

Operative Display for REVO PC Series



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Avvertenze Importanti per la sicurezza



The unit are integral part of industrial equipments.

When it is supply, the unit is subject to dangerous tensions. Don't remove the plastic cover.

Don't use this unit in aerospace and nuclear application.

Electric Shock Hazard (Rischi di scosse elettriche, Risque de choqué électrique)

When thyristor unit has been connected to main supply voltage and is switched off, before to touch it be secure that the unit is isolated and wait at least one minute to allow discharging internal capacitors.

Thus be secure that:

- access to thyristor unit is only permitted to specialised personnel;
- the authorised personnel must read this manual before to have access to the unit;
- the access to the unit must be denied to unauthorised personnel.

Important warnings (Avvertenze importanti, attention)

During the operations with units under tension, local regulations regarding electrical installation should be rigidly observed:

- Respect the internal safety rules.
- Don't bend components to maintain insulation distances.
- Protect the units from high temperature humidity and vibrations.
- Don't touch components to prevent electrostatic discharges on them.
- Verify that the size is in line with real needs.
- To measure voltage current etc. on unit, remove rings and other jewels from fingers and hands.
- Authorized personnel that work on thyristor unit under power supply voltage must be on insulated board

This listing does not represent a complete enumeration of all necessary safety cautions

Protection (Protezione, Protection)

The unit have IP20 protection rating as defined by the specific international. Is necessary consider the place of installation.

Earth (Messa a terra, Terre)

For safety, the Thyristor unit with isolated heat-sink must be connected to earth.

Earth impedance should be correspondent to local earth regulation. Periodically the earth efficiency should be inspected.

Electromagnetic compatibility (Compatibilità elettromagnetica, Compatibilité électromag.)

Our thyristor units have an excellent immunity to electromagnetic interferences if all suggestions contained in this manual are respected. In respect to a good Engineering practice, all inductive loads like solenoids contactor coils should have a filter in parallel

Emissions (Emissioni, Emission)

All solid-state power controllers emit a certain amount of radio-frequency energy because of the fast switching of the power devices. The Thyristor unit are in accord with the EMC norms, CE mark.

In most installations, near by electronic systems will experience no difficulty with interference. If very sensitive electronic measuring equipment or low-frequency radio receivers are to be used near the unit, some special precautions may be required. These may include the installation of a line supply filter and the use of screened (shielded) output cable to the load.

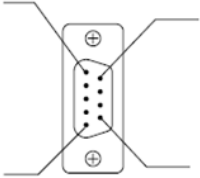


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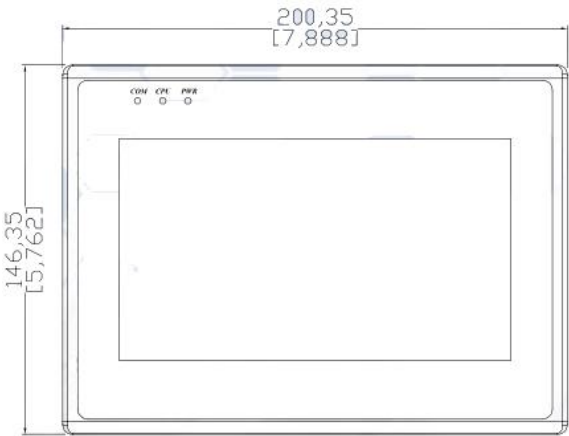
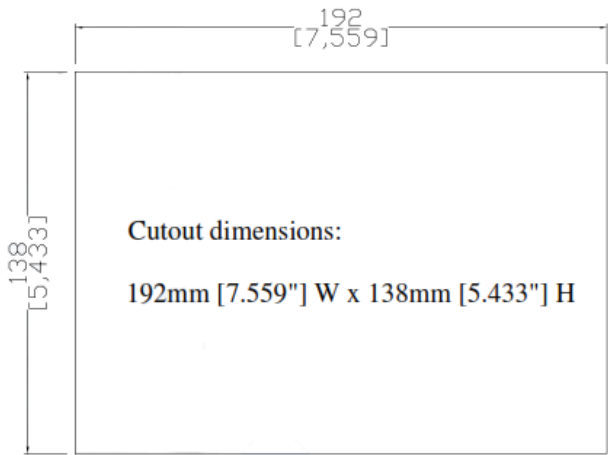
1 Wiring and dimensions

1.1 REVO-KP 7.0''

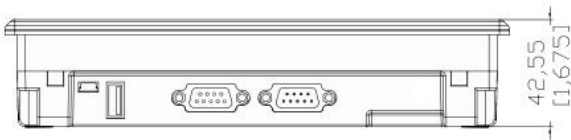
Pin Serial Port

CN1 (D-sub 9pin, male)	Pin	Signal Name	Description
	1	Tx/Rx -	Data - (Blue)
	2	Tx/Rx +	Data + (Brown)

1.1.1 Fixing holes

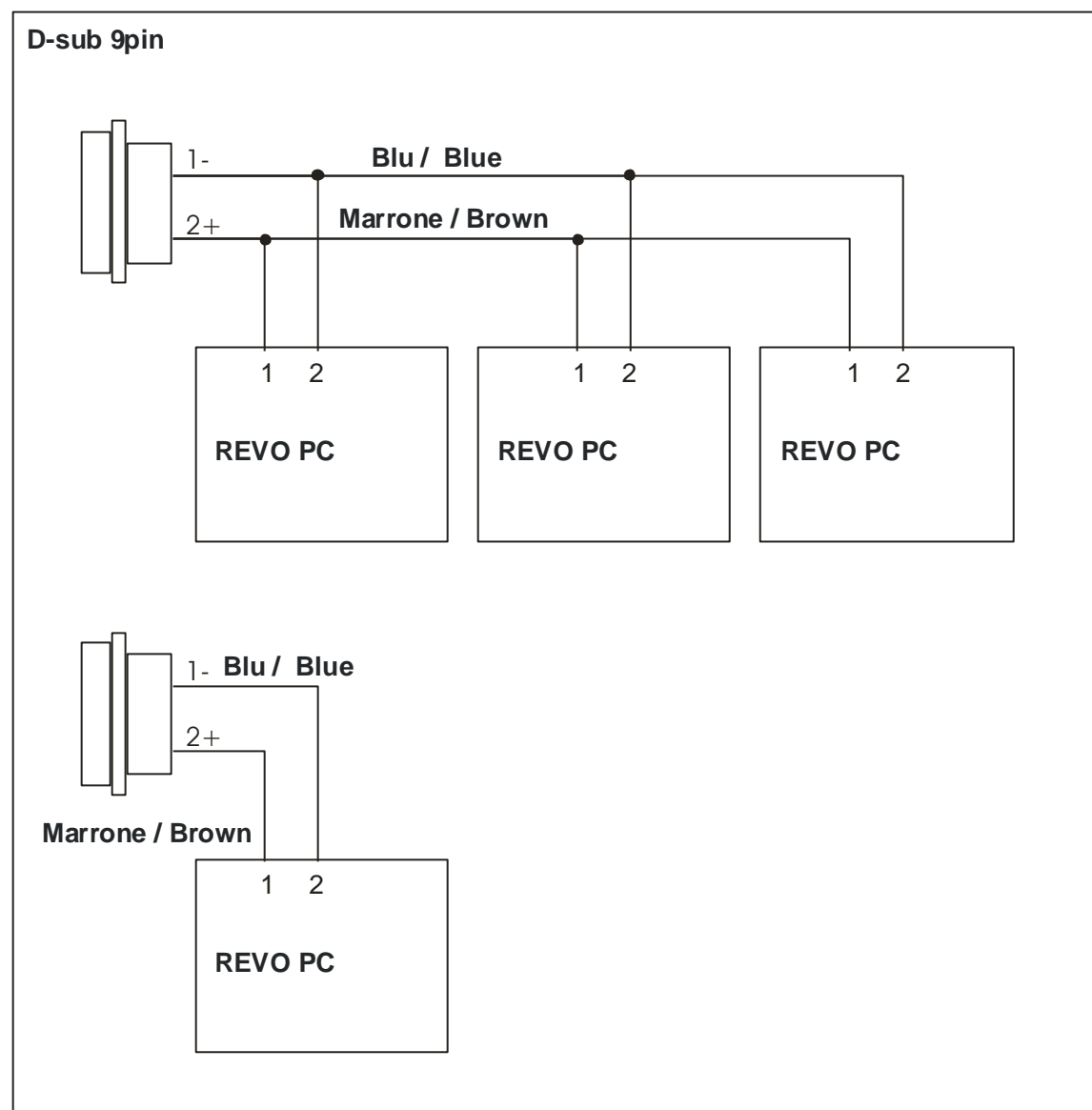


Front View



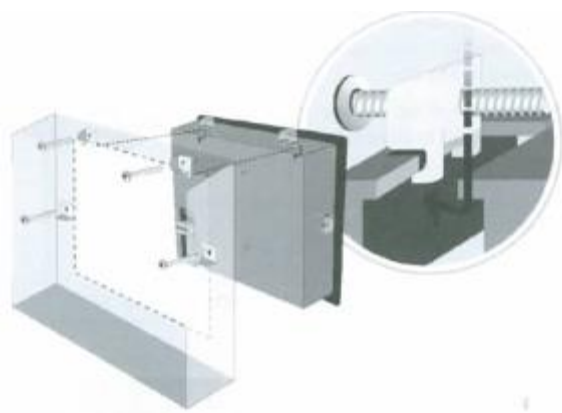
Bottom View

1.2 Wiring

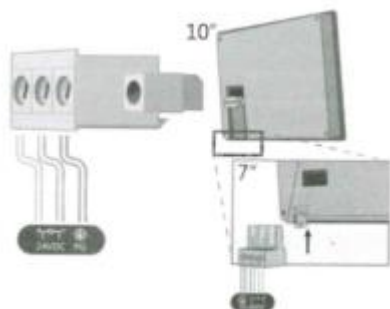


2 Installation

Before installation, make sure that the product has not been damaged during transport.
In case of damage, notify the carrier immediately.
Verify that the product is indeed the one ordered.



For mounting use the supplied brackets.



To connect the 24Vdc power supply using the supplied clamp

2.1 Serial Setting

Is possible connect 3 type of system

Connection Type	
3 Revo PC every REVO PC drive 8 zones of 1 phase load for each REVO PC (RPC18)	Revo PC 1: Address :1 Baudrate: 19200 Parity : none Revo PC 2: Address :1 Address :2 Baudrate: 19200 Parity : none Revo PC 3: Address :1 Address :3 Baudrate: 19200 Parity : none
1 Revo PC the REVO PC drive 8 zones of 3 phase of 2 phase zone (RPC28 or RPC 38)	Revo PC 1: Address :1 Baudrate: 19200 Parity : none
1 Revo PC the REVO PC drive 24 zones of 1 phase load (8 zones on phase L1, 8 zones on phase L2, 8 zones on phase L3) (RPC48)	Revo PC 1: Address :1 Baudrate: 19200 Parity : none

3 Operation

The panel is configured to communicate with the REVO-PC System .

3.1 Functional Description

3.1.1 Numeric fields

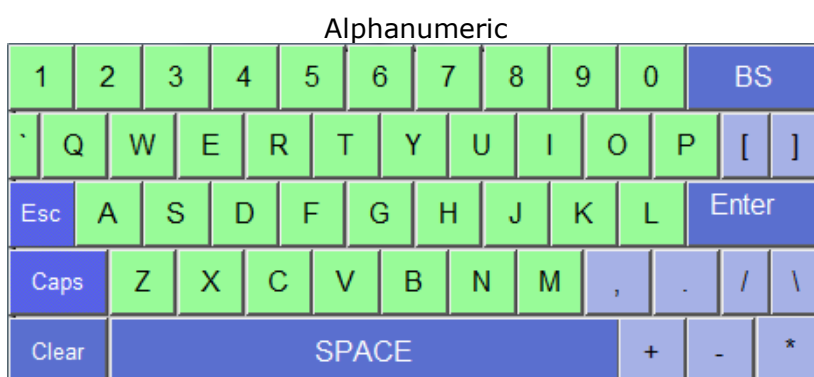
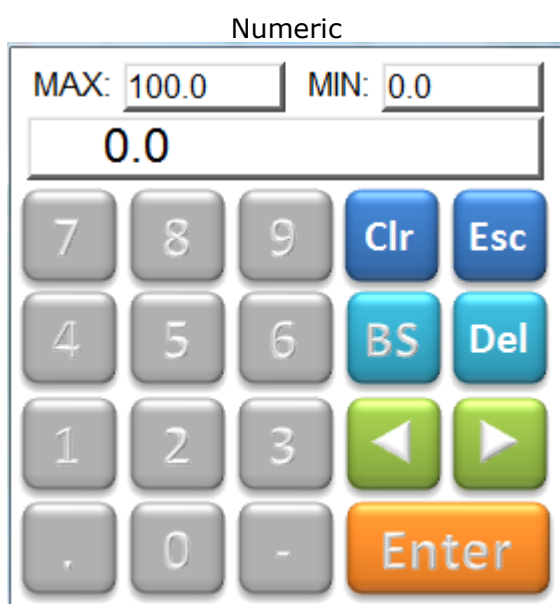
123

The BLUE values, if enabled, are read/write

123

The BLACK values are read-only

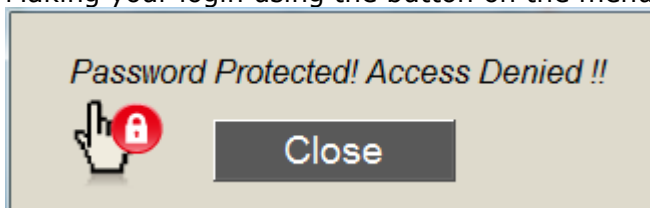
3.1.2 Virtual Keyboard



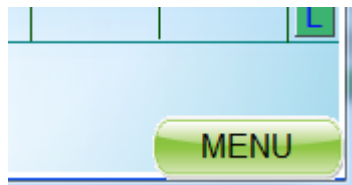
- BS = Back Sapce
- Clr = Delete all
- ESC = close the window without doing anything
- ` ` = minus sign
- ENTER = Confirm and submit data
- MAX = Maximum possible value
- MIN = Minimum possible value


3.1.3 Message

Making your login using the button on the menu



3.2 Menu



By pressing key  will appear on the navigation menu
The menu are different and depending of Access Level

Level 0



Level 1/2



Function keys



Log out the user level

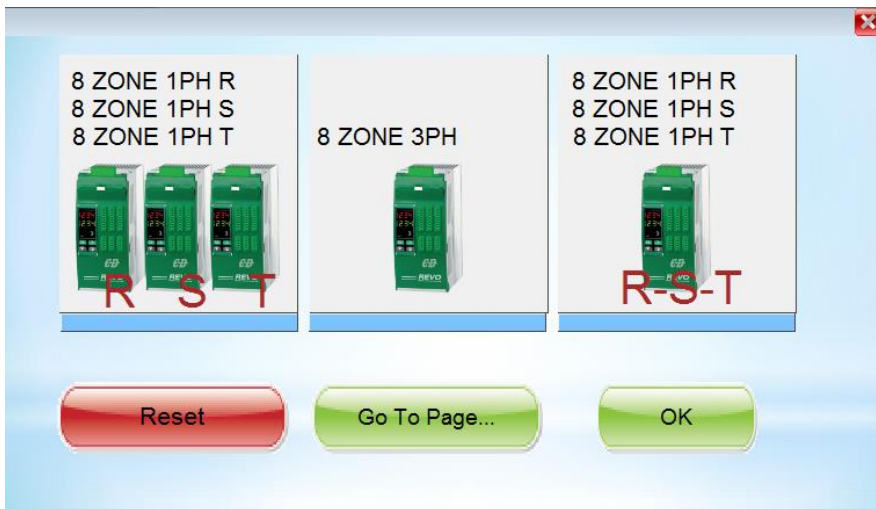
Calls page to log on to a different level

Calls page of the version information

Enter in **REVO-KP** configuration

3.3 First Power on

At First power on select the right application type



The application type can be:

- 3 Revo PC
every REVO PC drive 8 zones of 1 phase load for each REVO PC
- 1 Revo PC
the REVO PC drive 8 zones of 3 phase of 2 phase zone
- 1 Revo PC
the REVO PC drive 24 zones (8 zones on phase L1, 8 zones on phase L2, 8 zones on phase L3)
of 1 phase load

3.4 Home page

The home page change following the application type

3.4.1 Applycation with 3 REVO-PC of 8 ZONE

The page are divided in three groups.

Every group rappresent a phase connected to a different REVO PC-1PH (RPC08)

The group name can be personalized in configuration

Can be set max 8 zone for group

Phase R 6zone					Phase S 6zone					Phase T 8zone				
R					S					T				
SP%		A	kW	AL	SP%		A	kW	AL	SP%		A	kW	AL
R1	0.0	0.0	0.00	H L	S1	0.0	0.0	0.00	H L	T1	0.0	0.0	0.00	H L
R2	0.0	0.0	0.00	H L	S2	0.0	0.0	0.00	H L	T2	0.0	0.0	0.00	H L
R3	0.0	0.0	0.00	H L	S3	0.0	0.0	0.00	H L	T3	0.0	0.0	0.00	H L
R4	0.0	0.0	0.00	H L	S4	0.0	0.0	0.00	H L	T4	0.0	0.0	0.00	H L
R5	0.0	0.0	0.00	H L	S5	0.0	0.0	0.00	H L	T5	0.0	0.0	0.00	H L
R6	0.0	0.0	0.00	H L	S6	0.0	0.0	0.00	H L	T6	0.0	0.0	0.00	H L
										T7	0.0	0.0	0.00	H L
										T8	0.0	0.0	0.00	H L
Voltage		0	0.00 kW		Voltage		0	0.00 kW		Voltage		0	0.00 kW	
Pw Limit		0.0			Pw Limit		0.0			Pw Limit		0.0		
RPC OK D1 D2 D3 D4					RPC OK D1 D2 D3 D4					RPC OK D1 D2 D3 D4				
										MENU				

3.4.2 Applycation with 1 REVO-PC 3PH of 8 ZONE

Every Line is a zone in a 3phase system

Can be used max 8 zone

NAME	SP%	R		S		T		kW	
		A	AL	A	AL	A	AL		
ZONE1	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
ZONE2	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
ZONE3	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
ZONE4	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
ZONE5	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
ZONE6	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
ZONE7	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
ZONE8	0.0	0.0	H L	0.0	H L	0.0	H L	0.00	0.00
Voltage 0		0.00 kW							
Pw Limit 0.0									
RPC OK D1 D2 D3 D4									
									MENU

3.4.3 Applycation with 1 REVO-PC of 24 ZONE in 3 phase

The page are divided in three groups.

Every group rappresent the phase connected at the same REVO PC 1PH (RPC48)

The group name can be personalized in configuration

Can be set max 8 zone for group

R					S					T				
SP%	A	kW	AL		SP%	A	kW	AL		SP%	A	kW	AL	
R1	0.0	0.0	0.00		S1	0.0	0.0	0.00		T1	0.0	0.0	0.00	
R2	0.0	0.0	0.00		S2	0.0	0.0	0.00		T2	0.0	0.0	0.00	
R3	0.0	0.0	0.00		S3	0.0	0.0	0.00		T3	0.0	0.0	0.00	
R4	0.0	0.0	0.00		S4	0.0	0.0	0.00		T4	0.0	0.0	0.00	
R6	0.0	0.0	0.00		S5	0.0	0.0	0.00		T5	0.0	0.0	0.00	
R7	0.0	0.0	0.00		S6	0.0	0.0	0.00		T6	0.0	0.0	0.00	
R8	0.0	0.0	0.00		S7	0.0	0.0	0.00		T7	0.0	0.0	0.00	
R9	0.0	0.0	0.00		S8	0.0	0.0	0.00		T8	0.0	0.0	0.00	
					Pw Limit 0.0 kW									
					Tot 0.00 kW Voltage 0 V									
RPC OK 01 02 03 04										MENU				

3.4.4 Function description

The pages are divided into columns
The first column is the zone name

The first column is the zone name
SP% = Value of the percentage of control
A = Live Current
kW = Live Power (kW)
AL = Alarm Status
Voltage = Line Voltage
Pw Limit = Power Limit

3.4.5 ACTION on the main page

3.4.5.1 Reference Set

R				
	SP%	A	kW	AL
R1	0.0	0.0	0.00	H L
R2	0.0	0.0	0.00	H


Taping on the number will appear a virtual keypad to insert the Setpoint Value

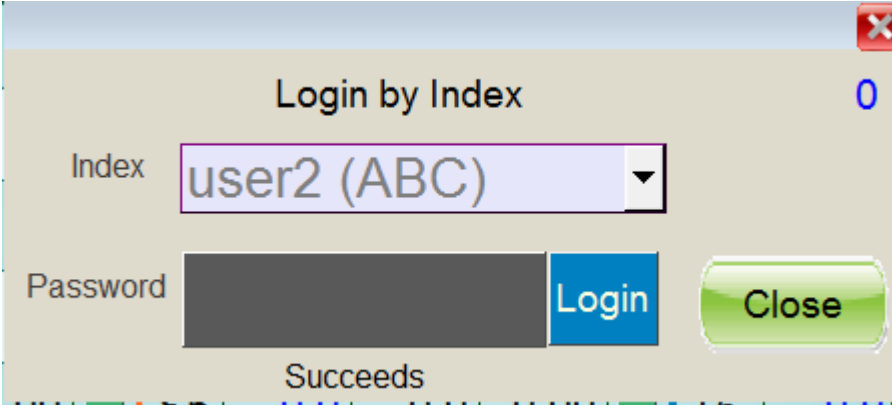
3.4.5.2 Power Limit

Voltage	0
Pw Limit	0.0
RPC OK	D11
D12	D13
D14	

Taping on the number will appear a virtual keypad to insert the Power Limit Value of single phase
If the access level is not enough will appear an error message

3.5 Log in

To access this page press 



The image shows a 'Login by Index' dialog box. It has a title bar with a close button (X). The dialog contains a label 'Index' next to a dropdown menu showing 'user2 (ABC)'. Below this is a 'Password' label next to a dark grey password input field. To the right of the password field is a blue 'Login' button. Further right is a green 'Close' button. At the bottom of the dialog, the text 'Succeeds' is displayed. In the top right corner of the dialog, the number '0' is shown.

Select the user ,insert the password and click on  button

If the password is right the level will change to the selected ones otherwise it will go to 0 value.

3.5.1 Acces levels

Level 0 (generic user)

Is possible to (No password)

- Navigate on allowed pages
- Set the % reference

Level 1 (advanced user)

Is possible to (Standard Password 1111)

- As level 0
- Chance Pw Limit

Level 2 (installer user)

Is possible to (Standard Password 2222)

- As level 1
- Set the ***REVO-KP2-PC***

3.6 Configuration Page

In this page is possible set the system



3.6.1.1 Label/Zones (Level2)

Name: R			Name: S			Name: T		
Number	Name	Load kW	Number	Name	Load kW	Number	Name	Load kW
0008	1: R1	0.0	0008	1: S1	0.0	0008	1: T1	0.0
	2: R2	0.0		2: S2	0.0		2: T2	0.0
	3: R3	0.0		3: S3	0.0		3: T3	0.0
	4: R4	0.0		4: S4	0.0		4: T4	0.0
	5: R5	0.0		5: S5	0.0		5: T5	0.0
	6: R6	0.0		6: S6	0.0		6: T6	0.0
	7: R7	0.0		7: S7	0.0		7: T7	0.0
	8: R8	0.0		8: S8	0.0		8: T8	0.0

OK

By Taping the "Grpup Name" field is possible to customize the text of 10 characters with an alphanumeric keypad

Name: R

Number Name Load kW

By Taping the "Name" fields is possible to customize the text with 2 characters foe each zone

Name Load kW

1: R1

By Taping the "Number" field is possible write the number of zones

Number

0006

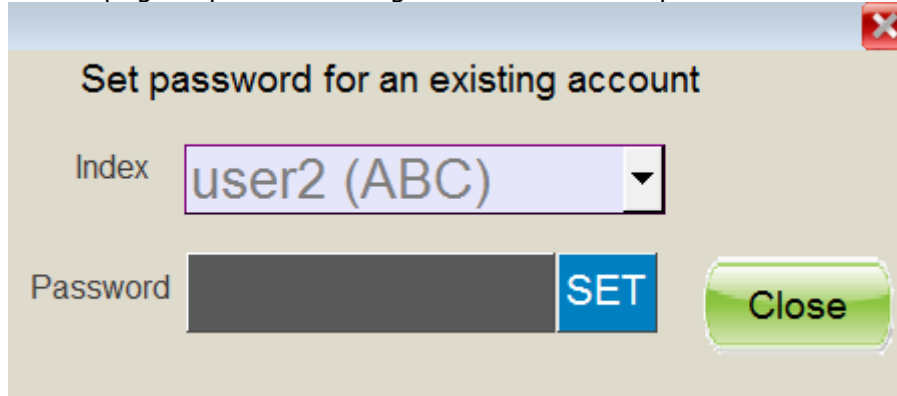
By Taping the "Load kW" field is possible write the kW of each zone

Load kW

0.0

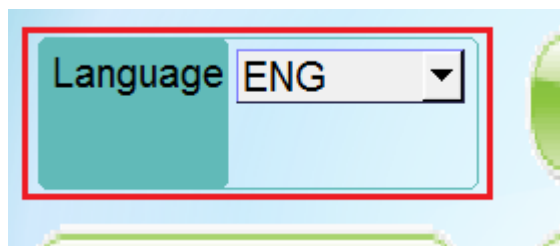
3.6.1.2 Password(Level2)

In this page is possible change user1 and user2 password

A dialog box titled "Set password for an existing account" with a close button (X) in the top right corner. It contains a label "Index" next to a dropdown menu showing "user2 (ABC)". Below this is a "Password" label next to a dark grey password input field. To the right of the input field is a blue "SET" button, and further right is a green "Close" button.

3.6.1.3 Language (Level1/2)

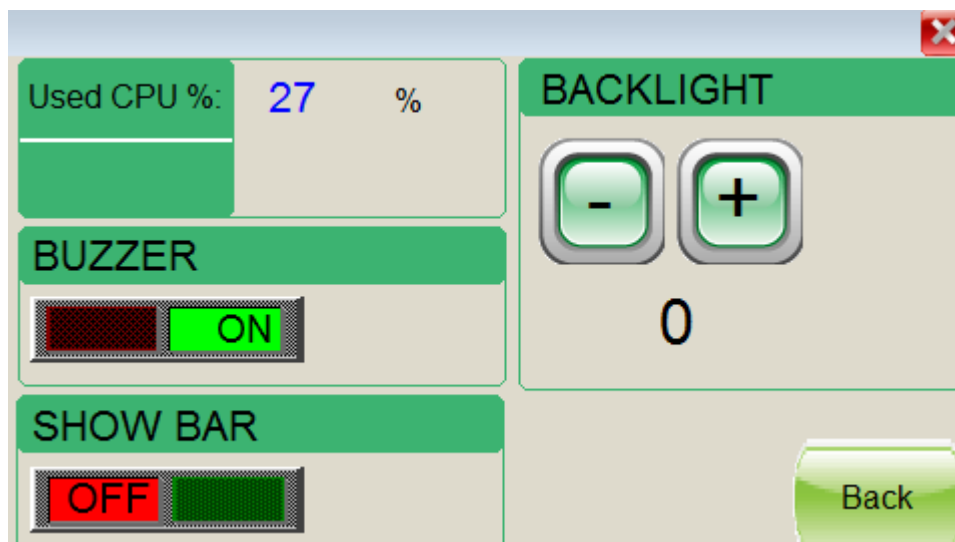
By pressing "Language" is possible to select Language

A close-up of a "Language" selection interface. It features a teal-colored button labeled "Language" next to a dropdown menu that currently displays "ENG". The entire selection area is enclosed in a red rectangular border.

3.6.1.4 Options (Level2)

In this page is possible

- See CPU usage
- Enable/disable buzzer
- Show/hide toolbar
- Modify Backlight intensity

A screenshot of the "Options" settings page. It is divided into two main sections. The left section contains three settings: "Used CPU %:" with a value of "27" and a percentage sign; "BUZZER" with a green "ON" indicator; and "SHOW BAR" with a red "OFF" indicator. The right section is titled "BACKLIGHT" and features two large buttons with minus and plus signs, and a digital display showing "0". A green "Back" button is located at the bottom right of the page.

4 Features

- Costruzione : Housing plastic molding
- Display : 7/10" TFT LCD 65.536 color
- CPU and Core Logic : 32bit RISC Cortex A8 - 600 MHz
- USB : 1 x 1 USB 2.0
- Ethernet : 1 x 10/100 Base-T
- DRAM : 128 MB DDR2 on board
- Internal memory : 128 MB memory flash on board,
Recipe memory stored in memory flash, RW 64Kword, RW_A 64Kword.
- Supply: 24 ± 20% V, 350 mA a 24 V cc

4.1 Environment feature

- Operating Temperature: 0 ° ~ 50 ° C (32 ° ~ 122 ° F)
- Storage Temperature: -20 ° ~ 60 ° C (-4 ° to 140 ° F)
- Relative humidity: 10% ~ 90% @ 40 ° C, no condensation
- CE / FCC: : Complies with EN 55022:2006, Class A
EN 61000-3-2:2006
EN 61000-3-3:1995 + A1: 2001 + A2: 2005
EN 55024:1998 + A1: 2001 + A2: 2003
- Front panel meets NEMA 4 / IP65

5 Order Code

CODICE	R	K	P	C	-	-	-	-	-	-	-	-	-	-
SCREEN DIMENSION														
7.0"					-	0	7	-						
10.0"					-	1	0	-						
COMMUNICATION														
For 3 RPC08 1PH 8 Loop each)CE + UL									-	38100	-			
For 1 RPC38 3PH 8 Loop)CE + UL										18300				
For 1 RPC48 3PH 24 Loop)CE + UL										18400				
VERSION														
With Ethernet											-	EL	0	0

6 Warranty condition

Producer gives a 12 months warranty to its products.
 The warranty is limited to repairing and parts substitution in our factory and does exclude products not properly used and fuses.
 Warranty does not include products with serial numbers deleted. The faulty product should be shipped to Producer at customer's cost and our Service will evaluate if product is under warranty terms.
 Substituted parts remain of Producer property.

