

**General Presentation
ON LINE HOTEL CONTROLLERS
PROXA-01
Mifare Proximity SYSTEM**

RESEL

**ACCESS CONTROL
ELECTRONIC DEVICES
MANUFACTURER**



**DOORPHONES
VIDEODOORPHONES
ACCESS CONTROL
HOTEL LOCKS**

PROXIMITY IS THE KEY



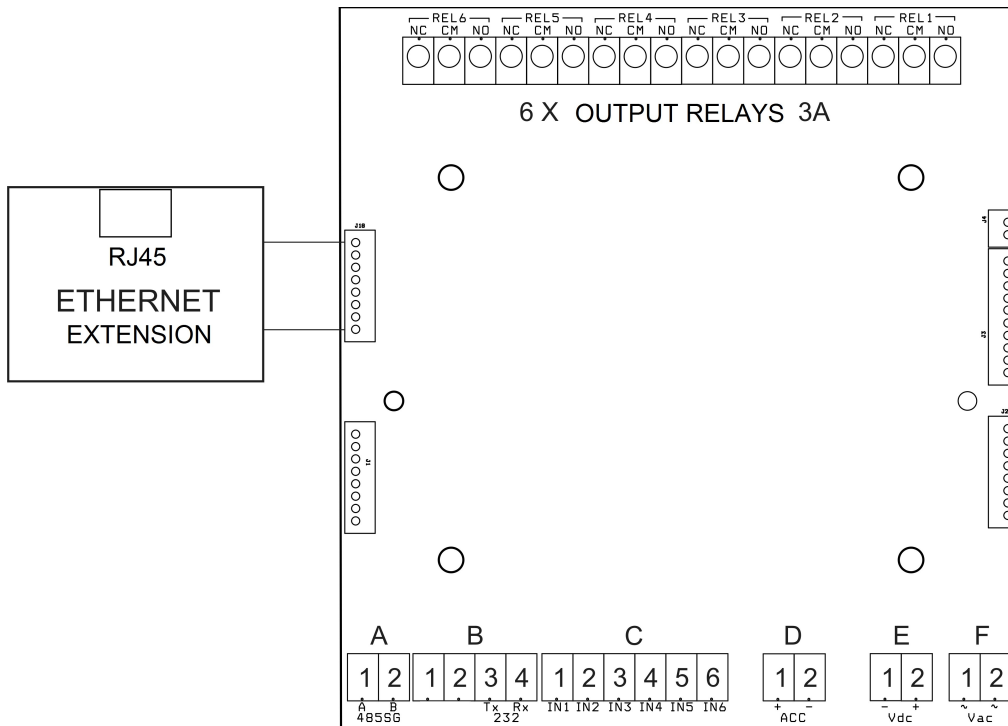
PROXA-01 Hotel Room CONTROLLER works with Mifare Proximity Card Readers type **PROXA-01MF** and Mifare Proximity Card Energy Saving devices **PROXA-01EE** manufactured by our company.

General Specifications:

PCB Outer Dimensions	138X120X64mm
Voltage supply	12... 15 Vdc
Maximum current	500 mA
Communication ports	1xRS232, 2xRS485, 1xTCP/IP
Number of inputs	6
Number of output relay contacts (NO, NC)	6
Maximum switched current resistive load	2Adc
Operating Temperature	5 – 50 ° C
Humidity	20%--95%

Technical specifications for ISCP-01 Power supply:

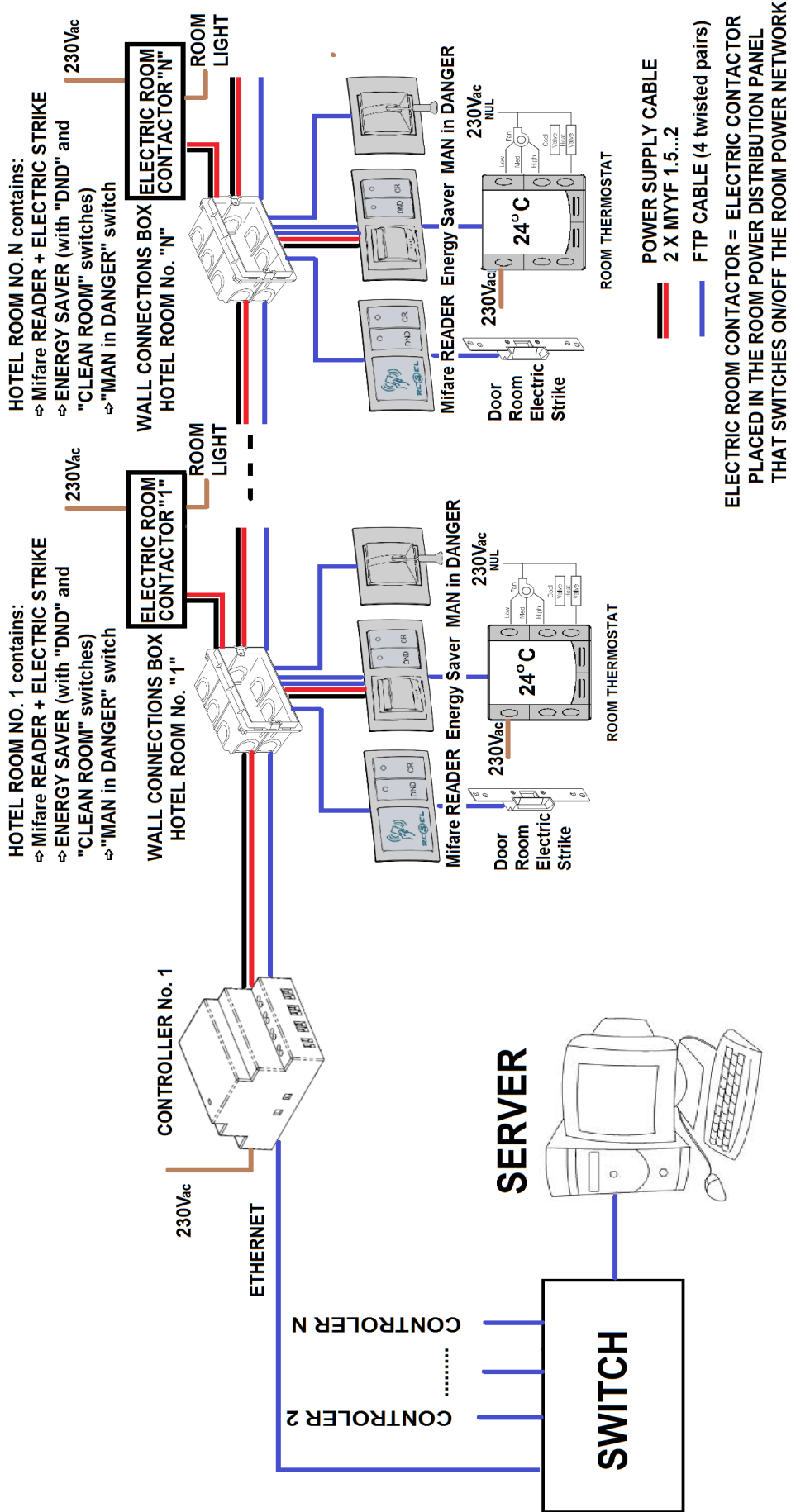
Output Voltage	13,5 VDC±5%
Maximum current	1 A (regulated voltage)
Optical signaling	Bicolor LED
Electrical bolt output	1 pc. 1A/30Vdc (when back-up battery conected)
Relay output	1 pc. contacts 5A / 230V (10A / 24Vdc) resistive load
Operating Temperature	-20...+55°C



PROXA-01 Controller board with extension ETHERNET module

CONNECTION DIAGRAM of the CONTROLLER PROXA-01

The following picture shows the General Diagram of Connections for a hotel Controller.



An ETHERNET bus can connect all the controllers and room devices of a hotel to a computer SERVER running the ONLINE management software application (real time). In this way it is possible to control all the utilities of all the rooms in a hotel.

All the hotel Controllers (CONTROLLER1 ... CONTROLLER N) are connected through FTP cables to one or more SWITCHES then to a SERVER running the ON LINE Hotel Management Software.

Each controller can manage up to 30 devices Mifare Reader type PROXA-01 (that control the electric bolt at the Door Room) and PROXA-01EE - Energy Savers (that have "DND" and "Clean Room" switches integrated as an option).

Each Energy Saver and Mifare Reader has two RS485 communication lines: one to connect the device to the controller and another one for controlling various RS485 devices in the room (eg Room Thermostat).

Each Energy Saver and Mifare Reader has 3 digital inputs lines and 3 digital output lines that can be assigned by the Management software as:

Inputs like: DND, Clean Room, MAN in DANGER, Flood sensor, Open window sensor, etc.

OUTPUTS - signaling DND and Clean Room, Electric Strike on the door room (usually a relay contact), Electric Contactor of the room (usually a relay contact), Water Valve command in case of flooding, etc.

The following picture shows how are the Room Devices connected via a RS485-SG bus (A&B signals are RS485 with galvanic separation of the bus). The RS485-SG bus connects the proximity Mifare Readers PROXA-01MF from the hotel room entrance door and the room's Energy Saver - PROXA-01EE.

PROXA-01MF Mifare Reader of a specific room recognizes the cards programmed for that room and open the lock using its own relay.

PROXA-01EE Energy Saver connected to the controller controls the power outlets in the room and room lighting via the Electric Contactor of the room mounted in the electrical panel.

The minibar (fridge) is recommended to be connected directly to the electricity grid of the hotel (not conditioned by the PROXA-01EE Energy Saver).

In winter/summer the system can preserve heat/cool by controlling a room thermostat that can connect via the second RS485 bus to PROXA-01MF Mifare Reader or PROXA-01EE Energy Saver (in the figure below, the signals a&b of the RS485 bus of the Thermostat are connected to the PROXA-01MF Mifare READER).

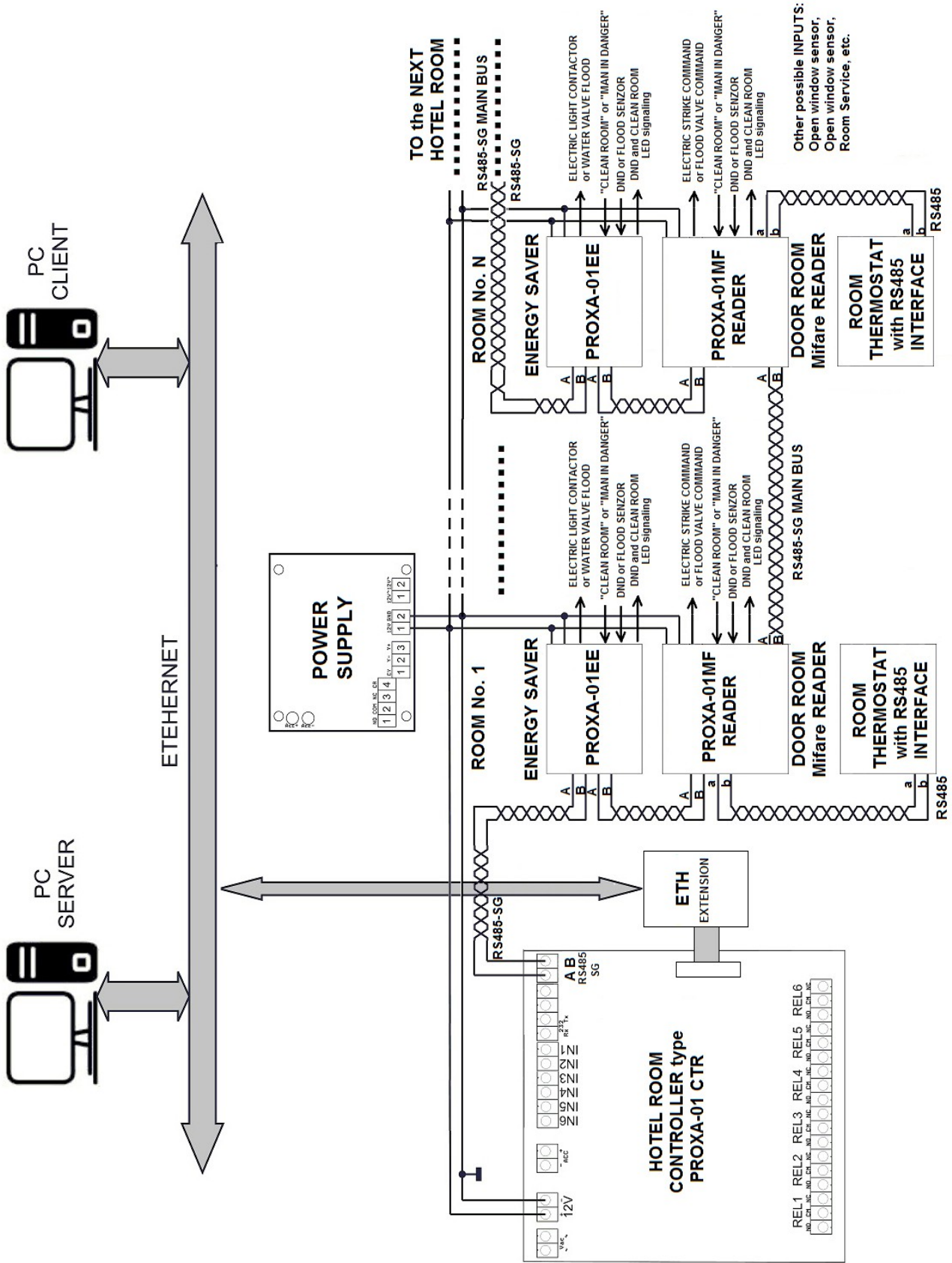
Thus, a client, after receiving the card for his room, can open the door of the room (with PROXA-01MF Mifare READER mounted at the entrance door of the room), can connect/disconnect the Power Network of the room (via PROXA-01EE Energy Saver).

The information about the moments of time when someone is entering the room, the moments someone connects the Power Network of the room (introducing its own card into the Energy Saver) or someone disconnects the Power Network of the room (removing the card from the Energy Saver) is transmitted in real time to the SERVER and stored so it can be viewed at any time by authorised hotel personnel by accessing any computer in the hotel LAN or INTERNET that has the CLIENT application installed.

Also the same applies on the information about the moments of time when a member of the hotel personnel is entering a room (maid, plumber, administrator, etc.), when that person connects the Power Network of the room (introducing its own card into the Energy Saver) or disconnects the Power Network of the room (removing the card from the Energy Saver).

Moreover, the controller can send to the SERVER real time information taken from sensors inside the hotel room:

- The temperature inside every hotel room from the Room Thermostats;
- Sensor that inform that the entrance door is left open;


















- Sensor that inform that the window is left open;
- Flood detection sensor in the bathroom;
- Actuated switch in case of MAN in DANGER situation (someone falls in the bathroom);
- Switch DND (do not disturb) acted;
- Switch Clean the Room action, etc.

The controllers can transmit real-time commands from the SERVER to PROXA-01MF Mifare Reader or PROXA-01EE Energy Saver installed in rooms and to the Room Thermostats:

- Temperature can to be set in the hotel room Economy Mode (30°C in the summer) or Confort Mode (20°C in the summer);
- Close Valve Flood command in case of flood situation,
- All Door Open Command in case of disaster, etc.

The Hotel Management Software allows the Hotel Stuff to have real time control and information about rooms Occupancy, persons that are inside the room at a moment, the time that needed a maid to clean a room, etc.

In the bellow table there are explained some of the icons that are used by the ON LINE Management Software to inform Hotel Stuff about the state of the hotel rooms:

	Free room
	Reserved room
	Occupied room
	Client is inside the room
	Maid is inside the room
	MAN in DANGER in the respective room
	Bathroom flood in the respective room
	Room under technical service
	Client ask for Room Cleaning
	Client ask Do Not Disturb
	Client ask for Room Service
	The room will have a check-in that day
	The room is ready for check-in
	The room will have a check-out that day
	The room is in check-out state (the client must leave that day or extend accommodation)