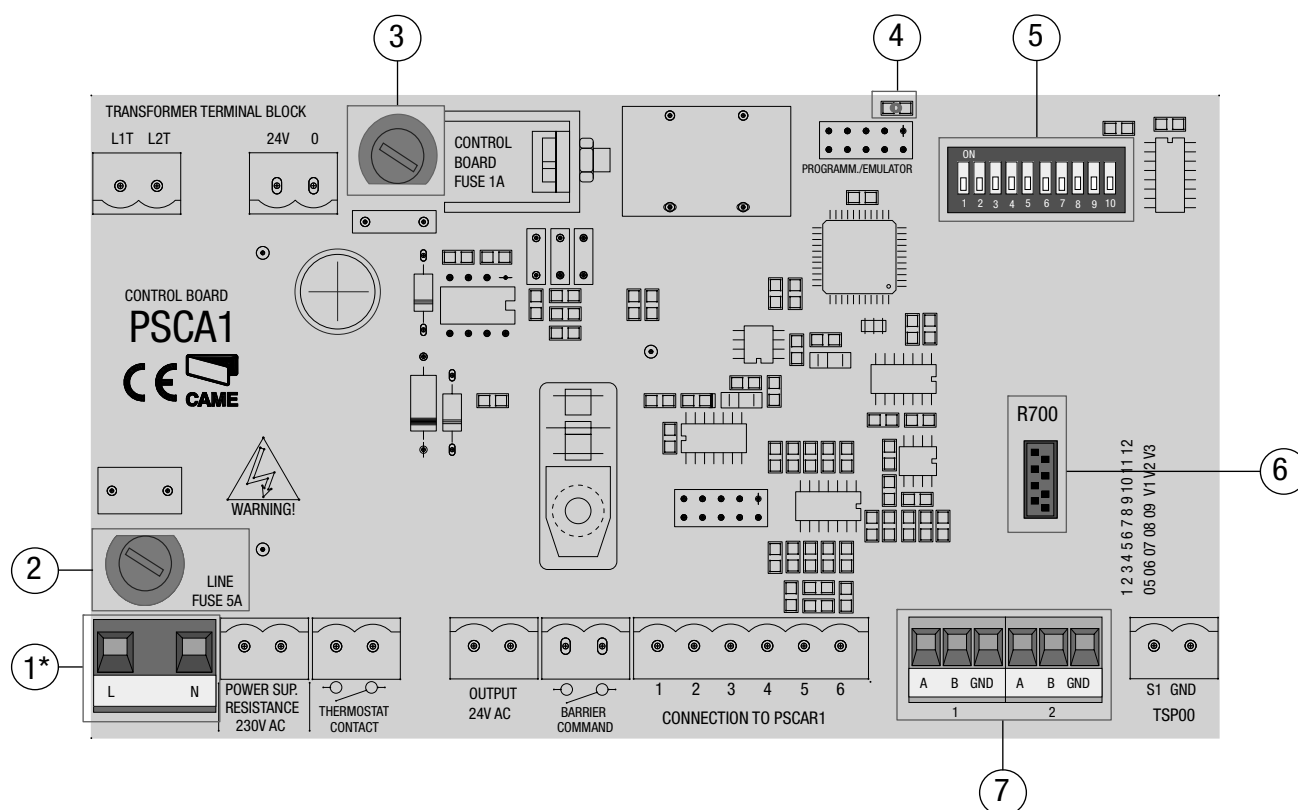


- | | |
|---|---|
| 1- Terminals for connecting to transformer | 12- Terminal for connecting the magnetic coil (only on token enabled PSE4000 units) |
| 2 - 5A token unit protection fuse | 13- Terminals for connecting sensors and keyboard |
| 3- Power source and 5A heating element protection fuse | 14- Terminals for connecting to the RBMP1 or to another PSR1 or to a REM |
| 4- Terminals for powering * 230 V a.c. card | 15- Token present reader sensor connection |
| 5- Terminals for connecting power to internal heating unit | 16- Connection to TSP00 sensors |
| 6- Thermostat contact to monitor heating unit (see p. 45) | 17- Token quality control contact |
| 7- 24V a.c. output | 18- Connectors for (R700 – R800) signal decoding cards |
| 8- Token unit power source | 19- “Circuit On” warning LED light |
| 9- Motor command micro-switch | 20- DIP Switch selector |
| 10- Terminals for connecting the devices that need to be commanded (i.e. automations) | 21- 1A circuit protection fuse |
| 11- Token request button contact | |



The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

PSCA1 (PSC4000) card - description

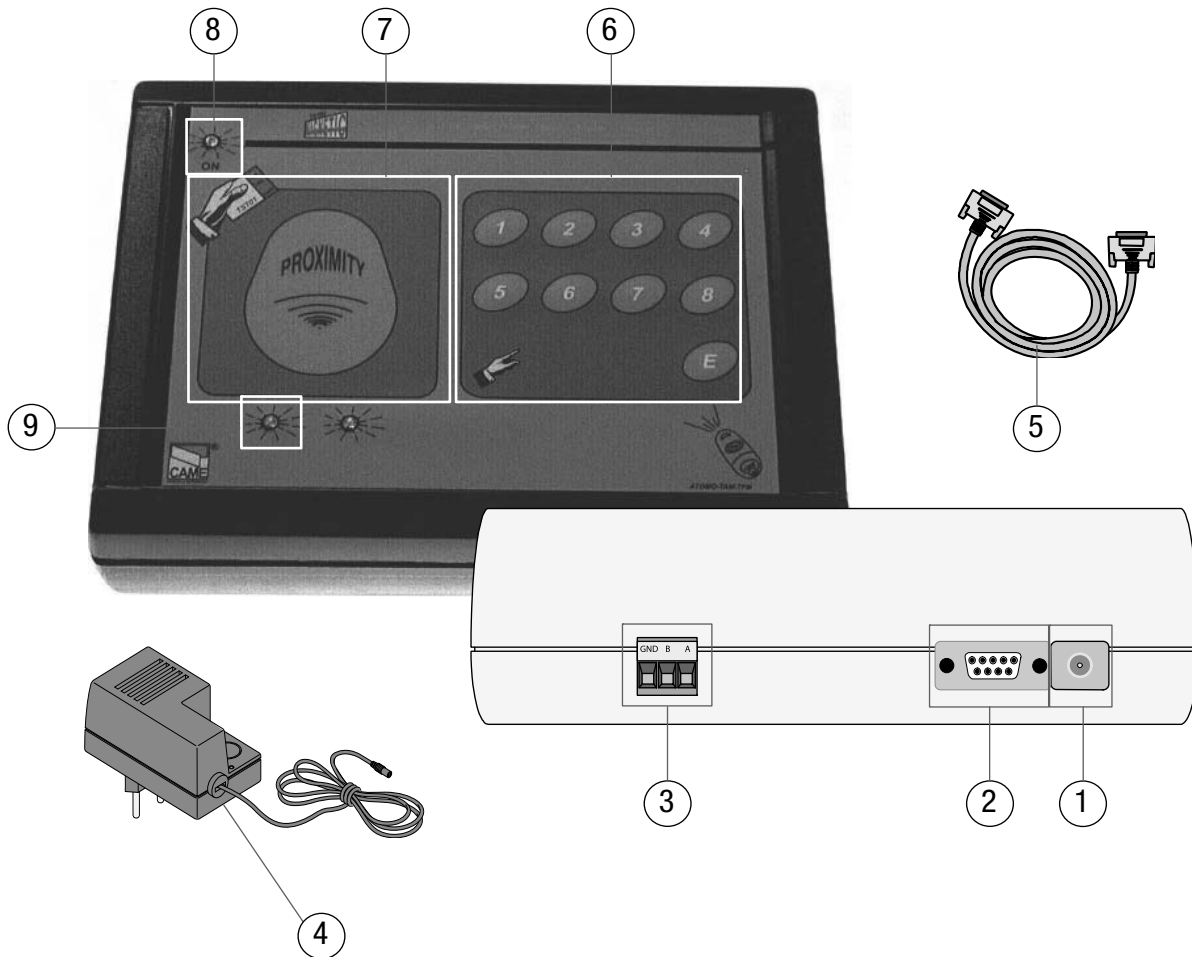


- 1 - Terminals to power the * 230 V a.c. card
- 2 - Terminals for connecting power to internal heating unit
- 3 - (Control board) circuit protection fuse
- 4 - "Circuit ON" LED warning light
- 5 - DIP Switch selector
- 6 - Connector for (R700) signal decoding cards
- 7 - Terminals for connecting to the RBMP1 or to another PSCA1 or to a PSR1



The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

PC30 – description

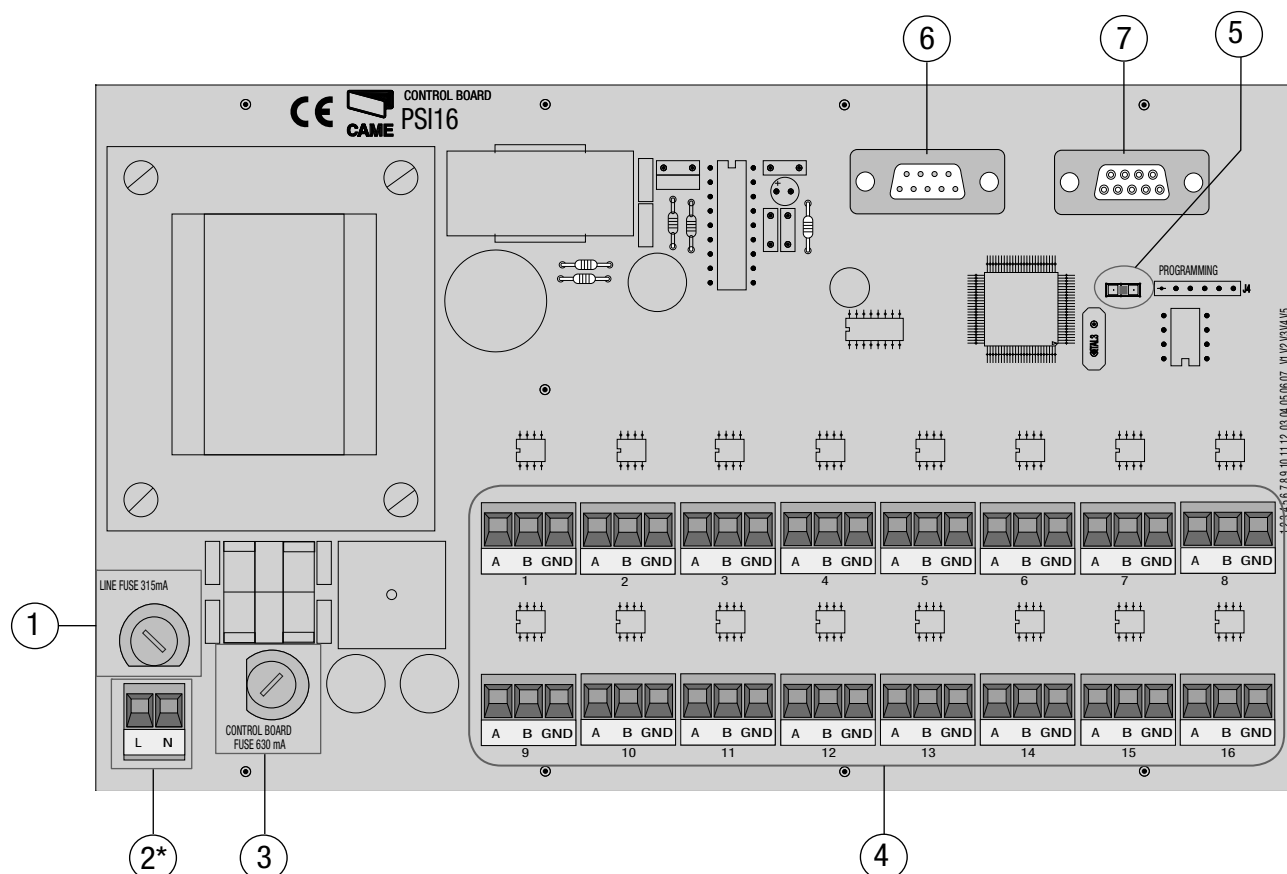


- | | |
|--|---|
| 1 - 12V a.c. power input | 7 - Area for TST01 Card (proximity card) memorisation and GET token reading |
| 2 - RS232 Serial port for connecting up Personal Computer | 8 - "Power ON" LED warning light |
| 3 - Terminals for connecting up RBMP1 (RS485 serial port) | 9 - LED warning light for code or proximity card reading |
| 4 - 12V a.c. power supply unit | |
| 5 - Cable complete with RS232 1.5 m connectors | |
| 6 - Keyboard for memorising S5000/S6000/S7000 selector codes | |



The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

PSI16 Auxiliary cash register control – description

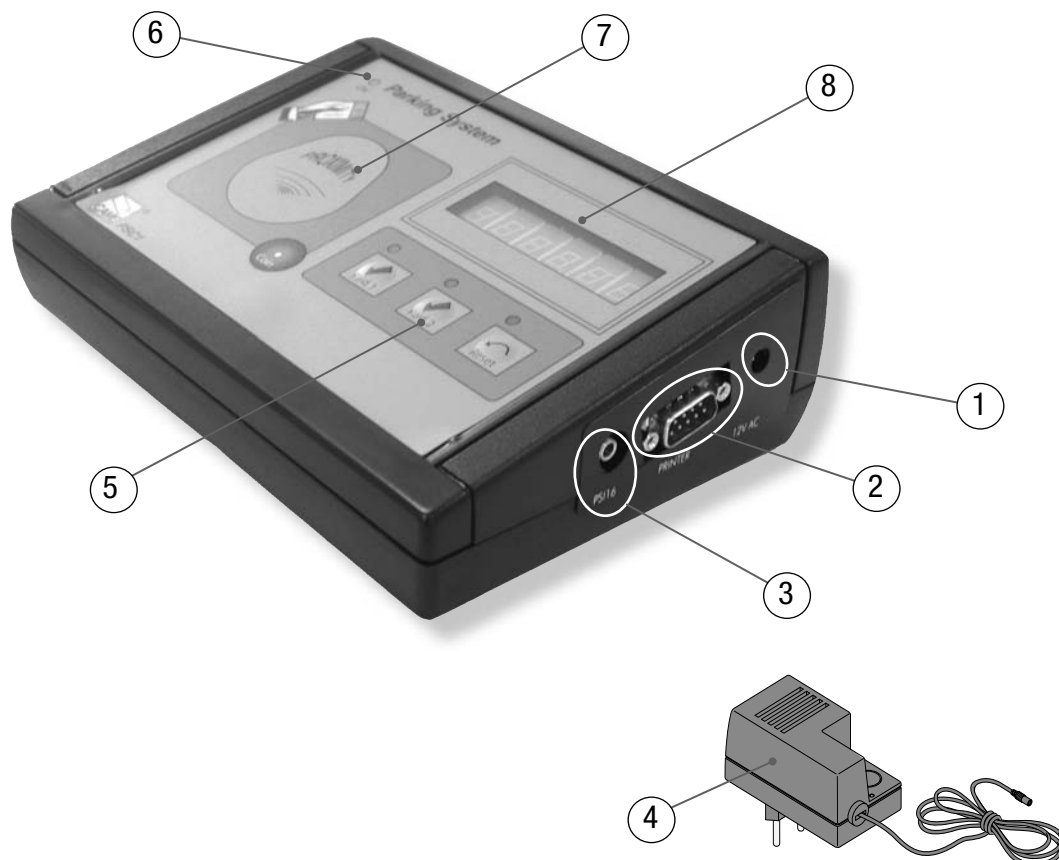


- | | |
|--|--|
| 1 - Power surge protection fuse | 5 - Power on" warning LED light |
| 2 - Terminals for powering the 230 V a.c. * circuit board??? | 6 - RS232 connector for connecting up RBMP1 card |
| 3 - Circuit protection fuse (Control Board) | 7 - RS232 connector for connecting up MODEM |
| 4 - Terminals for connecting PS13 units | |

! The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

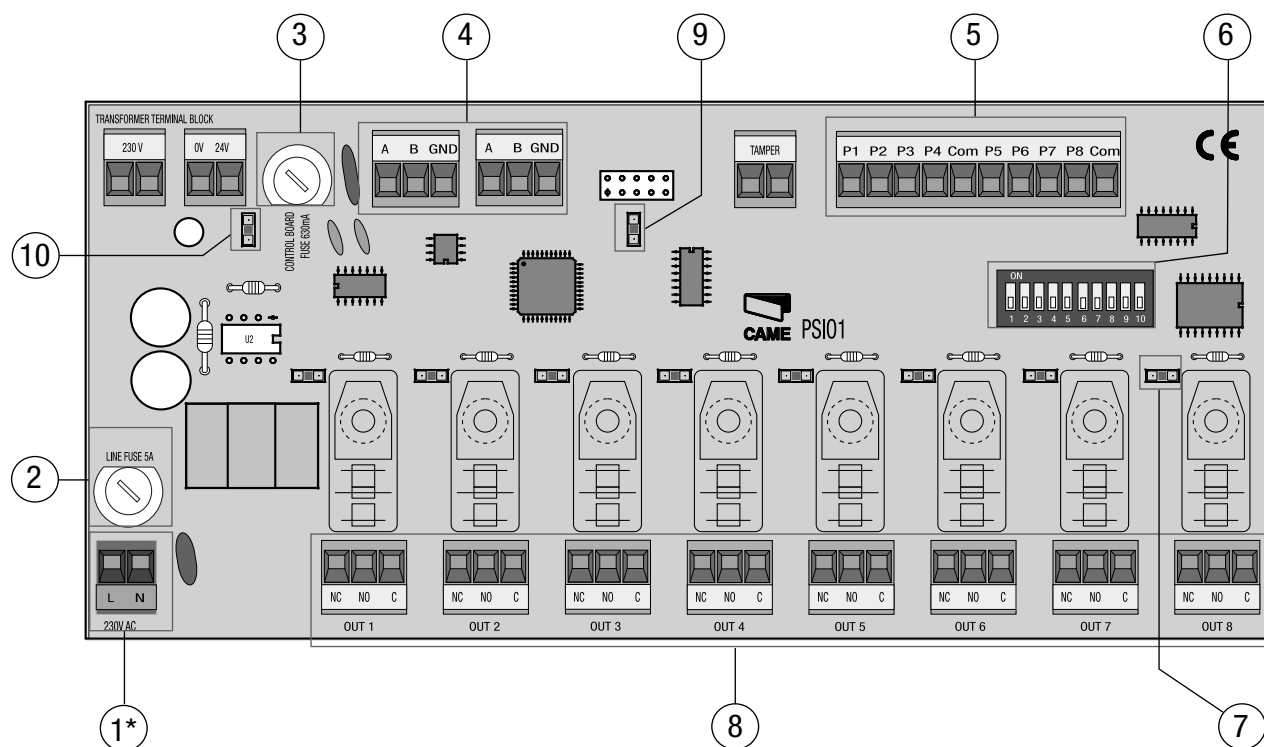
PSC1 Auxiliary cash registers – description

The PSC1 unit is an auxiliary cash register, and as such it allows occasional user exits. This peripheral unit is much used in shopping malls or supermarkets, as it allows several units to be installed to grant free or discounted parking to shoppers.



- | | |
|--|---|
| 1 - 12V a.c. power input | 5 - Command keyboard |
| 2 - Connector for serial printer | 6 - "Power on" warning LED light |
| 3 - Connector for connecting up to PSI16 | 7 - GET transponder token clearing reader |
| 4 - 12V a.c. power supply unit | 8 - Display |

PSIO1 Auxiliary device control - description

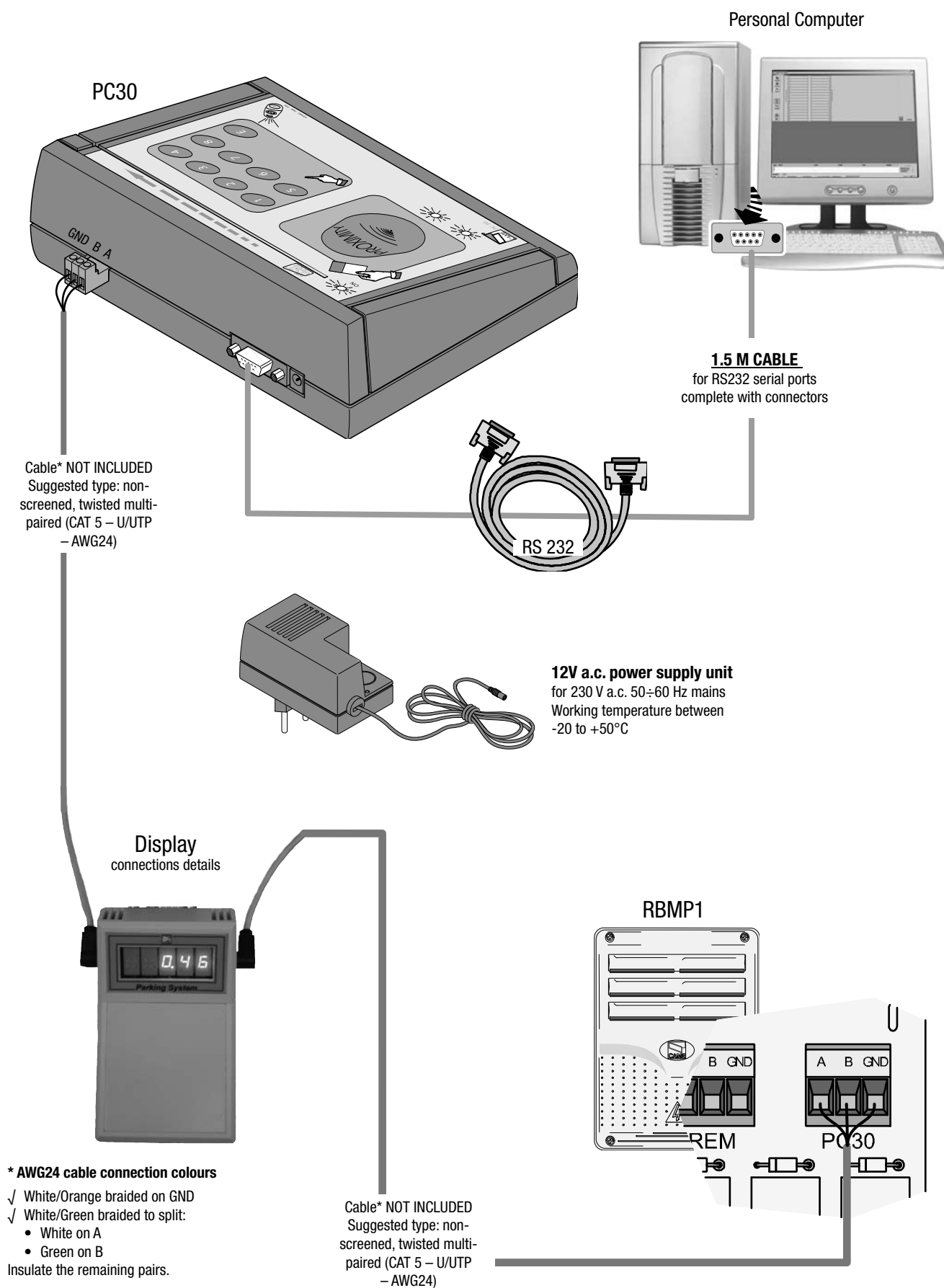


- | | |
|---|--|
| 1 - Terminals for powering to 230 V a.c. board | 6 - DIP Switch |
| 2 - Power surge protection fuse | 7 - "Relay ON" warning LED light |
| 3 - PSIO1 Board protection fuse | 8 - Terminals for connecting up control devices
(i.e. traffic lights, magnetic coils, etc.) |
| 4 - Terminals for connecting to RBMP1 or to another PSIO1 | 9 - "Communication ON" warning LED light |
| 5 - Terminals for connecting up input devices (Coils, Photocells, etc.) | 10 - "Board power ON" warning LED light |



The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

PSM4000 connections - (RBMP1) <--> Display <--> PC30 <--> PC

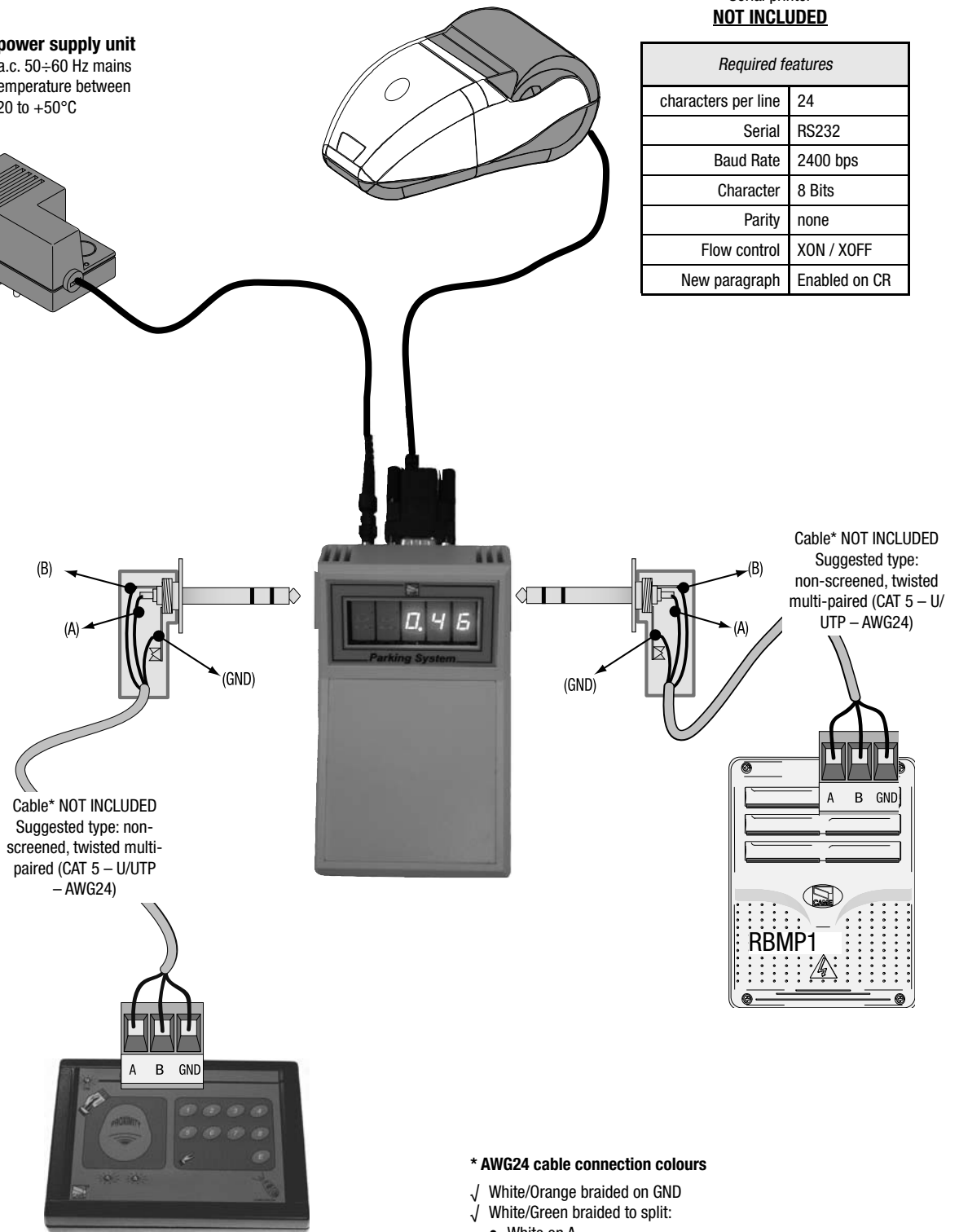


Display connections details

12V a.c. power supply unit
for 230 V a.c. 50÷60 Hz mains
Working temperature between
-20 to +50°C

Serial printer
NOT INCLUDED

Required features	
characters per line	24
Serial	RS232
Baud Rate	2400 bps
Character	8 Bits
Parity	none
Flow control	XON / XOFF
New paragraph	Enabled on CR

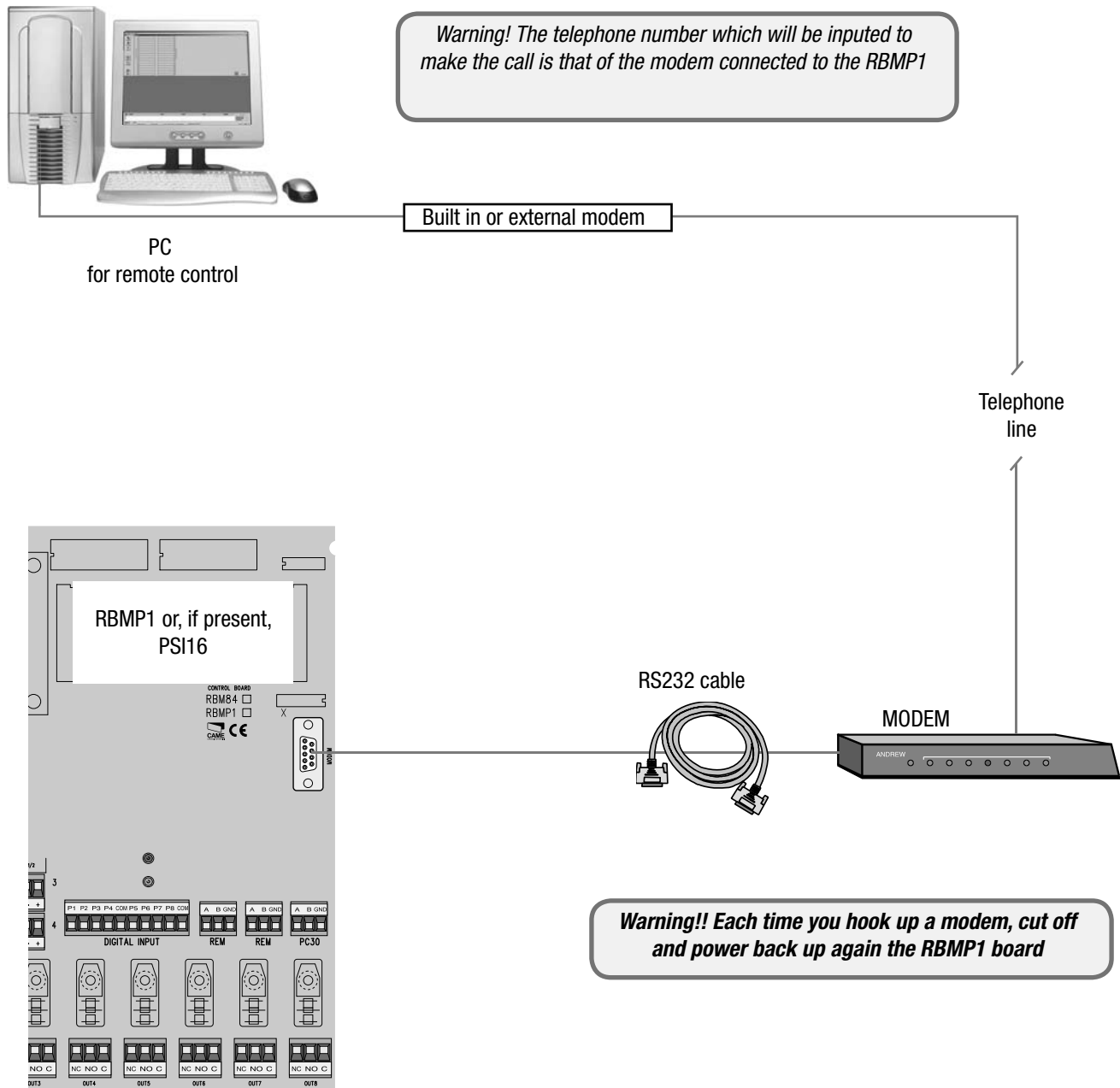


*** AWG24 cable connection colours**

- ✓ White/Orange braided on GND
 - ✓ White/Green braided to split:
 - White on A
 - Green on B
- Insulate the remaining pairs.

N.B. Be careful with the order of the wires, the colour should match the display and the RBMP1 (A B GND).

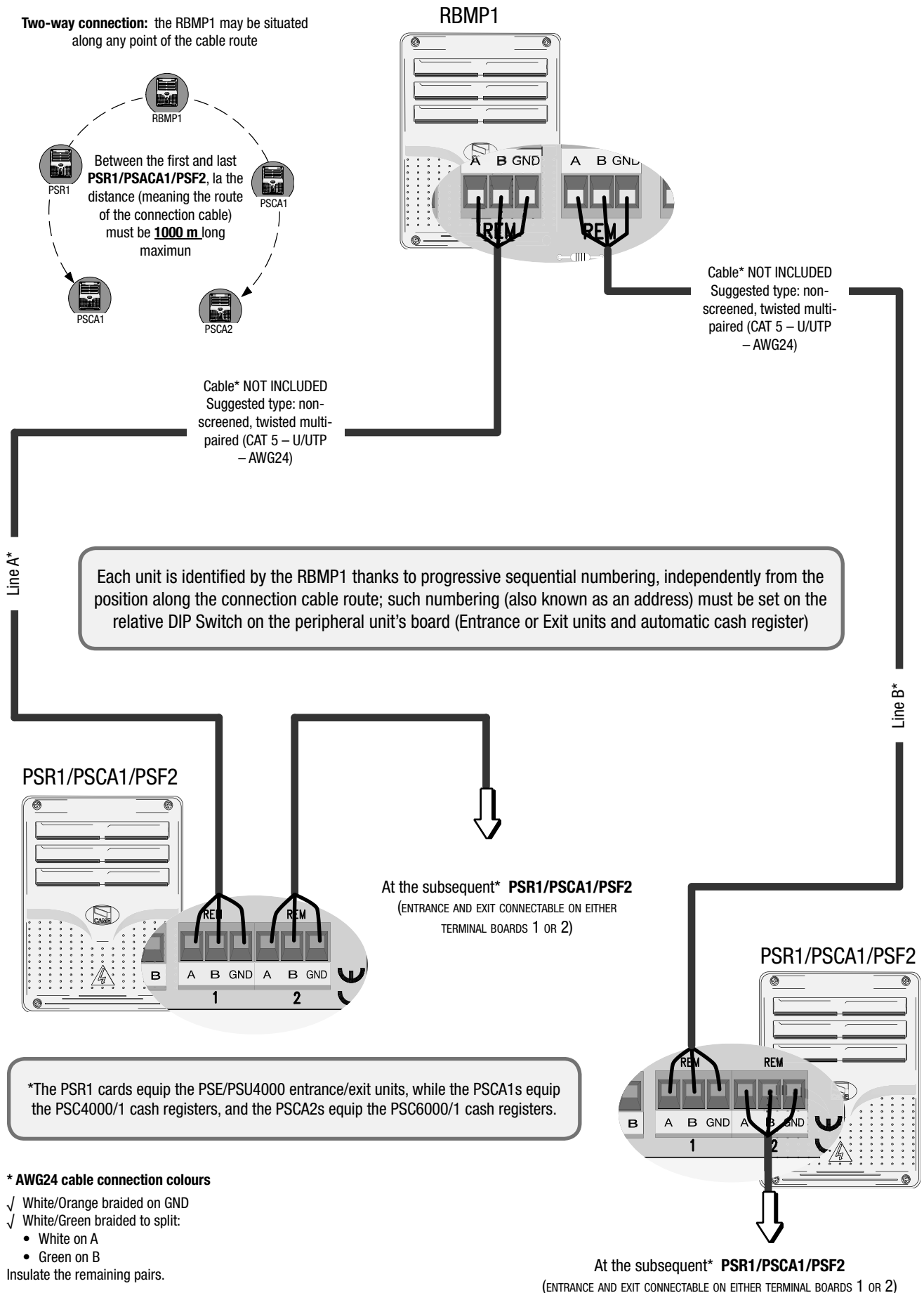
PSM4000 Connections - (RBMP1/PSI16) <--> PC via modem



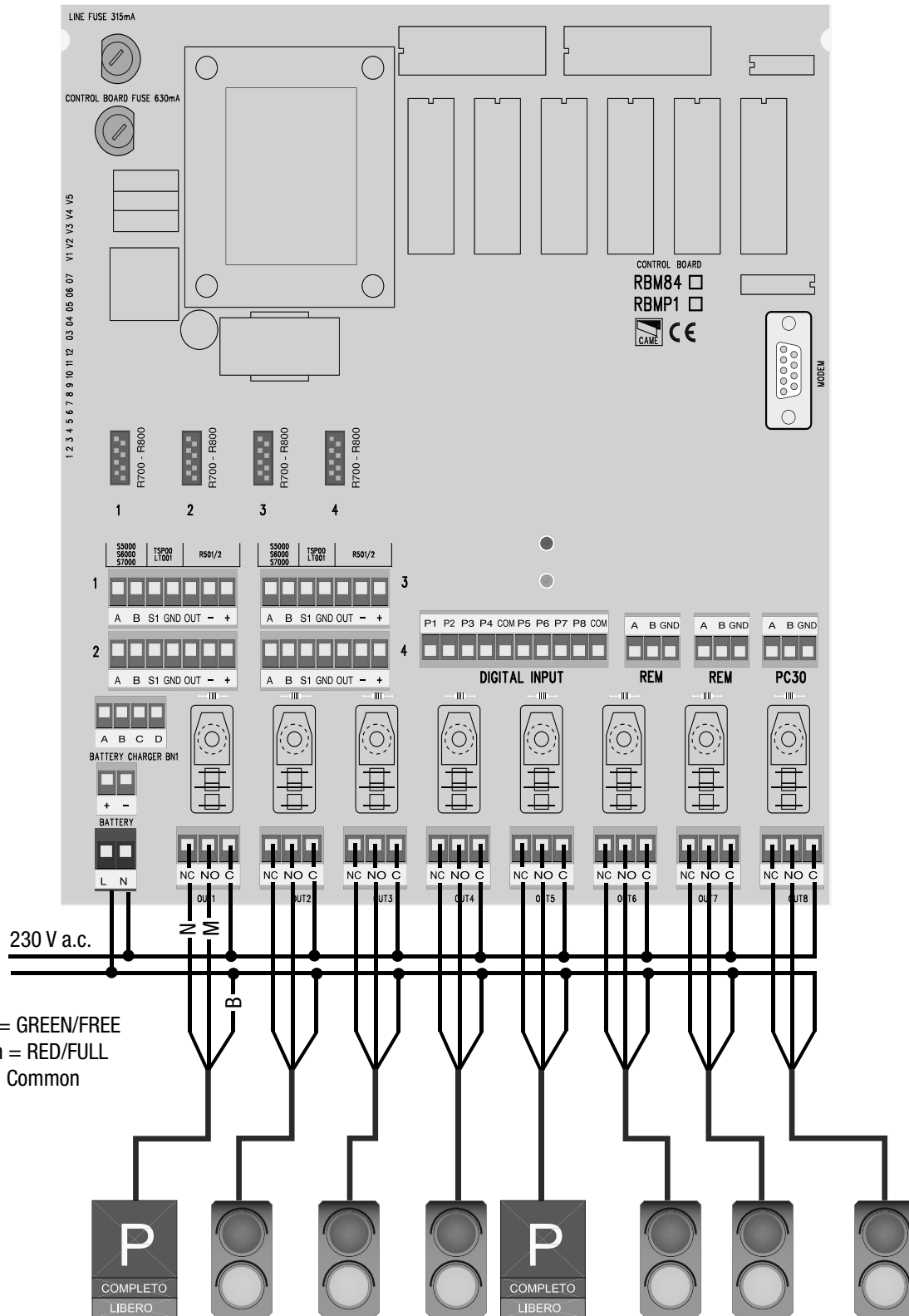
Communication takes place among a PC, its modem, the receiving modem and the RBMP1, during connection any parameter can be modified, and any information may be read.

Connections RBMP1 <--> PSR1 (PSE/PSU4000), PSCA1 (PSC4000) and PSF2 (PS6000/1)

Two-way connection: the RBMP1 may be situated along any point of the cable route



PSM4000 connection (RBMP1) <--> Traffic lights



“Partial” traffic lights, associated to different floors or sectors, up to a maximum of 8, controlled by standard issue software.

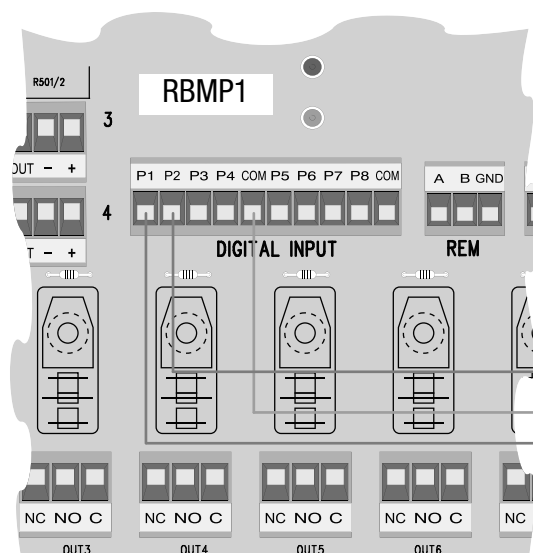
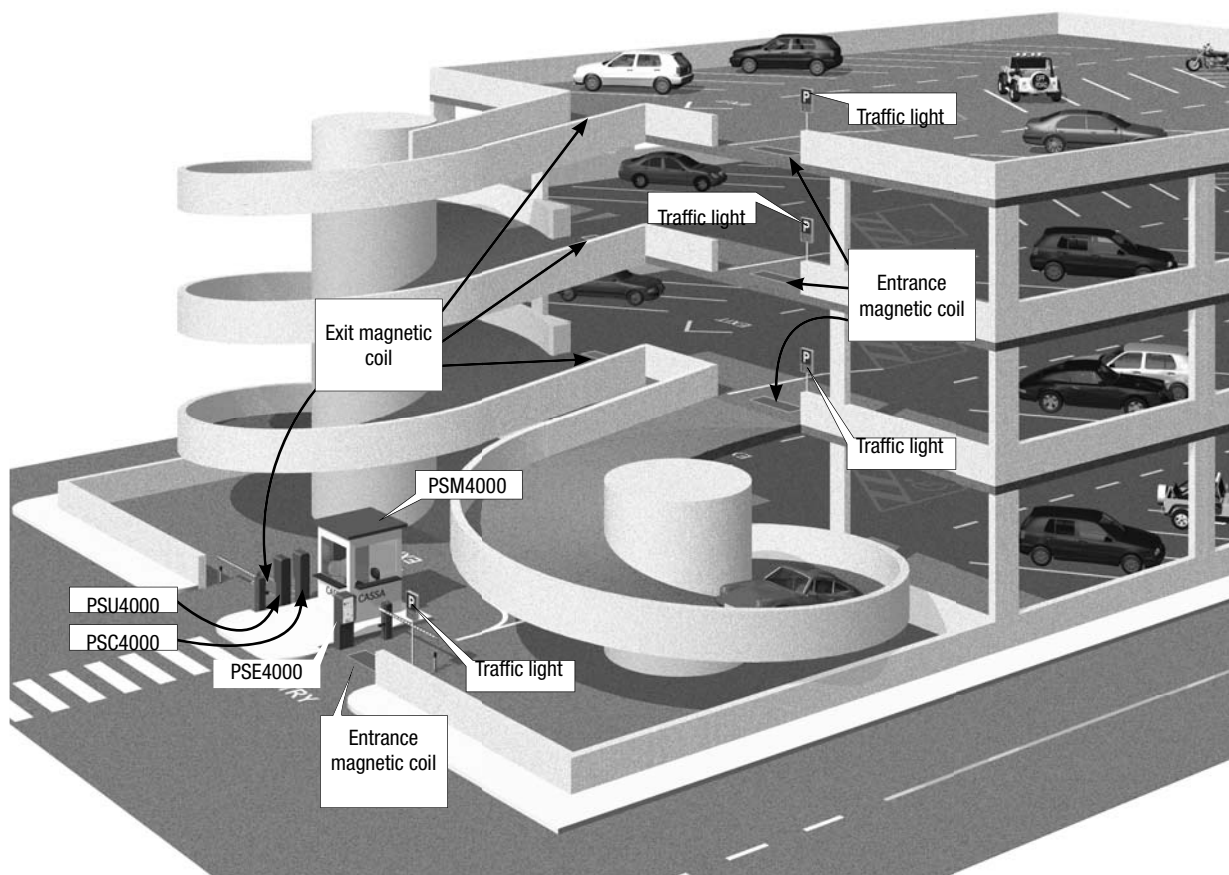


The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

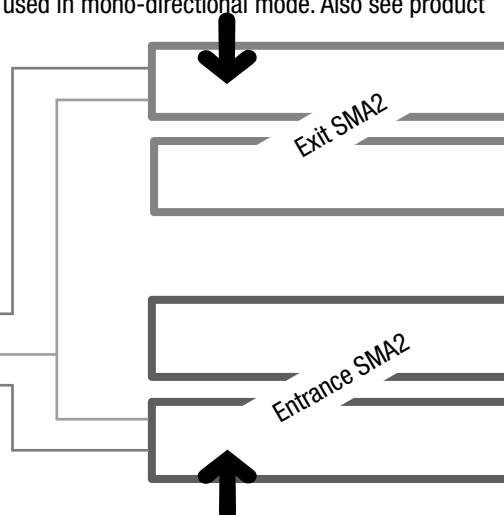
PSM4000 connections (RBMP1) <--> digital inputs

Digital inputs are used to connect up the magnetic coils which instantly provide a count of the number of vehicles in the parking facility, they command the traffic lights independently of the PSE/PSU4000 entrance and exit units. They are often used in multi-level parking, or ones with one entrance and one exit. The coils may be used to obtain an exact count of the number of vehicles on each level, which provides an exact number of free spaces on each parking level.

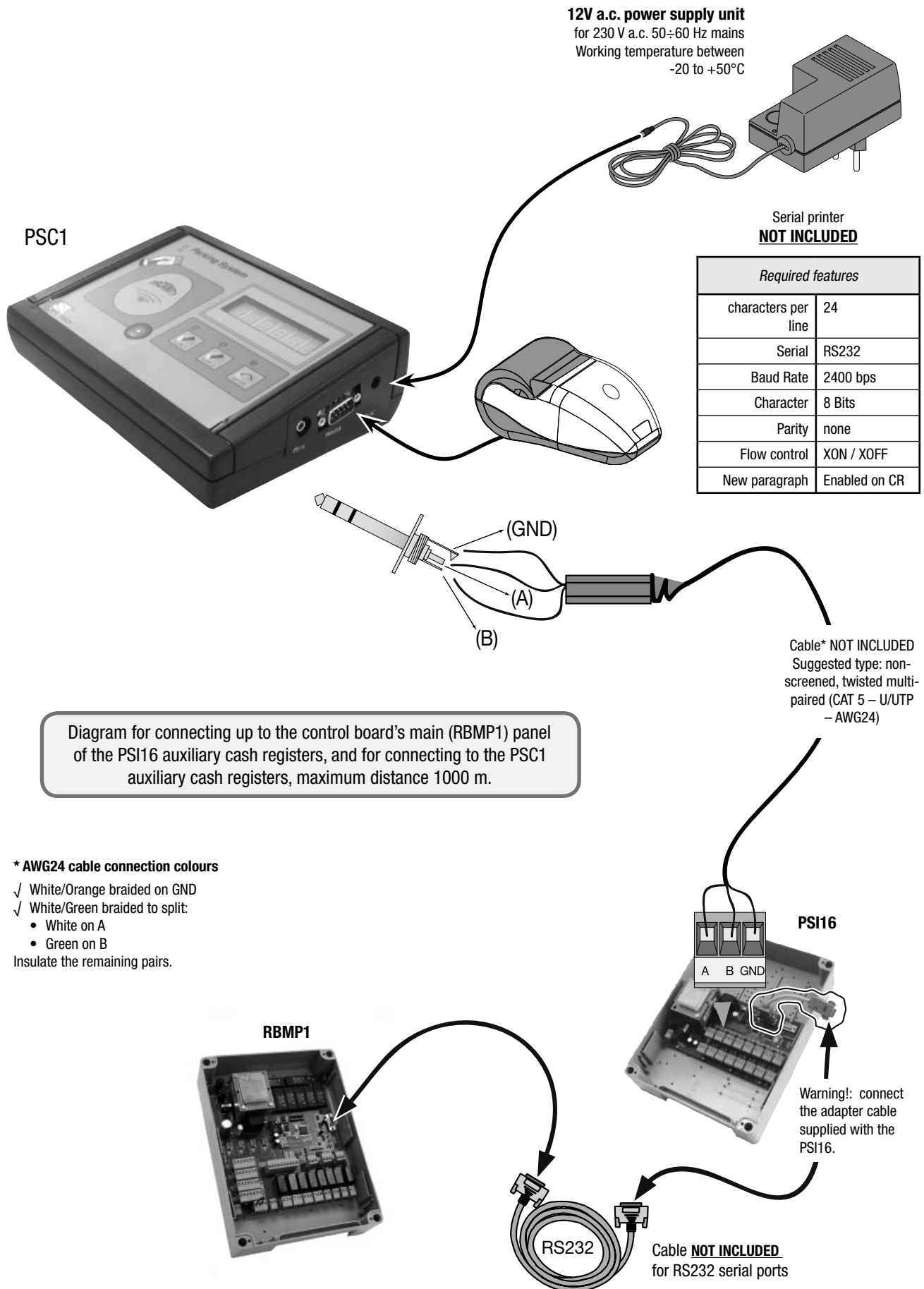
Example of multi-level parking with vehicle count coils on each level.



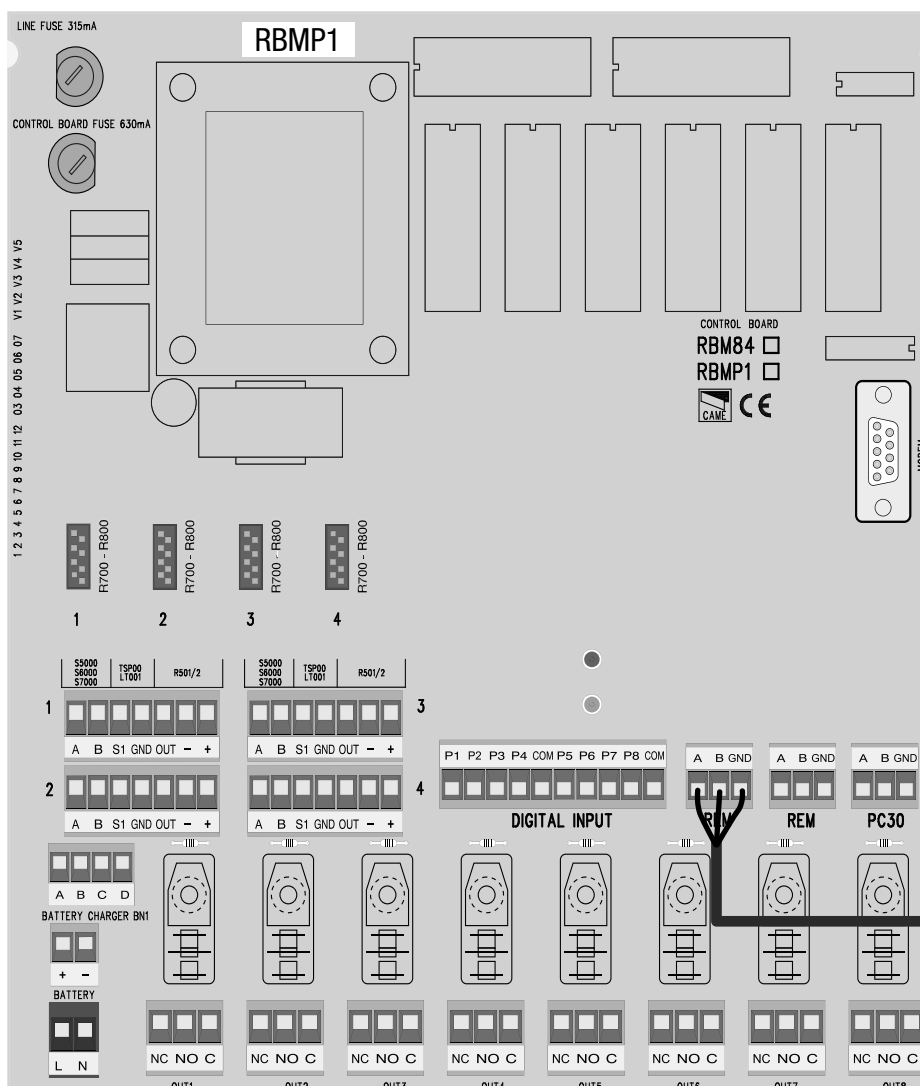
Method to connect the extra RBMP1/PSIO coils, to count the exact number of cars at each floor. A two-channel detector device such as the SMA2 is preferable, used in mono-directional mode. Also see product literature.



PSM4000 connections (RBMP1) <--> PSI16 and auxiliary (PSC1) cash registers



PSM4000 Connections (RBMP1) <--> PSIO1



* AWG24 cable connection colours

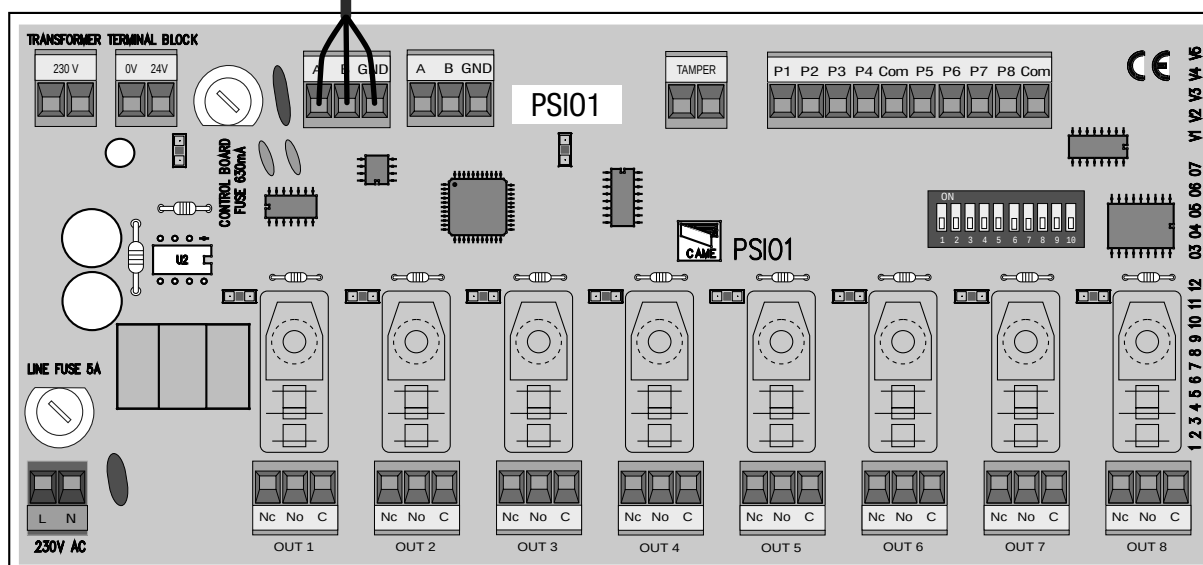
- ✓ White/Orange braided on GND
- ✓ White/Green braided to split:

- White on A
- Green on B

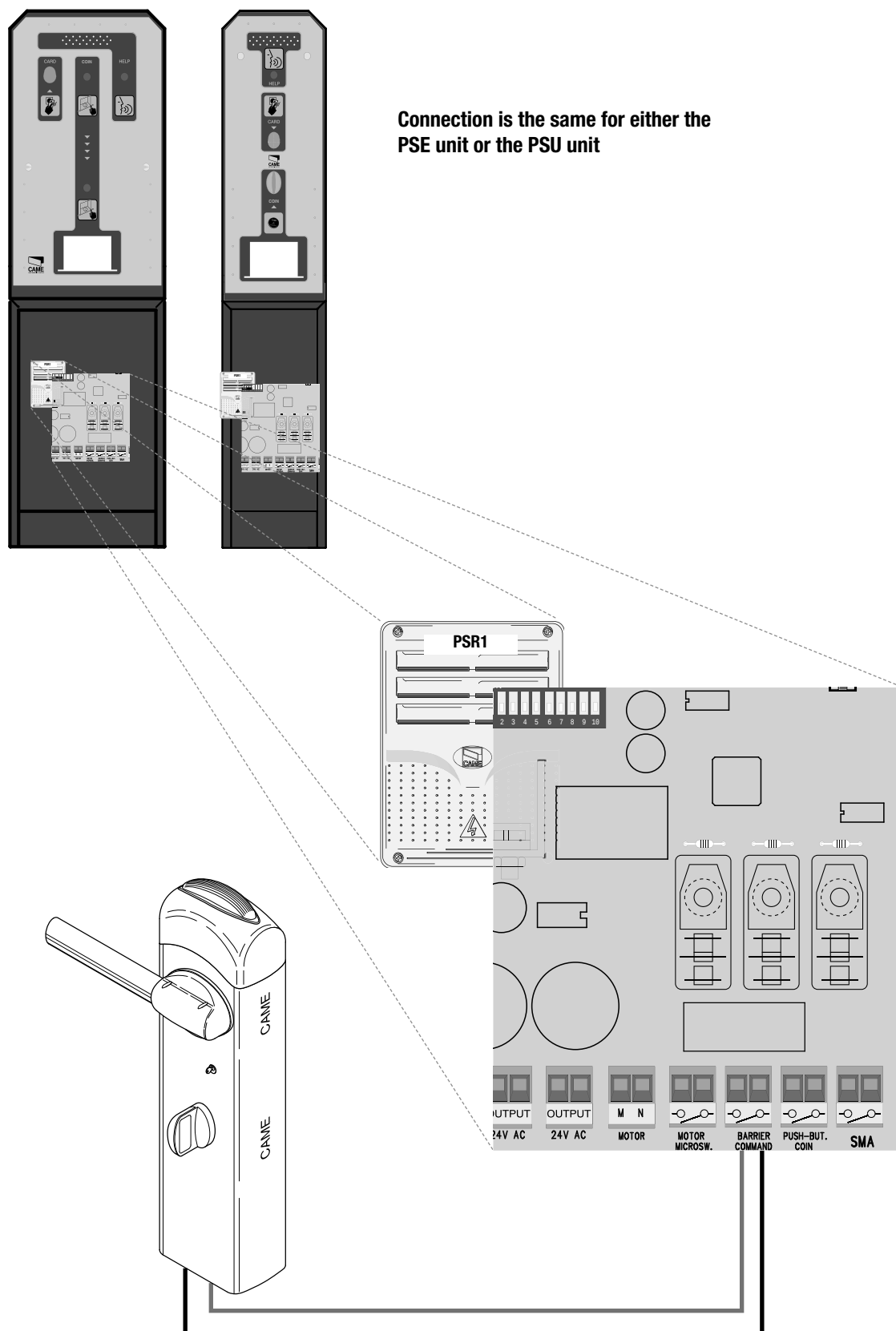
Insulate the remaining pairs.

Cable* NOT INCLUDED

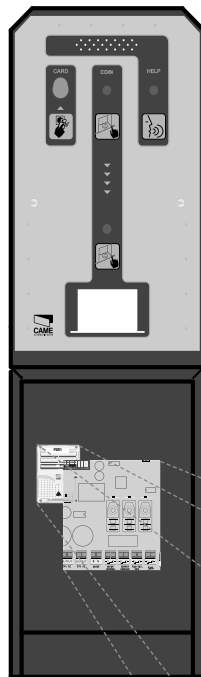
Suggested type: non-screened, twisted multi-paired (CAT 5 – U/UTP – AWG24)



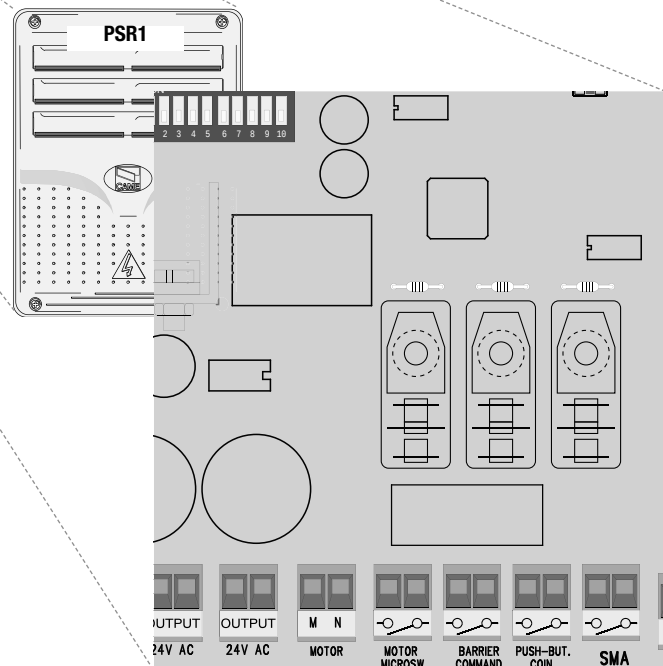
PSE/PSU4000 Connections <---> Bar or other automated devices



Connections for the PSE4000 <---> Electromagnetic sensor (Coil)



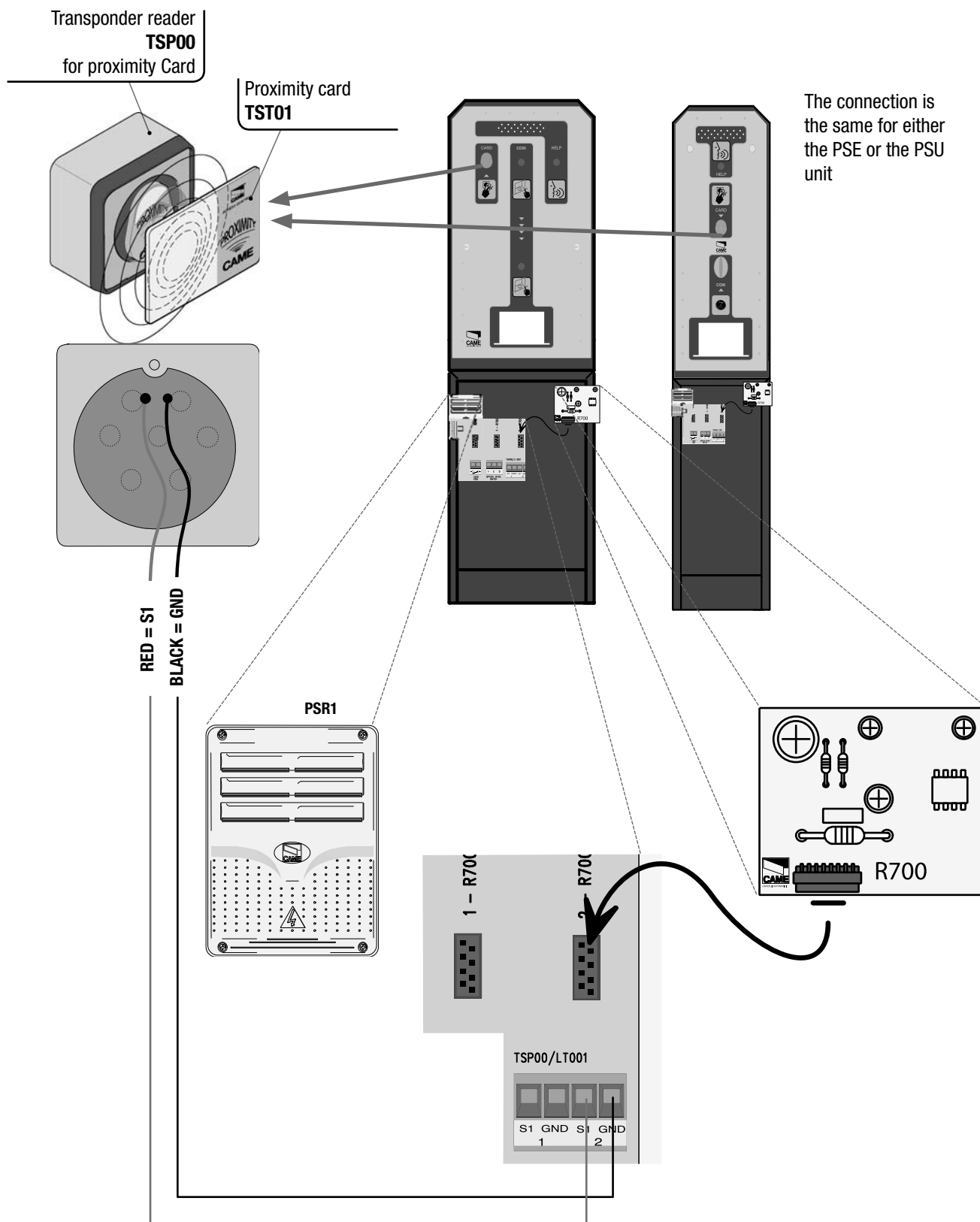
The detection metal mass detector sensor can only connect to the PSE4000



Electromagnetic metal mass
(vehicle) detection sensor

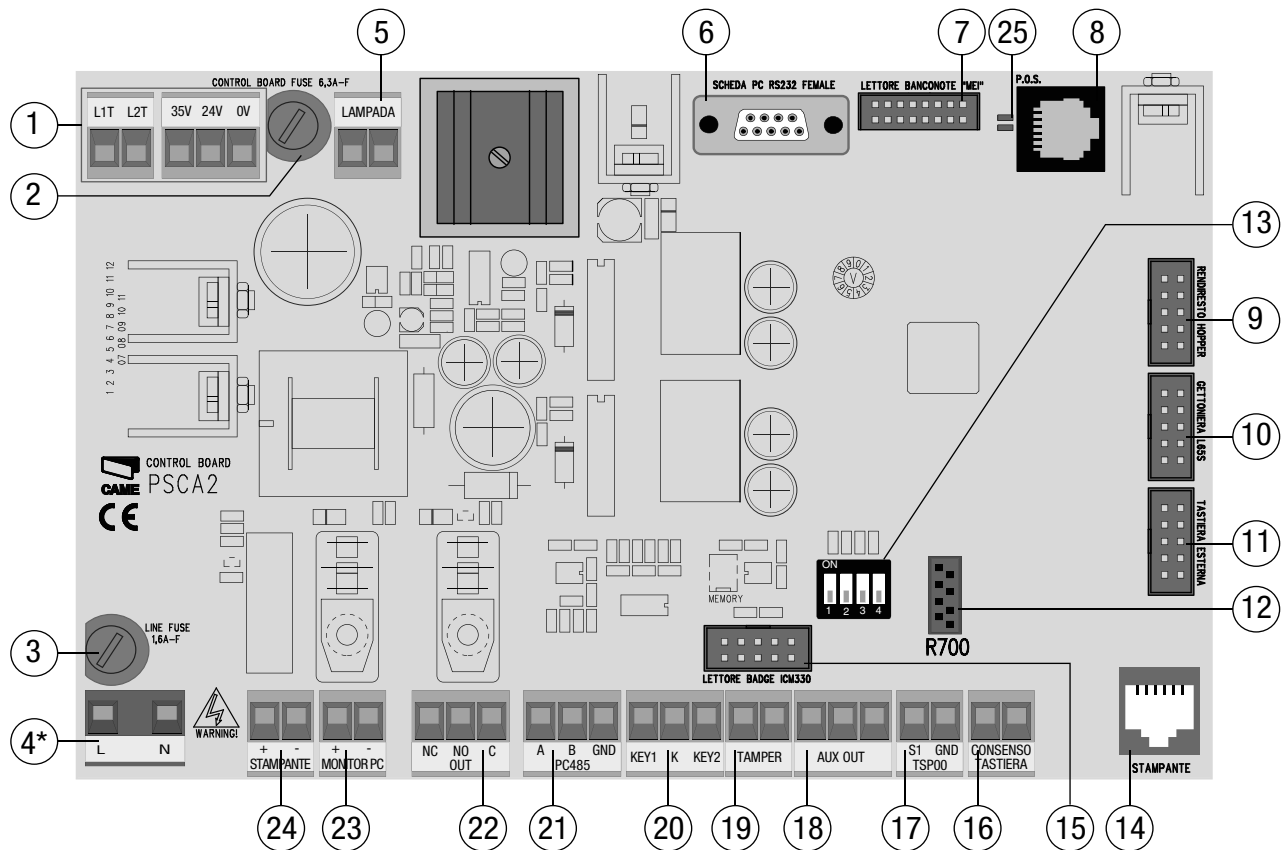
Collegamenti PSE/PSU4000 <---> sensore transponder TSP00

A GREEN LED indicator light inside the TSP00 means the reader is not properly set. A RED LED indicator light inside the TSP00 means the reader is properly set.



PSCA2 + PSF2 (PSC6000/PSC6001) cards – description

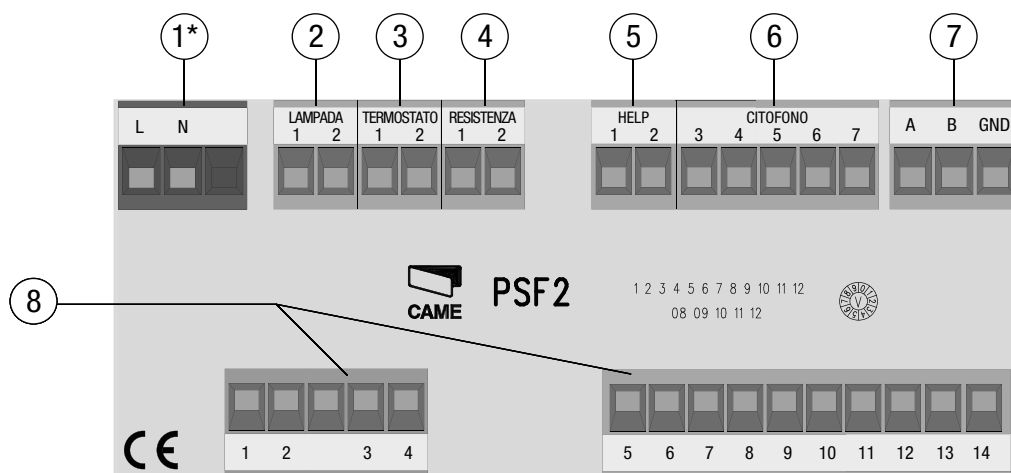
PSCA2 – managing primary components



- | | |
|--|--|
| 1- Terminals for connecting to transformer | 15- ICM330 badge reader unit connector |
| 2- 6.3A Card protection fuse | 16 - Contact linking terminal for cash register configuration (closing the contact causes a keyboard to appear on the monitor) |
| 3- 1.6 A Power surge protection fuse | 17- Connection to TSP00 sensors |
| 4- 230 V power source (from PSF2) | 18- Auxiliary output terminal clip (not used) |
| 5- Terminals for connecting indoor courtesy lamp | 19- Terminal clip for open cash register warning |
| 6- Connector for connecting RS232 PC cable | 20- Terminal clip for connecting sensor on open cash register keys |
| 7- Connector for processing banknotes | 21 - Terminal clip already connected |
| 8 - Plug connector for POS system | 22 - Output terminal clip |
| 9 - Change return processing connector | 23- Terminal clip for powering PC Monitor |
| 10 - Token dispenser connection | 24 - Terminal clip for Printer power |
| 11- External keyboard connector | 25- Power ON LED warning light |
| 12- R700 signal decoding card connector | |
| 13 - Cash register address DIP Switch | |
| 14- Connector Plug for printer | |

PSCA2 + PSF2 (PSC6000/PSC6001) cards – description

PSF2 – managing auxiliary components



- | | | | |
|-----|--|-----|---|
| 1 - | Terminals for powering the 230 V a.c. * board | 5 - | Terminal clip for connecting HELP button |
| 2 - | Terminal clip for connecting internal lamp (already connected) | 6 - | Terminal clip for connecting a possible intercom |
| 3 - | Terminal clip for connecting the internal thermostat (already connected) | 7 - | Terminal clip for connecting automatic cash register to other cash registers or parking facility components |
| 4 - | Terminal clip for connecting anti-freeze heating element (already connected) | 8 - | Already connected |



The minimum, double insulated, cable section, depends on the characteristics and dimensions of the system, and must not be less than 2.5 mm². Before connecting up the device, cut off the mains power supply.

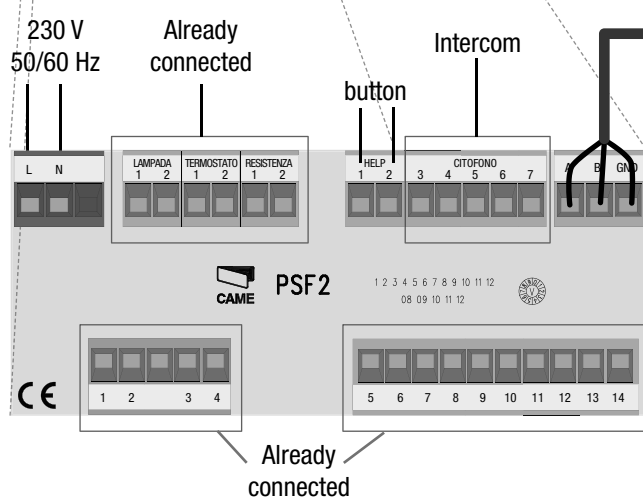
PSC6000/PSC6001 Connections



⚠ Overall, the auxiliary and utility inputs inside the cash register, are rated for a maximum of 1A – 250W

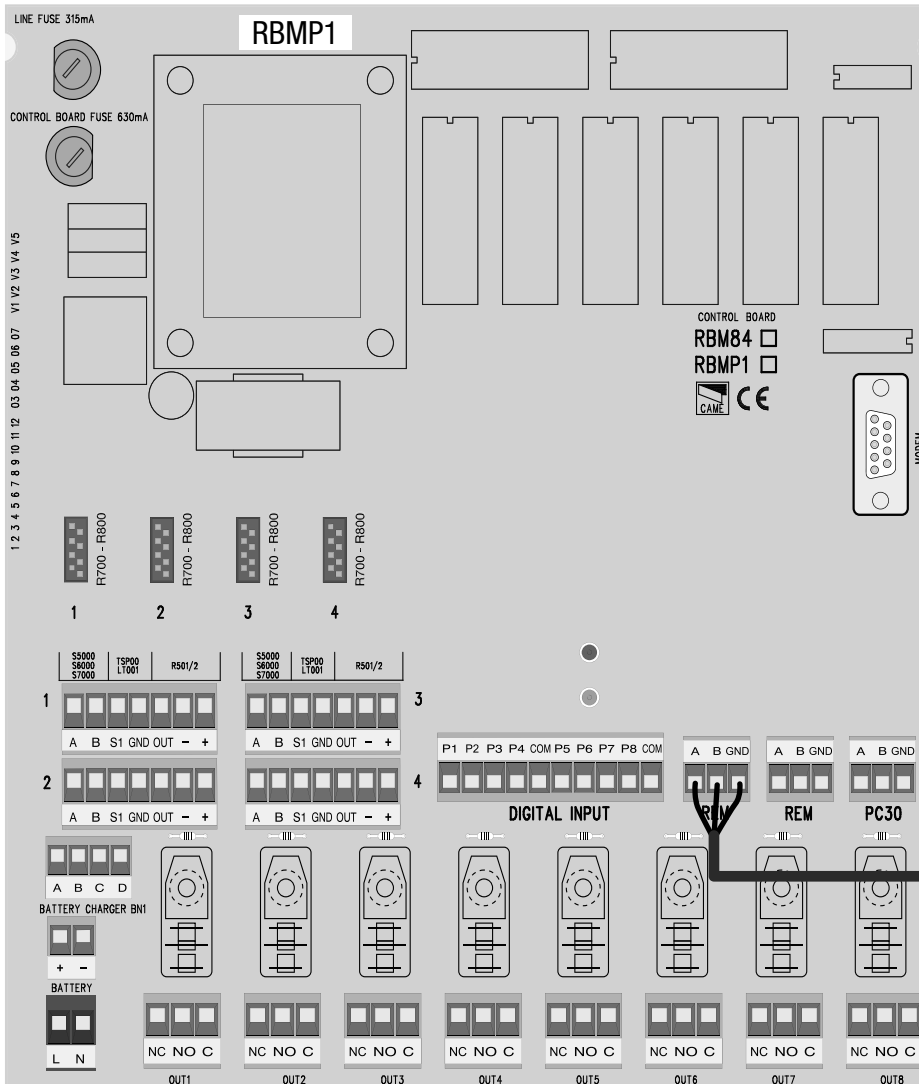


⚠ Warning! Perform the grounding directly onto the frame of the cash register, exactly as shown in the photograph.



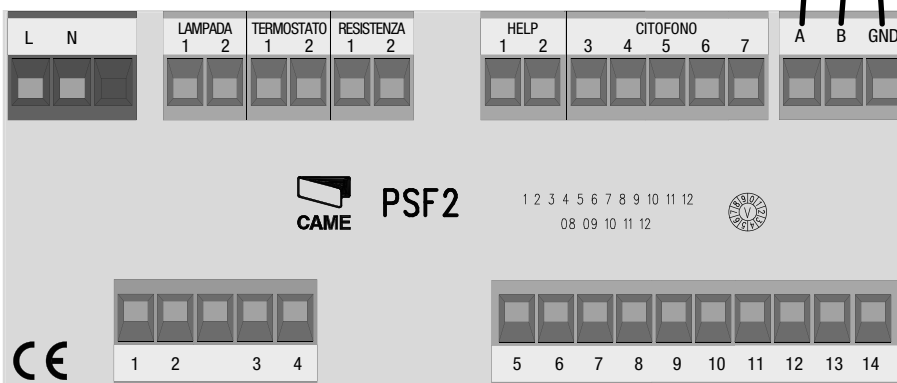
At the subsequent* PSR2/PSF2
(ENTRANCE AND EXIT CONNECTABLE ON
EITHER TERMINAL BOARDS 1 OR 2)

PSM4000 connections (RBMP1) <--> PSF2 (PSC6000/1)

*** AWG24 cable connection colours**

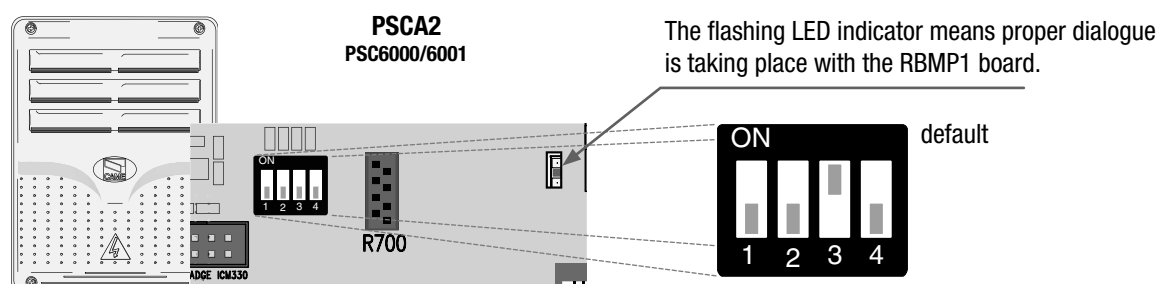
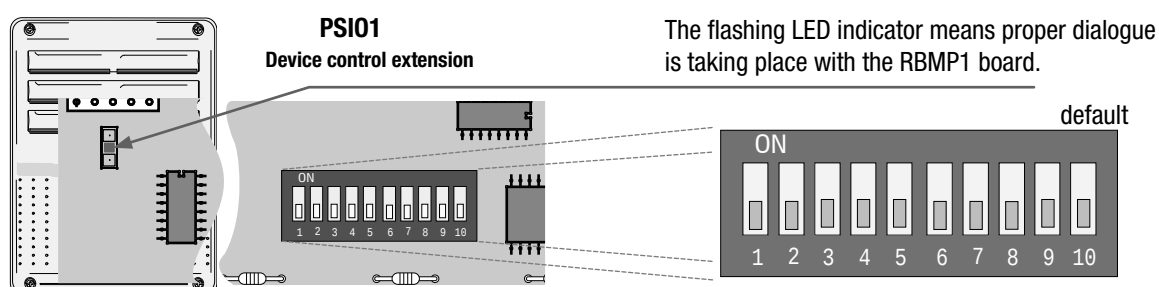
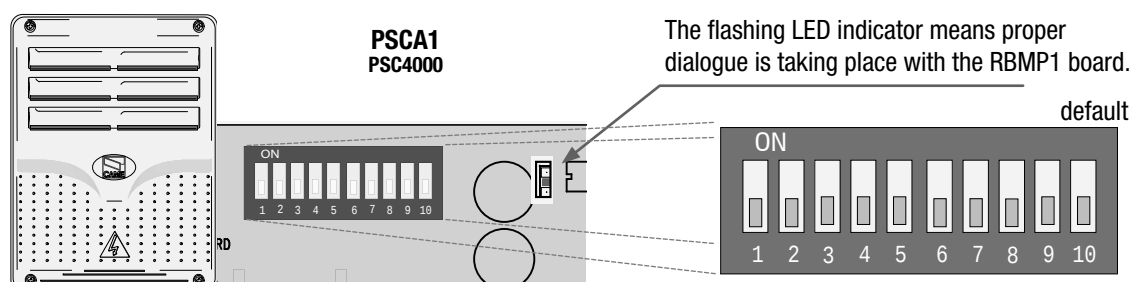
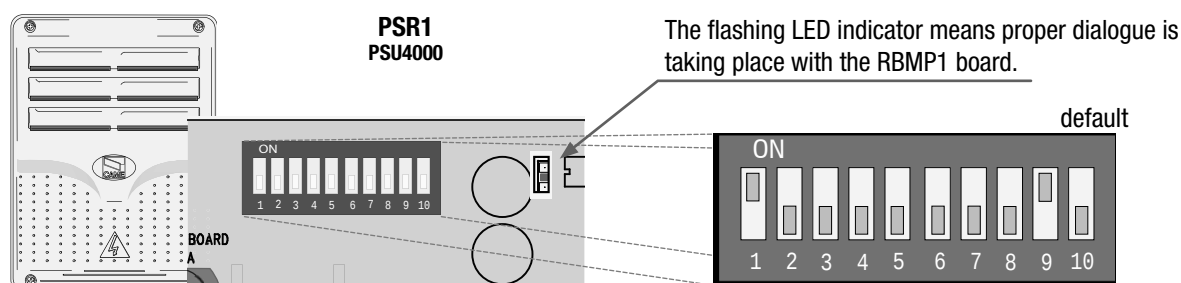
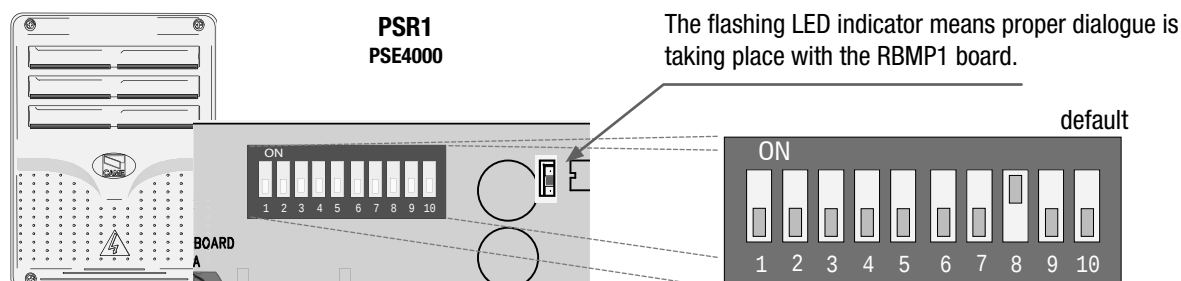
- ✓ White/Orange braided on GND
 - ✓ White/Green braided to split:
 - White on A
 - Green on B
- Insulate the remaining pairs.

Cable* NOT INCLUDED
Suggested type: non-screened, twisted multi-paired (CAT 5 – U/UTP – AWG24)



Logical address assignation system components

For the RBMP1 to communicate with the other connected devices (i.e. PSE, PSU, PSC, PSI01 and PSC7000/1) each of these must be assigned a univocal address; set the DIP Switches in the their control boards as shown in the following pages.



List of system device addresses

The DIP Switches on the various cards are factory-set to the n.1 position.
Set Dip-switch 10 to ON in case a termination is necessary on RS485 line.

PSE4000	Switch									
Number of serial position	1	2	3	4	5	6	7*	8	9	10
N°1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
N°2	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
N°3	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
N°4	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
N°5	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
N°6	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
N°7	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
N°8	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
N°9	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
N°10	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
N°11	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
N°12	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
N°13	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
N°14	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
N°15	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
N°16	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF

PSU4000	Switch									
Number of serial position	1	2	3	4	5	6	7	8	9	10
N°1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
N°2	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
N°3	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
N°4	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
N°5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
N°6	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
N°7	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
N°8	ON	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF
N°9	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
N°10	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
N°11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
N°12	ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
N°13	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
N°14	ON	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
N°15	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
N°16	ON	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF

PSC4000	Switch									
Number of serial position	1	2	3	4	5	6	7	8	9	10
N°1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°2	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°3	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°4	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°5	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°6	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°7	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°8	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF

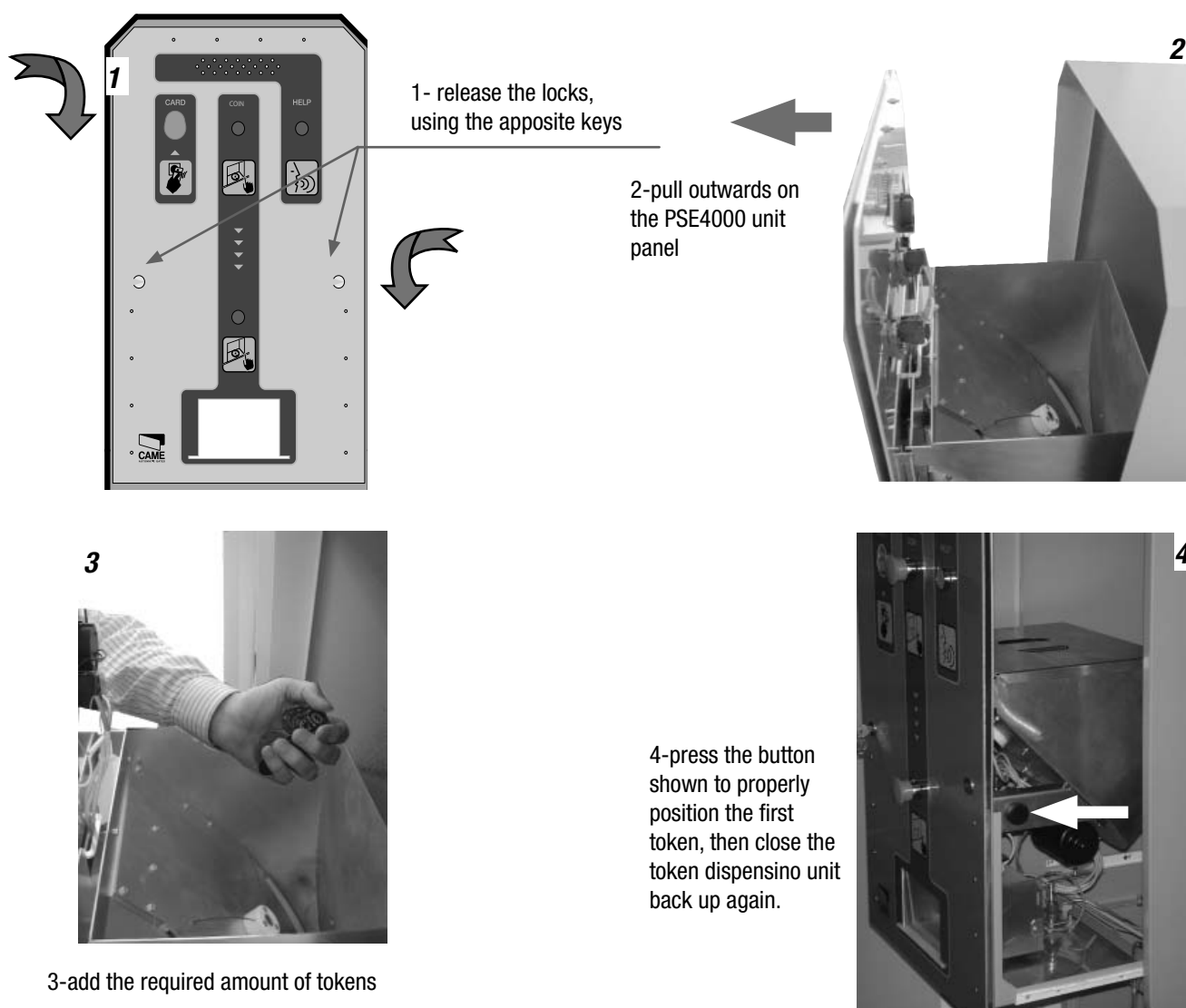
PSI01	Switch									
Number of serial position	1	2	3	4	5	6	7	8	9	10
N°1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°2	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°3	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°4	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°5	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°6	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°7	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
N°8	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF

PSC6000/1	Switch			
Number of serial position	1	2	3*	4**
N°1	OFF	OFF	ON	OFF
N°2	ON	OFF	ON	OFF
N°3	OFF	ON	ON	OFF
N°4	ON	ON	ON	OFF

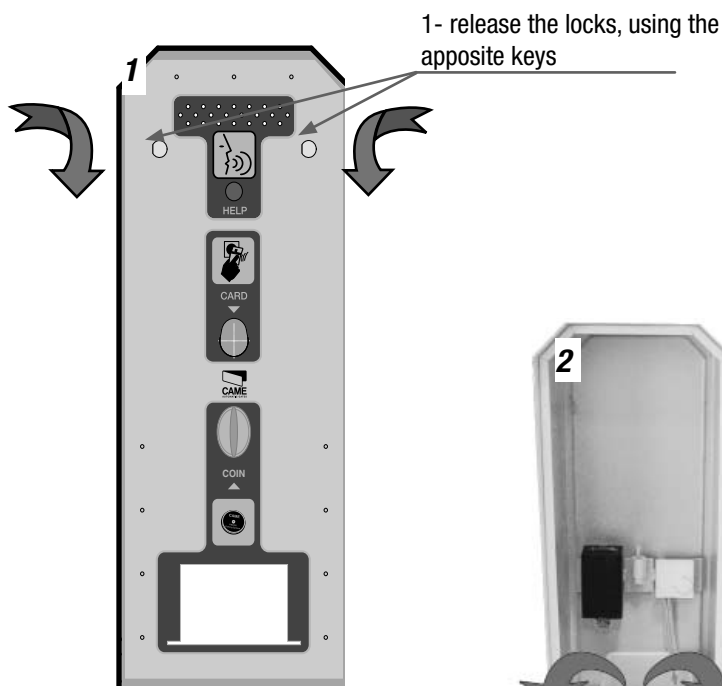
* ON (default) Model NV9 bank-bill receiver.
OFF MATRIX model bank-bill receiver.

** OFF (default) Model RM5 coin receiver.
ON GIODY model coin receiver.

Token loading procedure on PSE4000



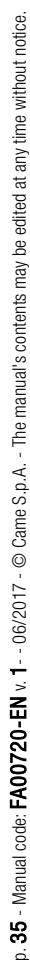
Token unloading procedure on the PSU4000



- The token must be stored carefully for it work when exiting at one of the parking facility's cash registers.

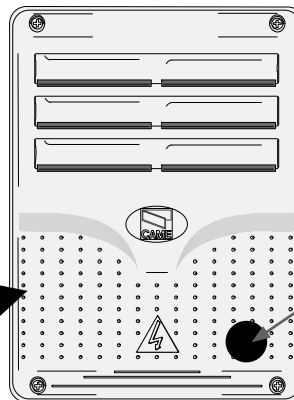
*Corrugated ø 25 mm flexible tube
for signal cables (type U/UTP Cat 5 AWG 24)*

*Corrugated ø 35 mm flexible tube
for power cables*



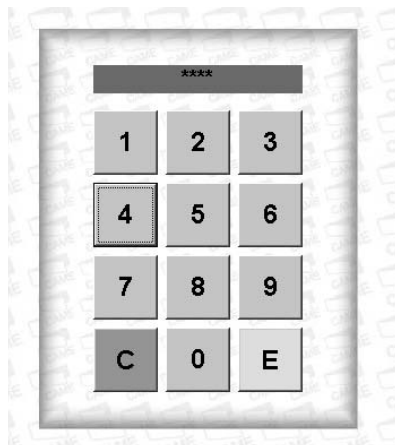
Coin loading procedure for the PSC6000/1


Release the cash register using the apposite keys

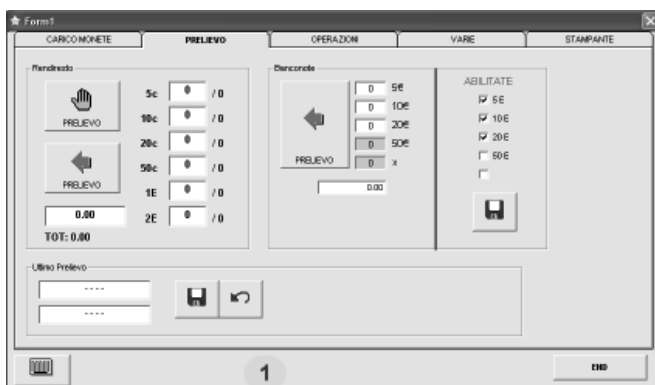


Pull on the top section of the cash register to open it (you may need to insert your hand into the coin retrieval well).

Once opened, press the button located on the panel box.



A software access window will open:
Enter the following password (default 1234) directly onto the monitor using the keypad and confirm by pressing E (in case of error, press C to cancel).

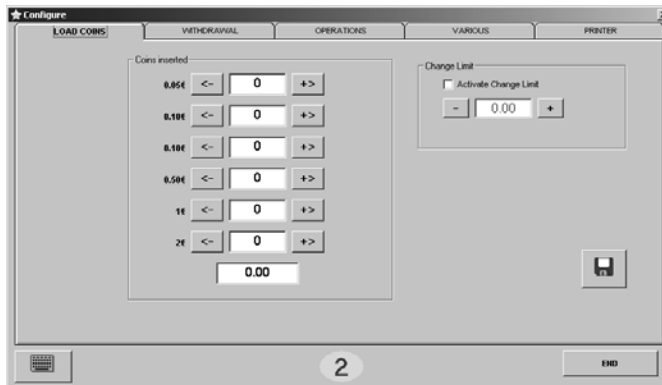


Once the password is entered, a group of windows will open.

Into the window, type "WITHDRAW" and in the box labelled "ENABLE" enter the denomination of banknotes accepted for payment; the greater denomination shall also be the minimum value of the coins that the change giving device may hold.



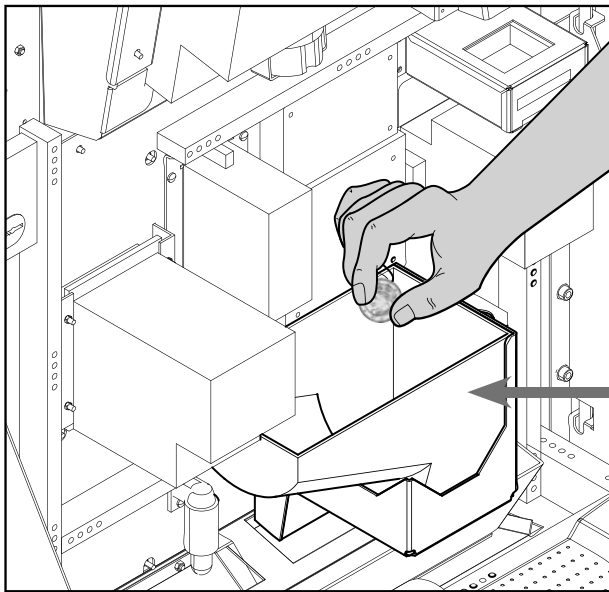
Click on the SAVE button to validate the changes



In the “Loaded Coins” box set the number of coins that you are going to actually load into the cash register. The right-hand buttons increase the number, while those on the left, decrease the number.



Click on the SAVE button to validate the changes

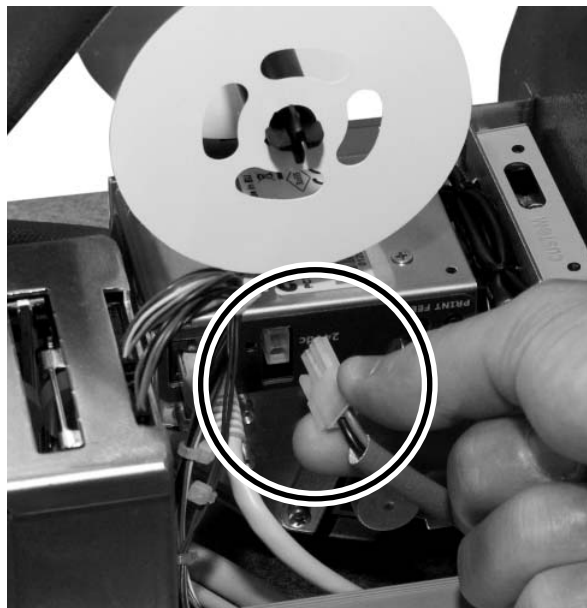


Insert the coins into the apposite container which is located just behind the cash register front-piece, while being careful to enter the exact number of coins registered on the software.

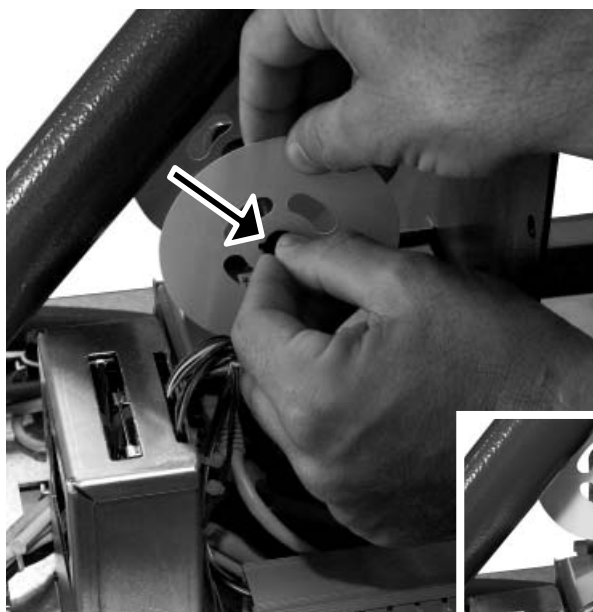
Paper changing procedure on automatic cash registers.



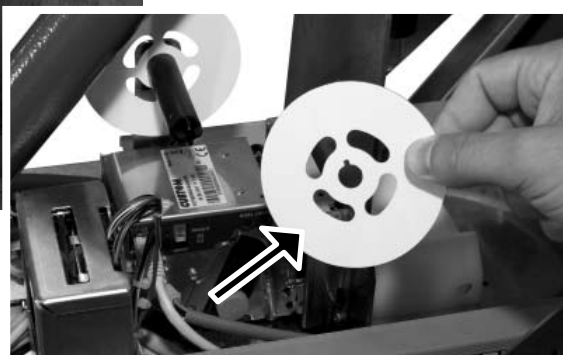
1. Release the locks and open the panel-door completely.



2. Cutt off power supply to the printer.

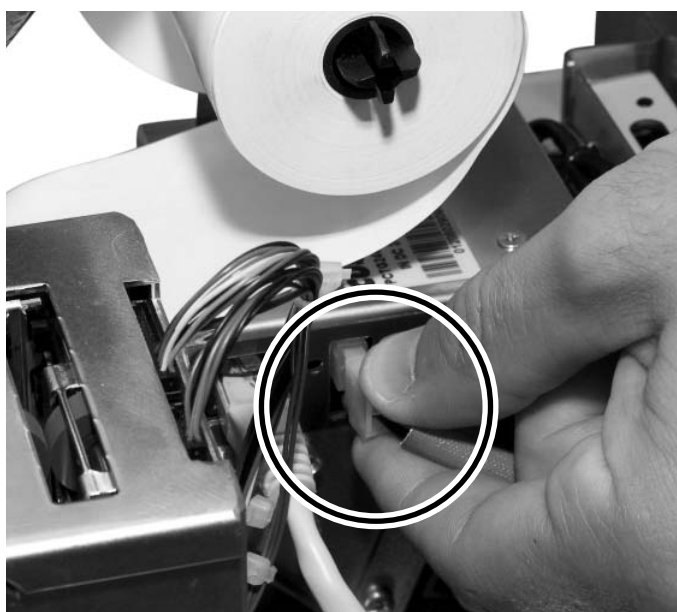


3. Free the roll support by pressing the apposite lock-teeth and removing the side band.

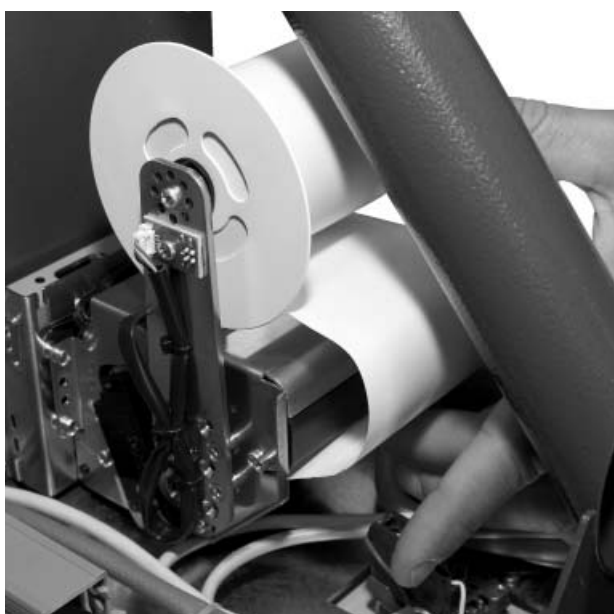




4. Insert the new roll.

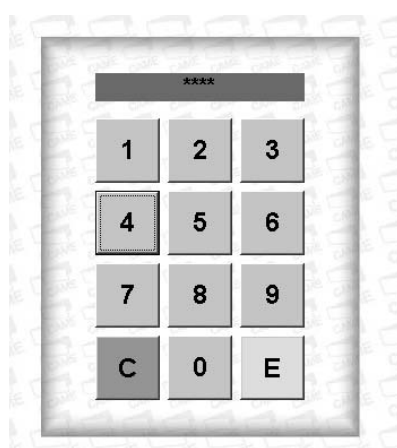
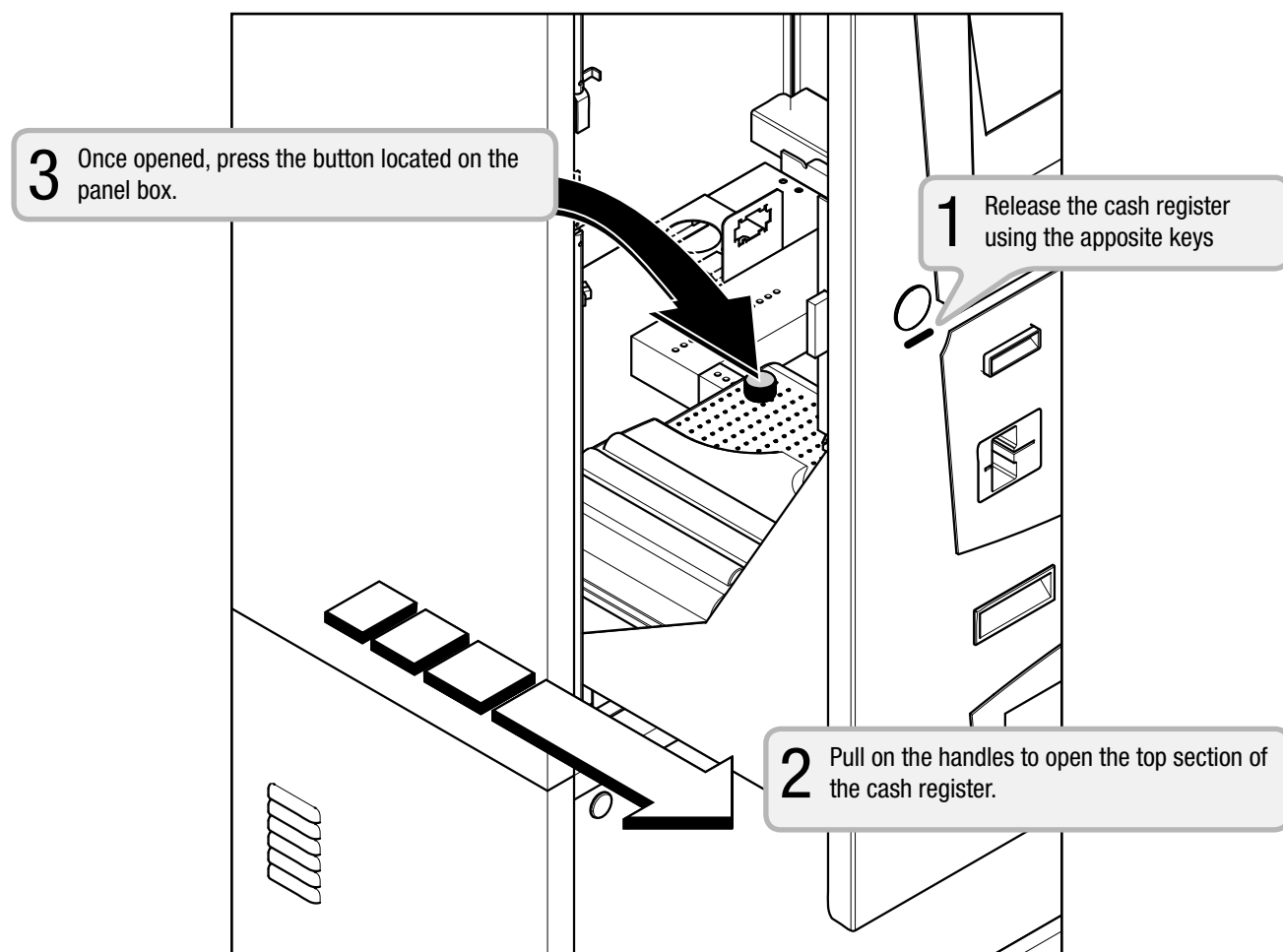


5. Power up again.



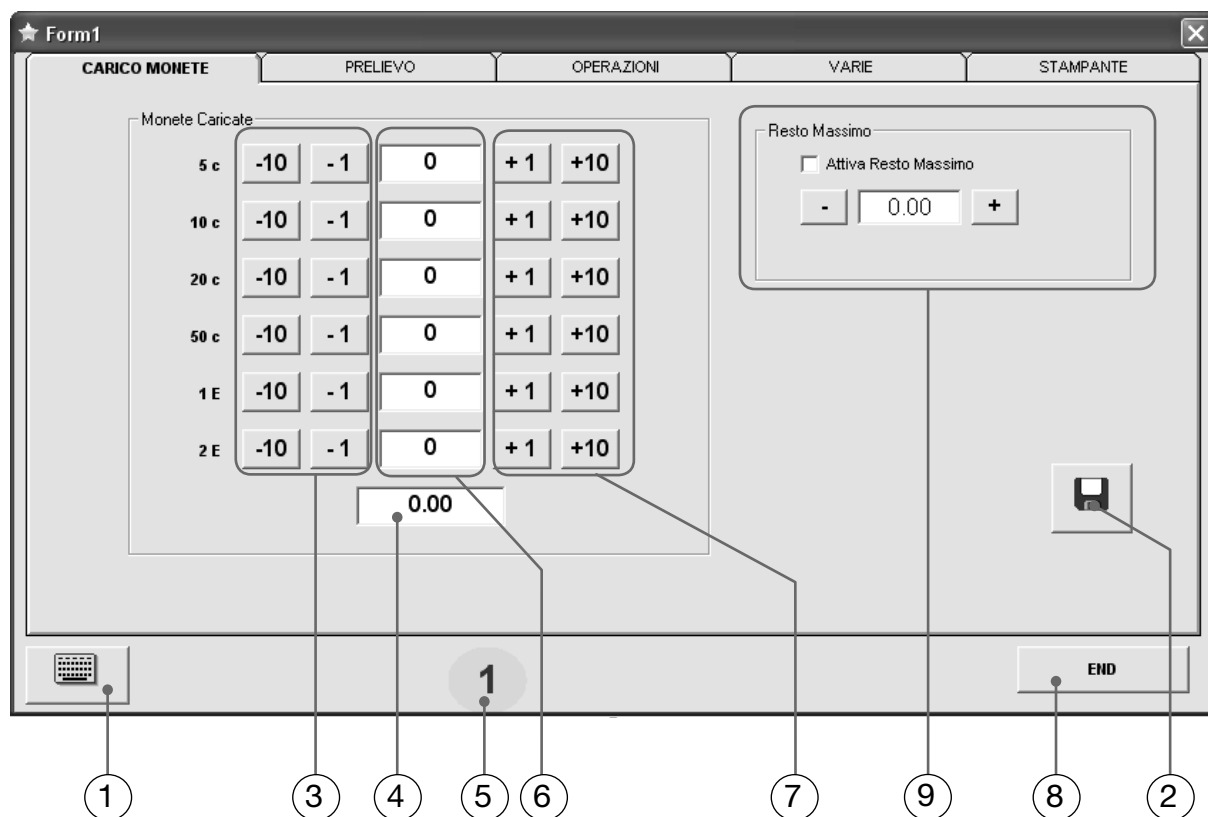
6. Place paper in the apposite slit under the roll support - the printer will hook it automatically. Close the panel-door.

Setting the PSC6000/1



A software access window will open:
Enter the following password (default 1234) directly onto the monitor using the keypad and confirm by pressing E (in case of error, press C to cancel).

COIN LOADING window Description



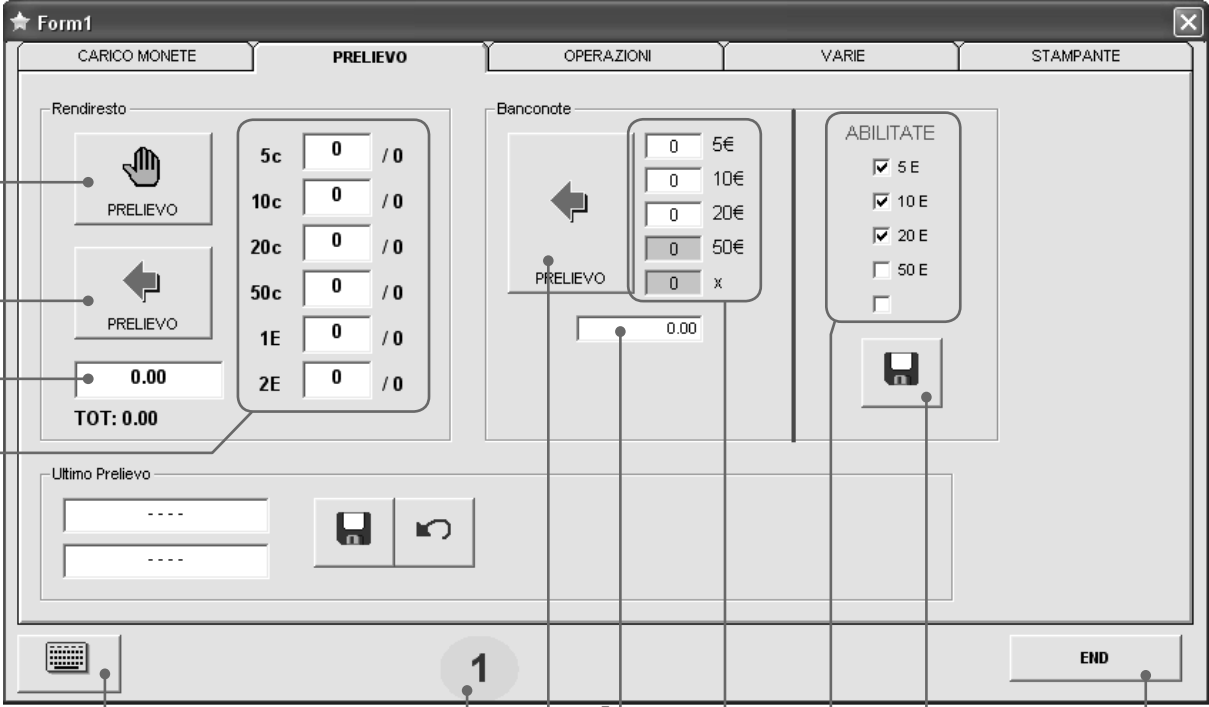
- | | |
|---|--|
| 1 - Touch screen activation button | 6 - Box to view the monetary value of each single fraction or coin unit. |
| 2 - Save settings button | 7 - Monetary value increase column |
| 3 - Monetary value reduction column | 8 - "END" button to conclude various operations. |
| 4 - Box to view the total monetary value contained in the cash register | 9 - Setting the maximum allowed change |
| 5 - Number of the connected cash register | |



Click on the SAVE button to validate the changes

N.B.: To load the coins read the instructions on pages 35 and 36.

Each time someone pays the toll, the central box (6) will be updates with the number of inserted coins and the lower box (4) will always display the total sum of the value in the cash register

Setting the PSC6000/1 WITHDRAW window


The screenshot shows a software interface titled 'Form1' with several tabs: CARICO MONETE, PRELIEVO, OPERAZIONI, VARIE, and STAMPANTE. The 'PRELIEVO' tab is active. It contains two main sections: 'Rendiresto' (Coins) and 'Bancnote' (Banknotes). The 'Rendiresto' section has a 'PRELIEVO' button (1), an arrow button (2), a display showing '0.00' (3), and a 'TOT: 0.00' label (4). Below these are input fields for 'Ultimo Prelievo'. The 'Bancnote' section has a 'PRELIEVO' button (6), a display showing '0.00' (7), and a grid of boxes for selecting banknote denominations (8-10). To the right is an 'ABILITATE' section with checkboxes for enabling banknote denominations (11). At the bottom right is an 'END' button (12). A touch screen activation button (5) is located at the bottom left. A small '1' is also present near the bottom center of the interface.

- | | |
|--|---|
| <p>1- Manual coin withdrawal button from the cash register (the button only serves to update the software in case coins are manually removed from the cash register).</p> <p>2 - Automatic withdrawal button.</p> <p>3- Box which displays the total value of coins to be withdrawn.</p> <p>4- By selecting boxes on the touch screen, various monetary values to be withdrawn can be entered, depending on the fractions or coin units (0.05, 0.10, ...).</p> <p>5- Touch screen activation button.</p> <p>6- Manual banknote withdrawal button from cash register (the button only serves to update the software in case banknotes are manually withdrawn from the cash register).</p> | <p>7- Box which displays the total value of banknotes to be withdrawn.</p> <p>8 - Number of the connected cash register.</p> <p>9 - By selecting boxes on the touch screen, various monetary values to be withdrawn can be entered.</p> <p>10- Using these boxes allows you to enable the banknote values that can be inserted into the cash register.</p> <p>11- Button to save the banknote value settings.</p> <p>12- END button to conclude the various operations.</p> |
|--|---|

How to withdraw coins manually

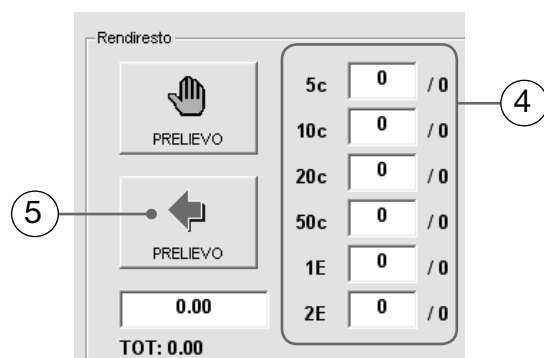


1. Open the register with the apposite keys.
2. Activate the button located above the control panel box.
3. Access the software via password.
4. Use keyboard, enter the number of coins to withdraw for each denomination ...
5. ... or just enter the total, leaving the choice of denominations to the register.
6. Manually remove from the container the coins you wish to withdraw.
7. Click on the button with the small hand to update the software.

Warning: always check that the entered values and actual coins in the register exactly match.



How to withdraw coins manually

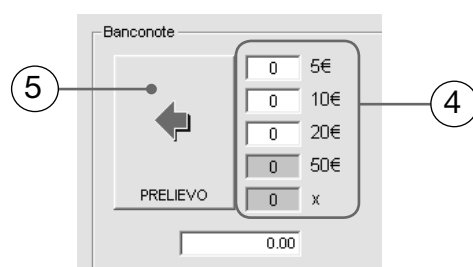


1. Open the cash register using the apposite keys.
2. Press the button located on the panel box.
3. Use password to access the software.
4. Use the keypad to enter the number of coins to withdraw.
5. Click on the button (which has a small arrow diagram)
6. The change giving device will automatically dispense the exact number of coins which you have chosen for withdrawal.

Warning: always check that the entered values and actual coins in the register exactly match.



How to withdraw banknotes

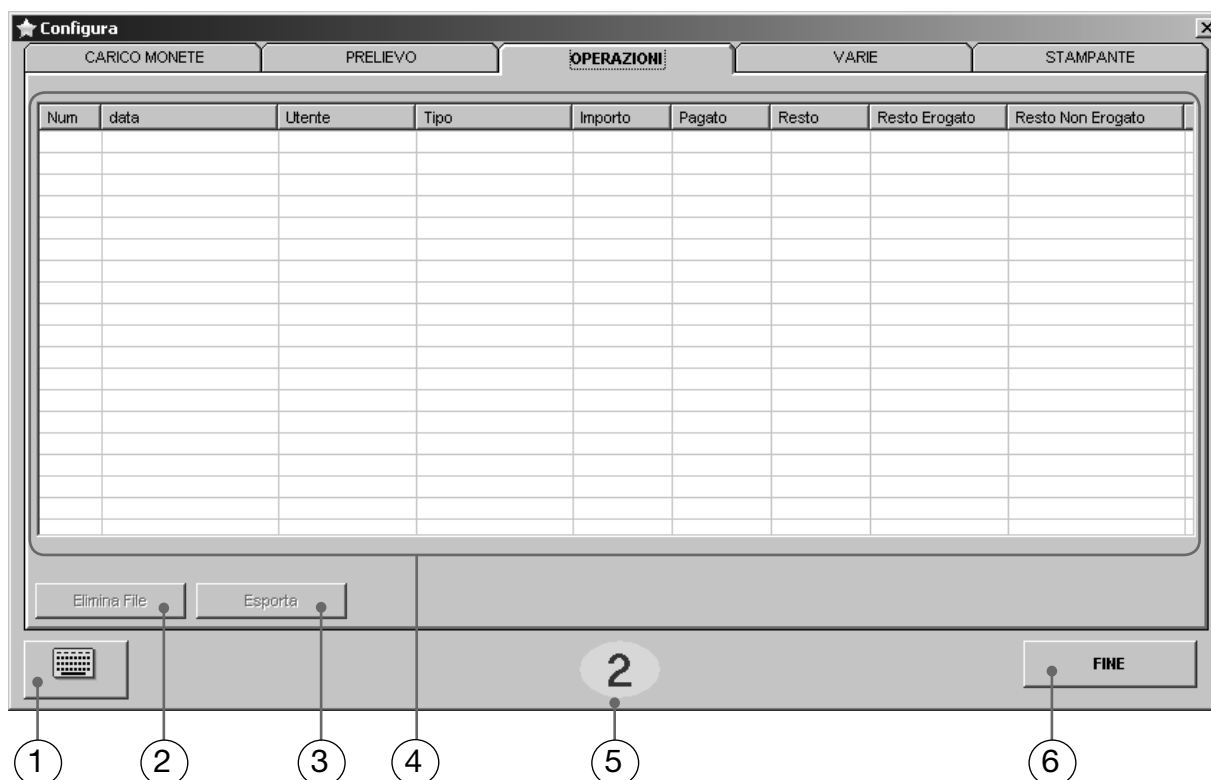


1. Open the cash register using the apposite keys.
2. Press the button located on the panel box.
3. Use password to access the software.
4. Use the keypad to enter the number of banknotes to withdraw.
5. Click on the button (which has a small arrow diagram) to update the software.
6. Remove the box containing the banknotes.
7. Remove from the box only the banknotes which you have decided to withdraw.

Warning: always check that the entered values and actual coins in the register exactly match.

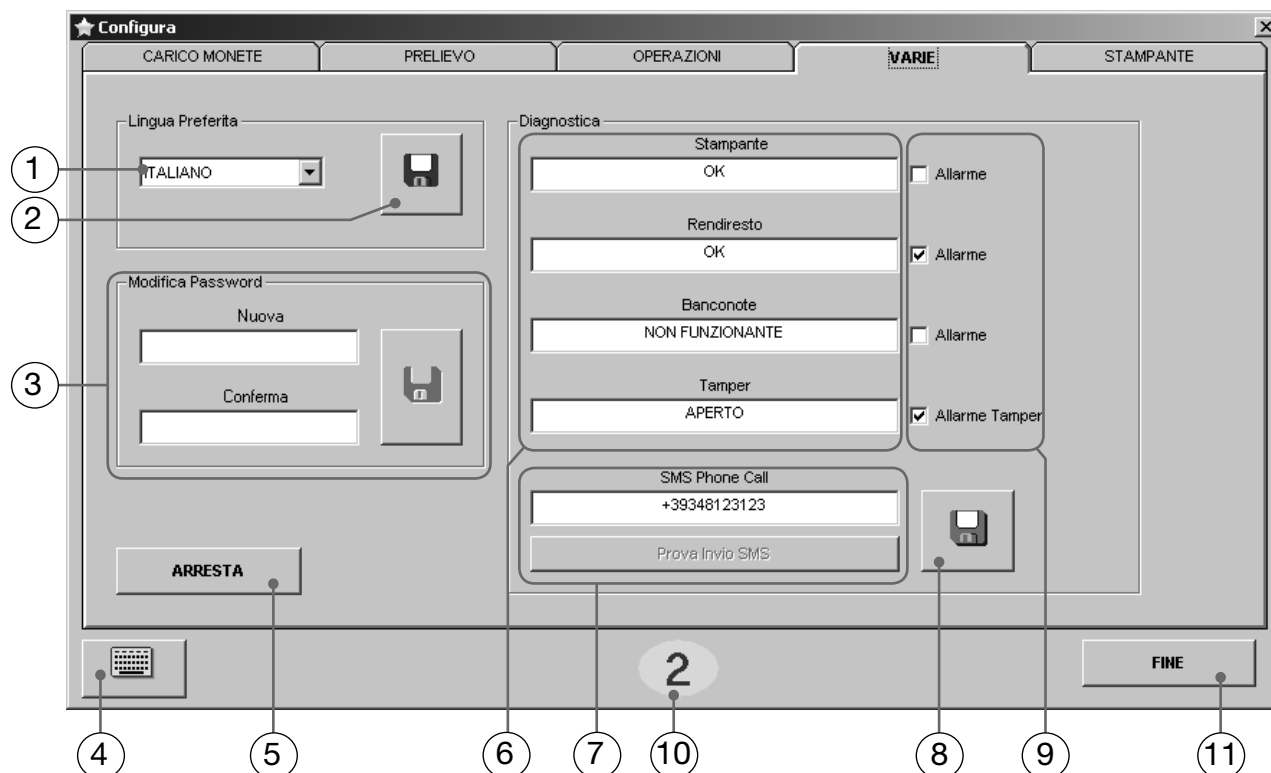


Setting the PSC6000/1 OPERATIONS window



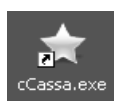
- | | |
|--|---|
| 1- Button to activate the touch screen keyboard. | 4- Operations carried out information window. |
| 2- Cancel file button (once pressed all files will be cancelled) | 5- Number of cash register connected. |
| 3- Button to export operations in text format file. | 6- END button to conclude various operations. |

Setting the PSC6000/1 VARIOUS window

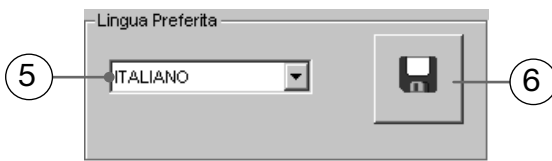


- 1 - Software language selection box.
- 2 - TSAVE language box.
- 3 - Password change or enter box.
- 4 - Touch screen activation box.
- 5 - Button to halt management software and to switch display to operating system.
- 6 - Cash register components diagnostic box.
- 7 - Telephone number for Text messaging alarms: by connecting an (optional) GSM modem the software will send a warning Text message in the event of selected malfunctions (see point 9 below).
- 8 - Button to save diagnostic settings.
- 9 - Selecting these boxes, activates alarms that in case of system component malfunctions. A Text message is sent if a GSM modem is connected up.
- 10 - Number of cash register connected.
- 11 - END button to conclude various operations.

N.B. : To return to the management software, click twice on the following icon:

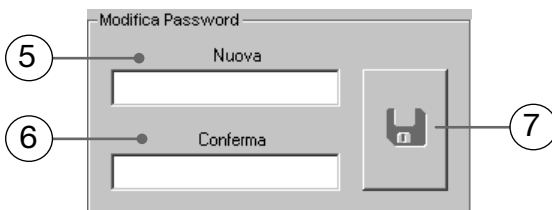


How to select the required language



1. Open the cash register using the apposite keys.
2. Press the button located on the panel box.
3. Use password to access the software.
4. Select the VARIOUS box.
5. Select the required language.
6. Save the setting.

How to change password



1. Open the cash register using the apposite keys.
2. Press the button located on the panel box.
3. Use password to access the software.
4. Select the VARIOUS box.
5. Enter the new password.
6. Re-enter the new password.
7. Save the setting.



How to insert a telephone number to notify of any malfunctions.

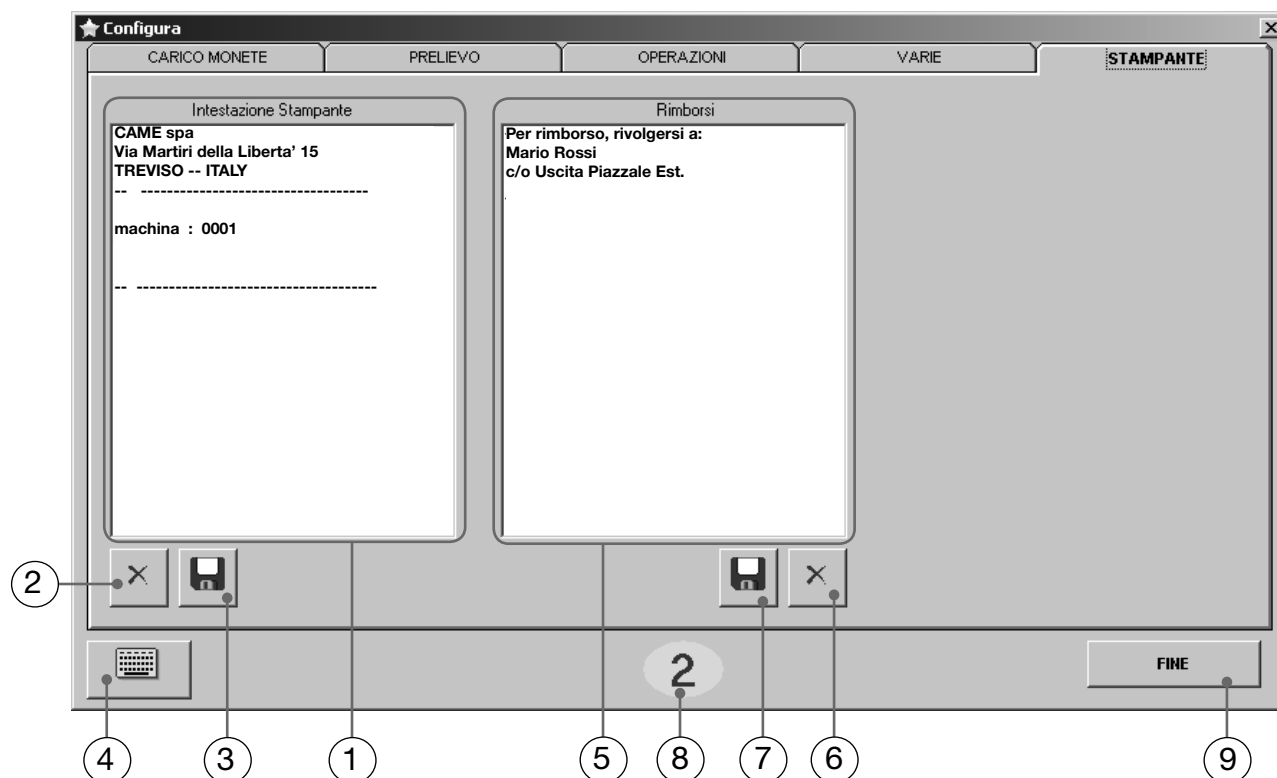


1. Open the cash register using the apposite keys.
2. Press the button located on the panel box.
3. Use password to access the software.
4. Select the VARIOUS box.
5. Enter the telephone number in the given space.
6. Click on the SAVE button to validate the function.

Warning: the "Test Text message sending" function is active only when the GSM modem is connected to the system.

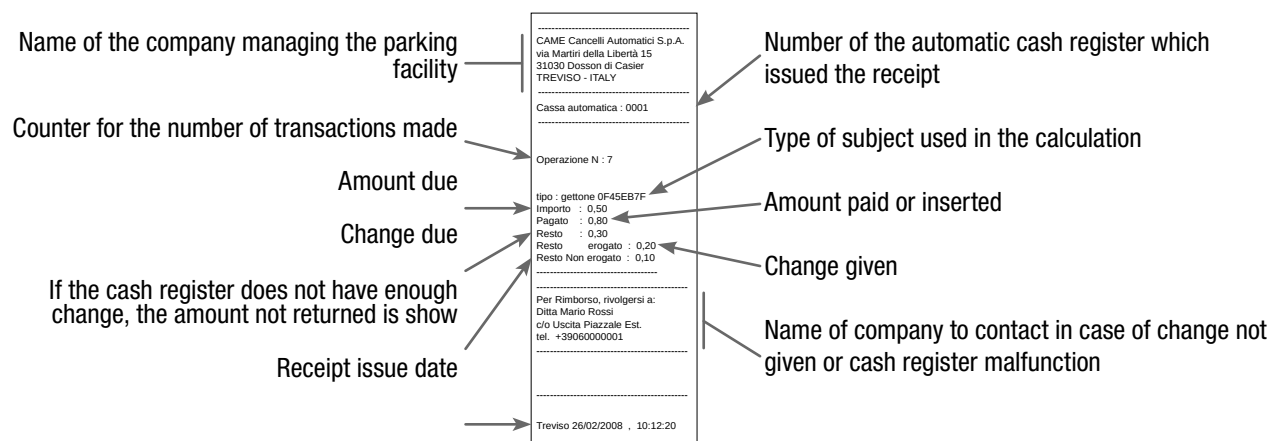


Setting the PSC6000/1 PRINTER window



- 1- Window for entering name of the company managing the parking facility.
- 2- Button to cancel phrases selected on the Printer Heading.
- 3- Button to save Heading on window.
- 4- Button to activate internal keypad.
- 5- Window to enter data of person assigned to giving reimbursements in case change is not returned or system malfunction.
- 6- Button to cancel phrases selected on Reimbursements.
- 7- Button to save Reimbursement data on window.
- 8- Number of cash register connected.
- 9- END button to conclude carious operations.

How to read the receipt



Heating unit

With condensation and/or extreme temperatures, we suggest switching on the heating unit using the apposite thermostat.



RBMP1 DIP Switch – Selecting functions

DIP Switches 1 and 2 = select s the time available for barrier to open, once token is retrieved from the PSC4000's tray.

DIP Switch 4 = select time available for payment, once token is placed on the PSC4000's sensor.



Dip 1 e 2 OFF.....3 seconds



Dip 4 ON.....30 seconds.



Dip 1 ON, 2 OFF.....5 seconds



Dip 4 OFF.....2,5 seconds (suggested).



Dip 1 OFF, 2 ON.....10 seconds



Dip 1 ON, 2 ON.....25 seconds

N.B.: DIP Switch 3 and 5 not used, leave in the OFF position.

Accessing the AUTOMATIC PAY-STATION



CUT OFF THE MAINS POWER SUPPLY.

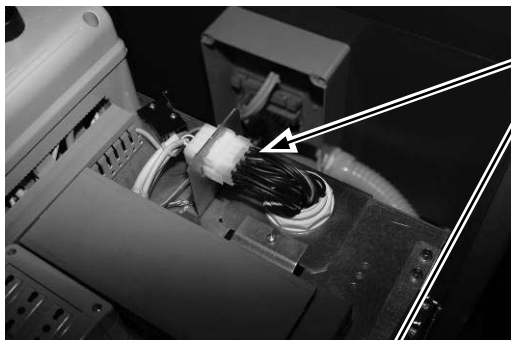
- use the supplied keys to open the unit



- pull towards yourself on the two handles fitted to the front of the unit

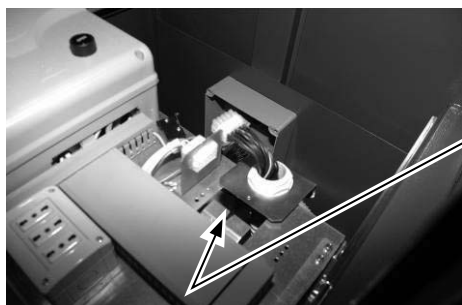
If replacing inner accessories should present any difficulties, remove the unit's front piece by following the following instructions.

⚠ WARNING! Two or more people are required for this procedure.



•disconnect the cables

•Loosen the screw



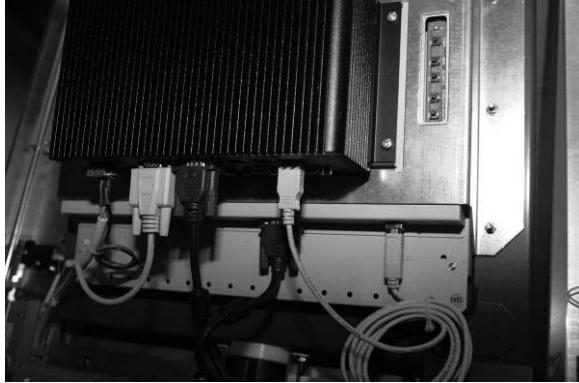
•remove the metal plate



Remove the panel by moving it to the opening limit switch, lift and pull towards yourself.

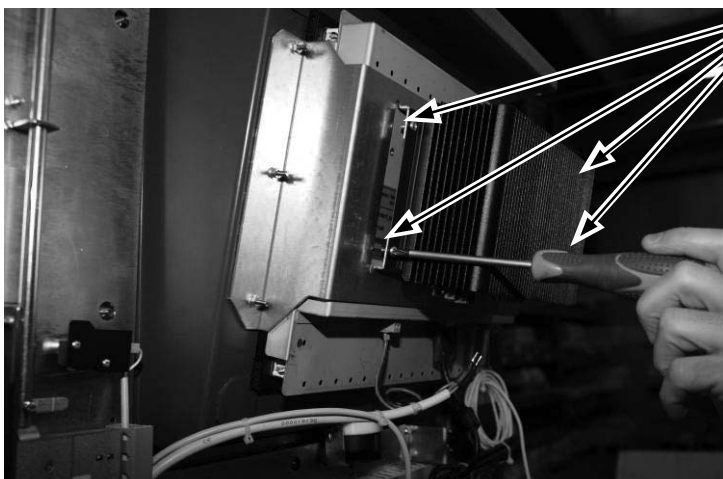
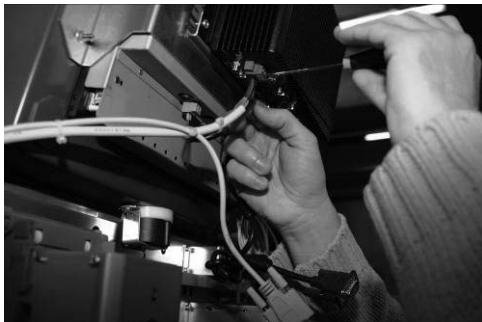
INDUSTRIAL PC replacement

spare part code -> 119RIR362



- unplug all cables beneath the industrial PC

 **Warning!** PC power supply = 24 V DC



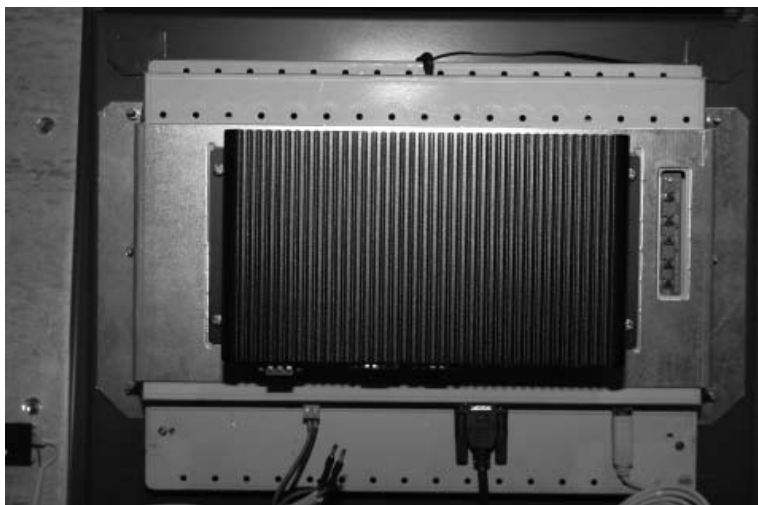
- loosen the four screws

INDUSTRIAL PC maintenance

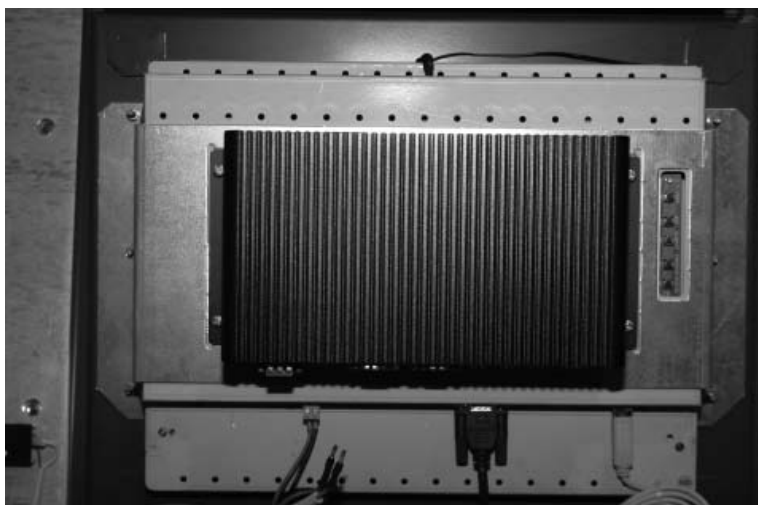
The industrial PC needs periodic maintenance.

INDUSTRIAL TOUCH-SCREEN MONITOR replacement

spare part code -> 119RIR363



- unplug the cables beneath the 119RIR362 industrial PC
- unplug the cables beneath the 119RIR363 monitor



- loosen the six nuts
-  **Warning!** Hold the touch-screen monitor with your hand.

INDUSTRIAL TOUCH-SCREEN MONITOR maintenance

Clean using a moist cloth, specific for PC monitor cleaning.

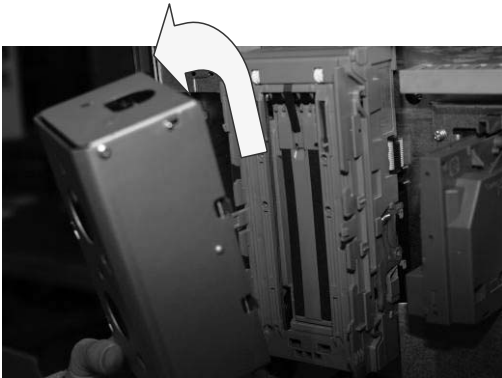
 *Do not use alcohol or aggressive detergents.*

VN9 BANKNOTE READER replacement

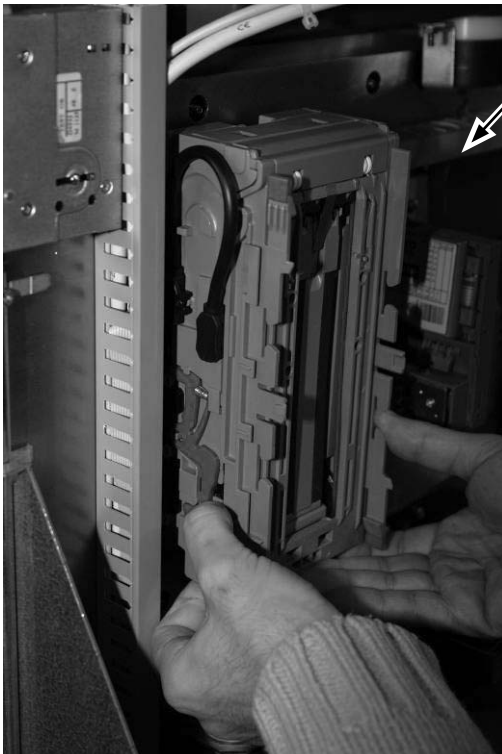
spare part code -> 119RIR365



- slightly move the holding tab



- remove the banknote collector, moving it upwards and towards you.



- press the two tabs to remove the NV9 banknote reader



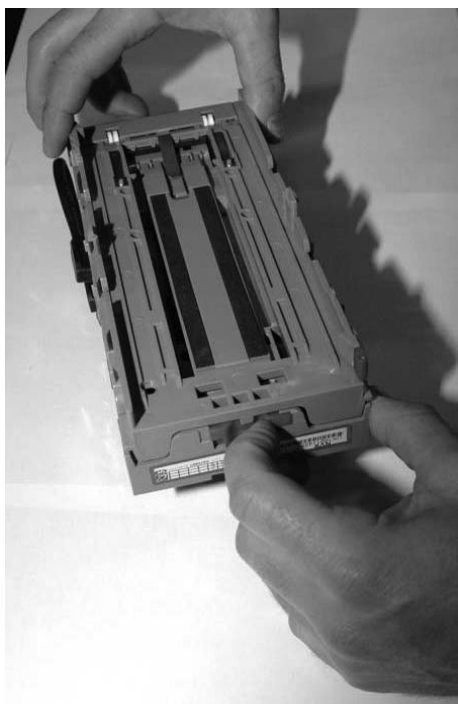
- unplug the cable



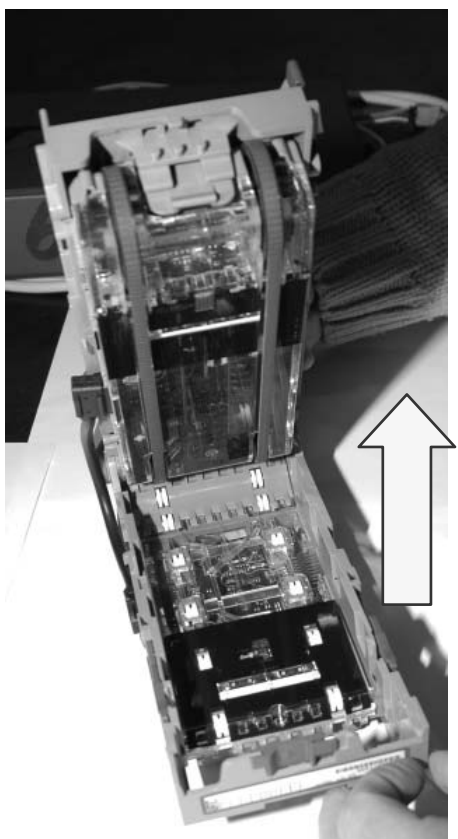
VN9 BANKNOTE READER maintenance

Maintenance must be done once per month.

 **Warning! Do not lubricate the NV9 banknote reader**

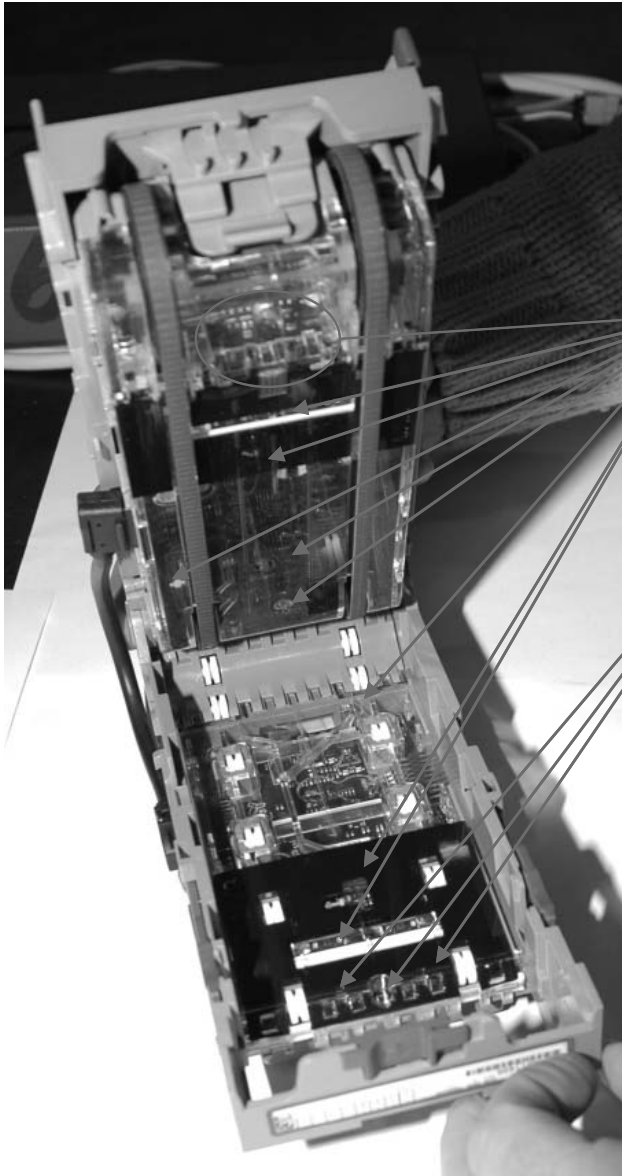


- move the tab to the right



- open the NV9 banknote reader

The NV9 banknote reader's capacity is 300, maximum



- for cleaning inside, use a soft moist non-frayed cloth.
- be sure that the sensor lenses are properly cleaned and dry.
- the lenses on the front sensor must be cleaned with either a wad or a soft brush.

COIN VALIDATOR replacement

spare part code -> 119RIR360

- unplug the cable



- with a flat head screwdriver, slightly move the holding tab ...



- and remove the coin validator from the support.



COIN VALIDATOR maintenance

Maintenance must be done once per month. Use compressed air to clean the coin validator.

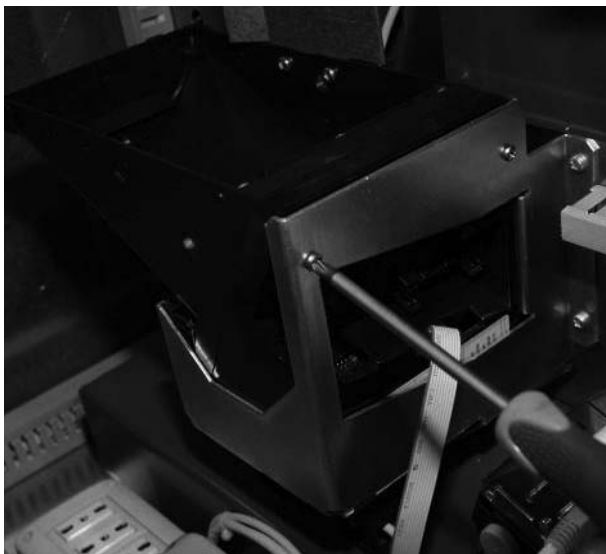
⚠ Warning! Do not lubricate the coin validator.

COIN SELECTOR replacement

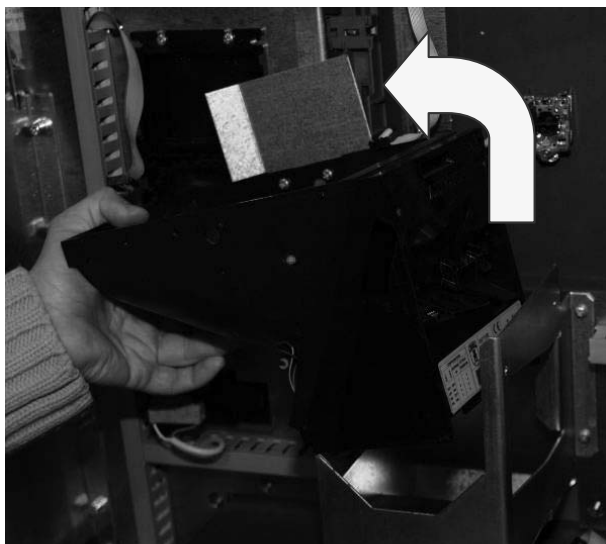
spare part code -> 119RIG295



- unplug the cable



- loosen the two screws

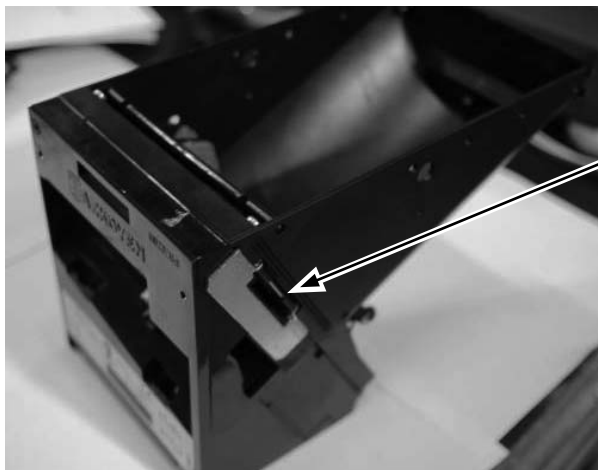


- lift and remove from the metal support, the coin selector.

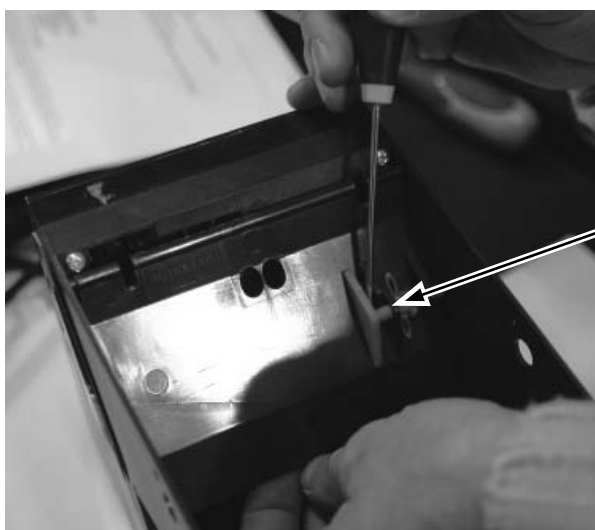
COIN SELECTOR maintenance

Perform periodic maintenance according to the operating conditions (at least once per year).

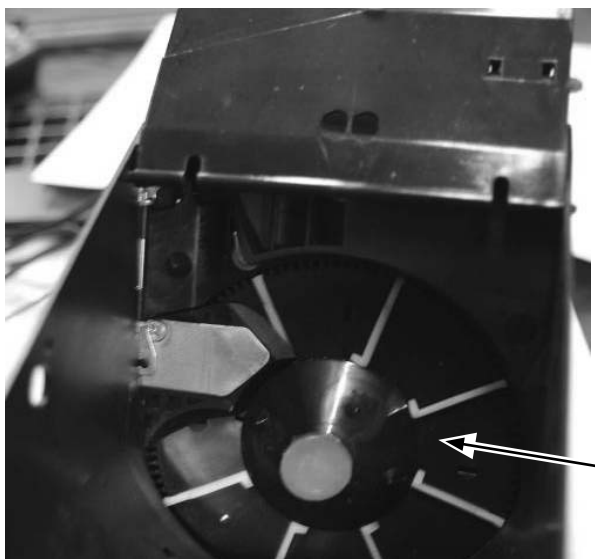
⚠ Warning! Do not lubricate the coin selector.



- clean the coin exit slot, with compressed air



- clean the inside of the coin selector, moving the holding tab leftwards and using a screwdriver to lift the hatch door.



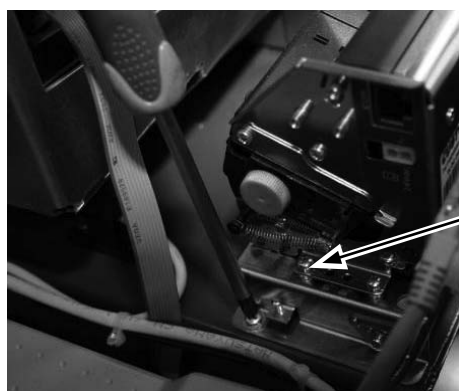
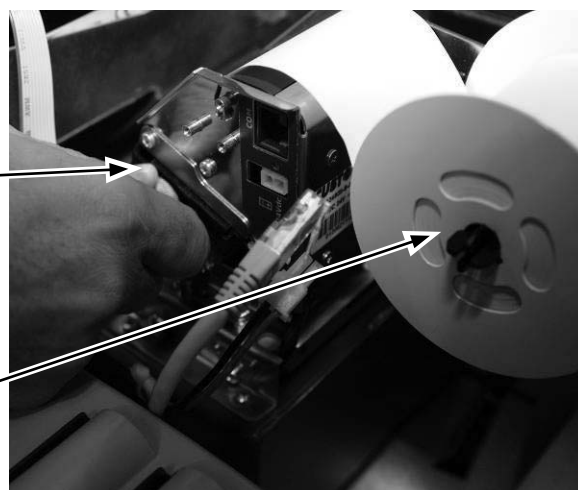
- clean using compressed air and a moist unfrayed cloth (including the coin basket)

REPORT PRINTER replacement

spare part code 119RIR361

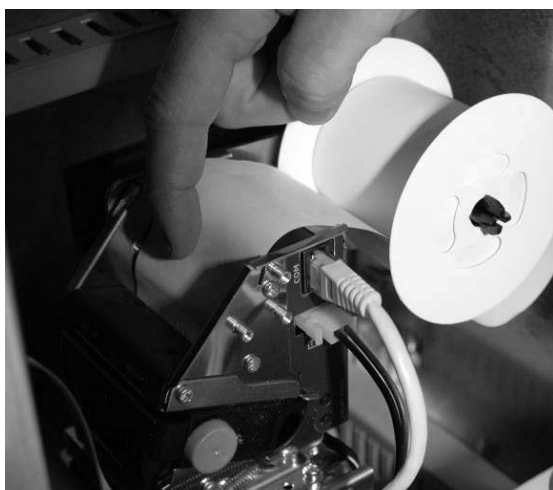
- disconnect the two cables: power and data supplies

- turn the green knob counter clockwise, until the paper extracts from the printer. Compress the center tabs and remove the white roll holding disc.



- loosen the four fastening screws.

- once the printer is replaced, cut the paper edge on the roll using scissors.

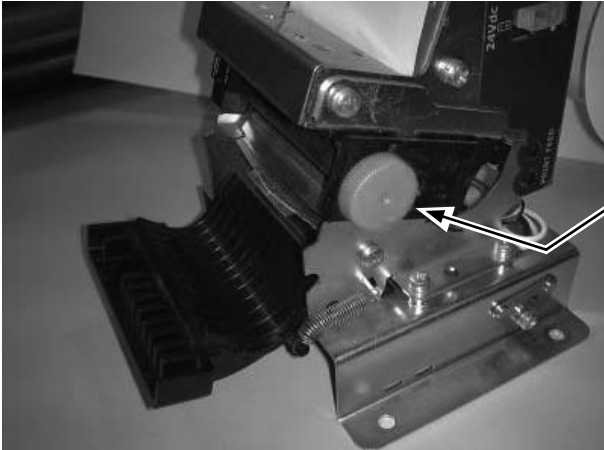


- Power up the printer, fit the rolled paper into the corresponding slot, the paper is hooked and cut automatically.

REPORT PRINTER maintenance

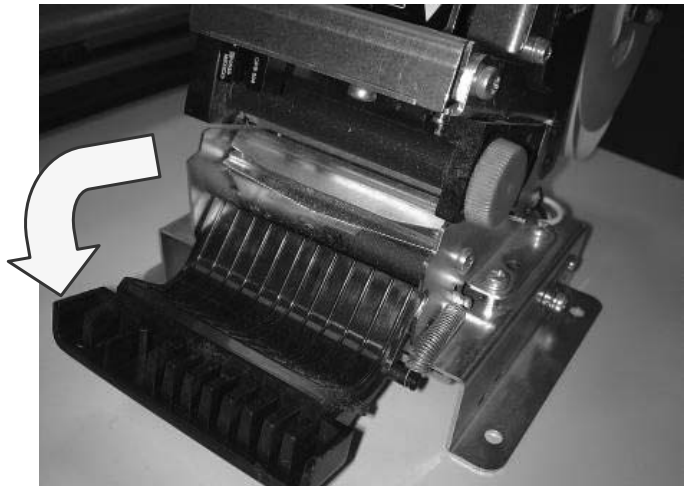
Maintenance must be done once per month.

⚠ Warning! Do not lubricate the report printer.



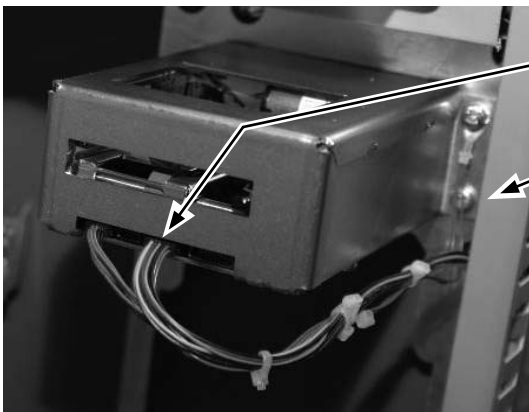
- remove the paper by turning the green knob counter clockwise

- open the black hatch, clean inside the hatch and the rubber cylinder, using a damp cloth and by turning the green knob.



TICKET DISPENSER replacement

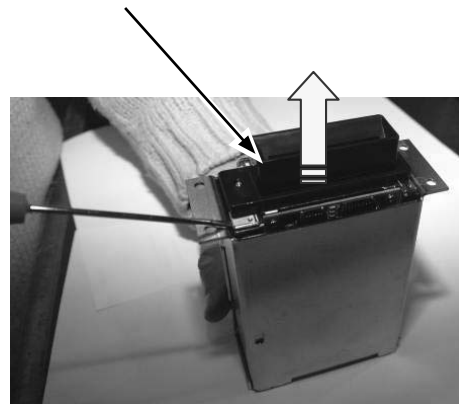
spare part code -> 119RIR359



- unplug the two connectors, behind the ticket mover
- Loosen the four fastening screws



- loosen the ticket mover fastening screw
- use a screwdriver to remove the ticket mover



TICKET DISPENSER maintenance

Maintenance must be done once per month.

 **Warning! Do not lubricate the ticket dispenser.**



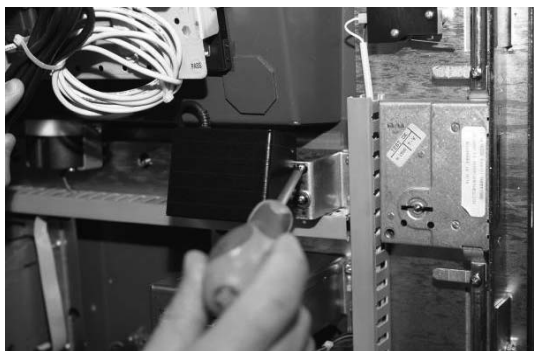
- use compressed air to clean the inside of the ticket mover, without dismantling it.

Replacing the BARCODE FIX-SCANNER

spare part code 119RIR358



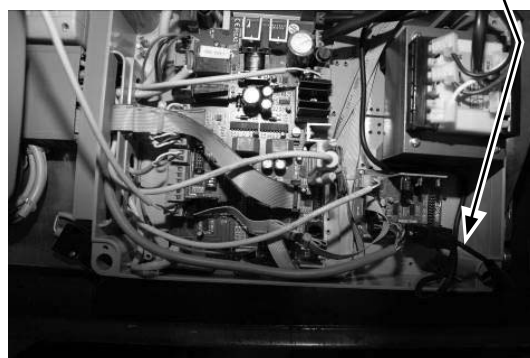
- remove the covers from the grooves



- loosen the four fastening screws

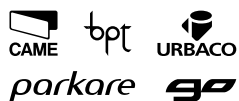


- remove the cable, connected up to the control unit



English - Manual code: **FA00720-EN v. 1** - 06/2017 - © Came S.p.A.
The contents of this manual may be changed at any time without prior notice.

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Came S.p.A.

Via Martiri Della Libertà, 15
31030 **Dossan di Casier**
Treviso - Italy
☎ (+39) 0422 4940
📠 (+39) 0422 4941

Via Cornia, 1/b - 1/c
33079 **Sesto al Reghena**
Pordenone - Italy
☎ (+39) 0434 698111
📠 (+39) 0434 698434

www.came.com