03/2017

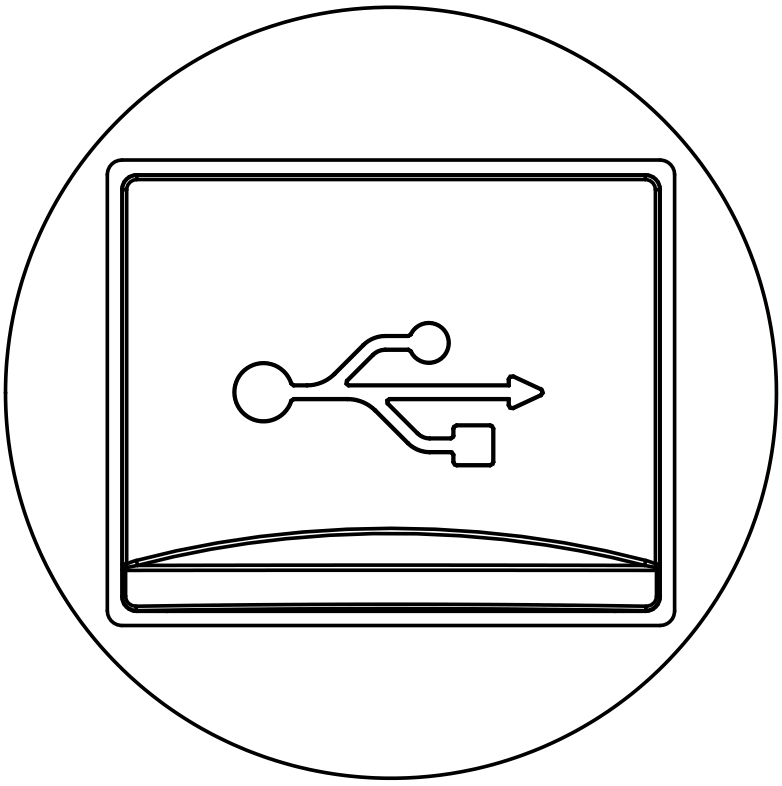
Mod: BCC/10

Production code: 728673

Diamond
catering equipment

SERVICE INSTRUCTION

USB Blast Chiller & Freezer



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CONTENTS

1. INTRODUCTION

1.1 MANUAL PURPOSE

The aim of this manual is to provide the necessary information for all after sales activities. You should carefully read what is described in this manual before you begin any repair.

Inside this manual warning and caution symbols are used with the following meaning:

IMPORTANT!

Points out important notes.

CAUTION!

Points out a situation with possible minor injuries or damage to the product if these instructions are not adhered to.

WARNING!

Indicates a danger that could cause serious injury or death if precautions are

not observed.

Furthermore, in this service manual are highlighted NOTES that emphasize the importance of some of the information.

1.2 PRECAUTIONS AND SAFETY

IMPORTANT!

To reduce risks related to the use of the breading station, it is very important to read all the instructions for use and maintenance in this manual beforehand. Keep this manual close at hand for referral purposes.

After installation keep the instruction handbook for future consultation.

FIRE HAZARD

Keep the area around the appliance clear and free from combustible materials. Do not keep flammable materials in the vicinity of the appliance.

Install the appliance in a well-ventilated place.

Place emergency telephone numbers in a visible position.

The appliance must be used by trained personnel about the risks involved.

Do not use products (even if diluted) containing chlorine (sodium hypochlorite, hydrochloric or muriatic acid, etc.) to clean the appliance or the floor under it. Do not use metal tools to clean steel parts (wire brushes or Scotch Brite type scouring pads).

Do not allow oil or grease to come into contact with plastic parts.

Do not allow dirt, fat, food or other residuals to form deposits on the appliance.

Do not clean the appliance with direct jets of water or use steam to clean the equipment.

The symbol  located on the product indicates that it should not be considered domestic waste, but must be correctly disposed of in order to prevent any negative consequences for the environment and the health of persons.

IMPORTANT!

Failure to observe the above can compromise the safety of the appliance.

Failure to observe the above invalidates the warranty.

1.3 DATA PLATE

The marking or data plate is located on back of the unit and the small data identification on front control panel. The meaning of the various information is listed below:

1.3.1 LEGGEND OF DATA PLATE.

F.Mod. Factory model description

Comm.Model	Commercial description
PNC	Production number code
Ser.No	Serial number
El	Power supply voltage / phase
Hz	Power supply frequency
kW	Max. power input
A	Current absorption
Power unit El.	Power
I	Dust and water protection rating
CE	CE marking
L	Logo IMQ/GS

Manufacturer:
Electrolux Professional SPA
Viale Treviso, 15
33170 Pordenone (Italy)

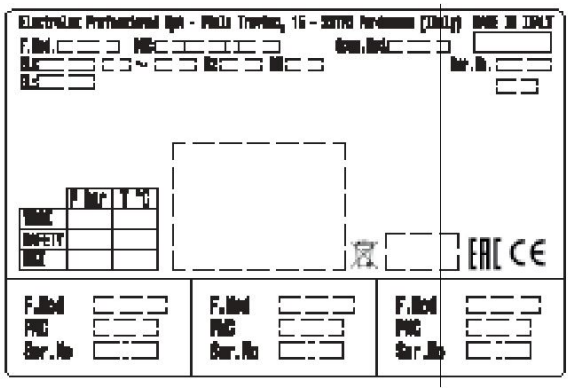


Fig. 1. Data plate ie.

1.3.2 TECHINAL DATA

A. TABLE -

B. REFER TO SINGLE UNIT FOR MORE DETTAILS PRESENT ON DATA PLATE

Max load	KG	30	50	70	100	180
Power supply	V	400				
Phase	n°	3N				
Frequency	Hz	50/60				

IMPORTANT!

IMMEDIATELY CHECK FOR ANY DAMAGE CAUSED DURING TRANSPORT.

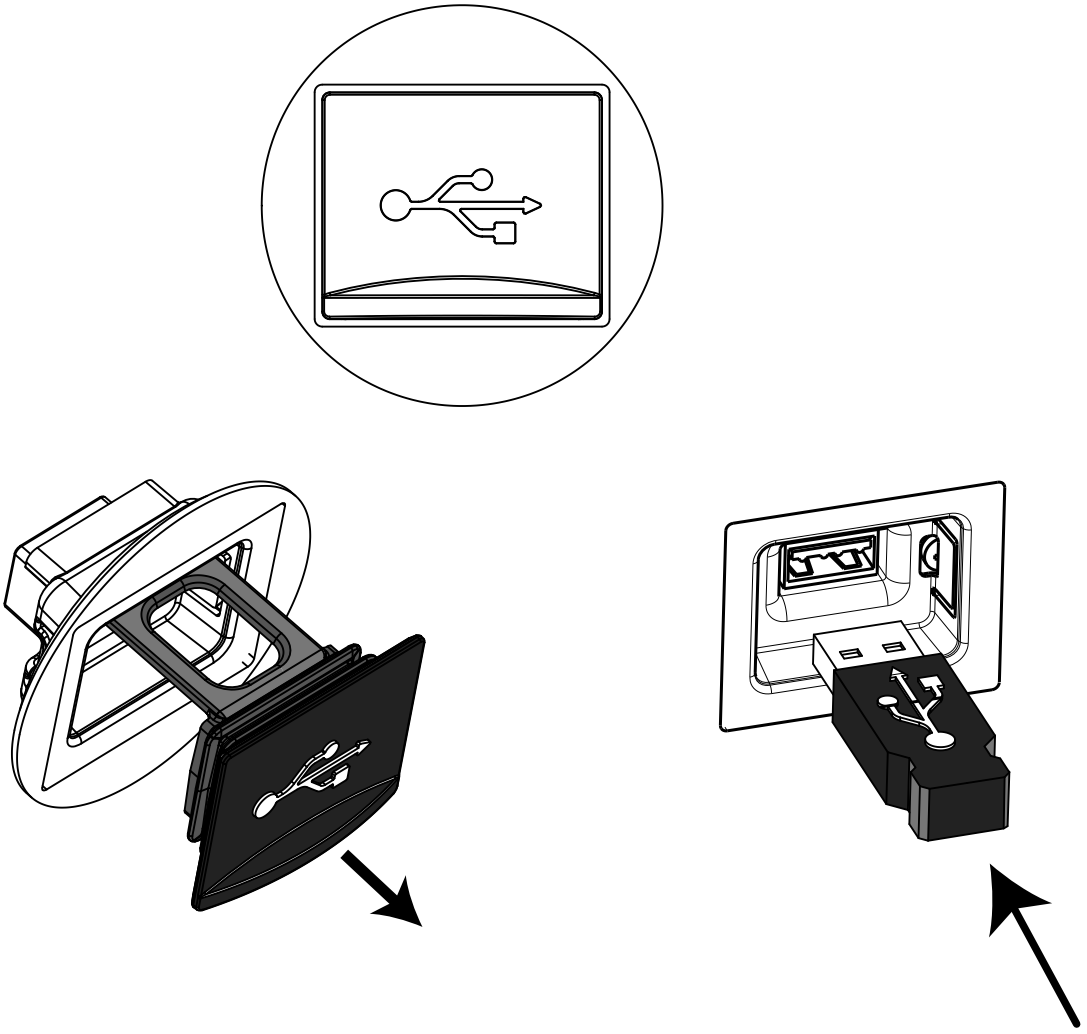
2. DOWNLOAD ACCESS

This section explains how to download the data logger present in the board COP_UI40 installed on the equipment.

Before to acess at any work read the safety section at page 5

2.1 To acess at USB port ,you need to identify it's position, since different on the base of the unit range. A symbol of USB is printed on cover to acces the USB KEY insertion.

2.2 Remove the cover pulling it towards you to access the USB KEY slot:



2.3 The download will start automatically at the USB key insertion. The operation is possible only with the appliance in stand-by (the machine is in On status but there are no cycles running).

If the USB key is inserted while there is a cycle active there will be a long buzzer sound.

2.4 Do not insert the USB key before turning ON the appliance in opposite case the alarm **"b7"** will be showed on display and buzzer and Icone alarm will be on.

To cancel the alarm remove the USB key and then switch OFF and ON again the machine

Attention! Do not use the USB port to recharge mobile or other devices.
The Food probe of the Oven can not use on Blast chiller!

3 DOWNLOAD

When the USB Key is inserted, in the display temperature and time will show the information as:

Now the download is active. On the temp. Display "USB" will apper.

On the time display the circles scroll will be active till shown END with the buzzer sound ON.

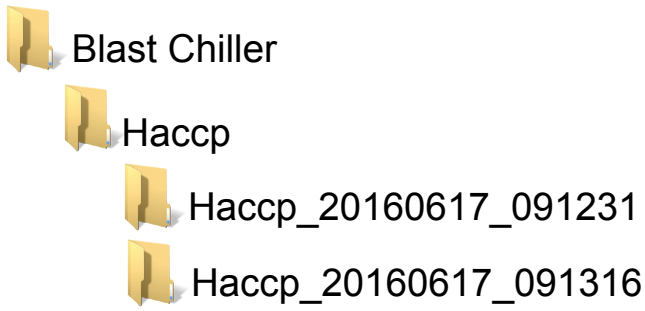
The process can take a several time according to the quantity of days to be download

Any operation from the user interface is not possible: all keys are disabled.

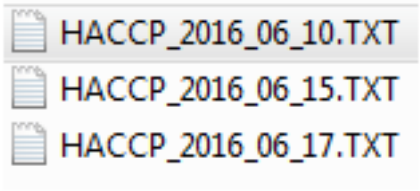
Remove the USB Key only apper the label END

3.1 FOLDER DOWNLOAD

A folder with name "Blast Chiller" will be present on USB KEY.
Inside this folder will be a sub folder with name HACCP.
The HACCP folder will contain another sub folder with reference name to:
Year-month-day_hour-seconds



the name of sub folder ie refers the download date of log.
Inside the sub folder will be stored the report of HACCP with different report dates.



IE:
HACCP_2016_06_10 is refered to 10/06/2016
HACCP_2016_06_15 is refered to 15/06/2016
HACCP_2016_06_17 is refered to 17/06/2016

4 DESCRIPTION OF LOG REPORT

The log report HACCP has a format .TXT.

In this report are described all information regarding as:

-Firmware version

-Food probe type(multi point)

-Temperature scale

-Start cycle

-Normative set

-Cavity set

-Duration of cycle

-Food probe set

Report txt:

```
HACCP LOG REPORT

17/06/2016      9:12
        Prec-10 board firmware version: 2.00
        USB logger firmware version:    1.00    build   5
        USB logger resources version:   1.00    rev.    0
        Food Probe type:        Multi point
        Temperature scale:      °C

*** HACCP REPORT ***

Start Cycle     15/06/2016      10:03
*** Hard positive chilling: time mode
Normative:      UK
*** Cavity Set: -20°
*** Duration Set:       1:25
*** Food Probe Set:     3°


Time    Cavity temperature [°C] Probe temperature [°C]
10:05   -21°                    -20°
10:07   -19°                    -18°
10:09   -21°                    -20°
10:11   -19°                    -18°
10:13   -22°                    -21°
10:15   -20°                    -19°
10:17   -23°                    -22°
10:19   -20°                    -19°
10:21   -21°                    -21°
10:23   -21°                    -20°
10:25   -19°                    -18°
10:27   -22°                    -21°
10:29   -20°                    -19°
10:31   -23°                    -22°
10:33   -21°                    -19°
10:35   -20°                    -19°
10:37   -21°                    -20°
10:39   -19°                    -18°
10:41   -23°                    -22°
10:43   -20°                    -19°
10:45   -22°                    -21°
10:47   -21°                    -20°
10:49   -19°                    -18°
10:51   -22°                    -21°
10:53   -20°                    -19°
10:55   -23°                    -22°
10:57   -21°                    -20°
10:59   -19°                    -18°
11:01   -22°                    -21°
11:03   -20°                    -18°
11:05   -23°                    -22°
11:07   -21°                    -19°
11:09   -20°                    -20°
11:11   -22°                    -20°
11:13   -19°                    -18°
11:15   -23°                    -21°
11:17   -20°                    -19°
11:19   -21°                    -21°
11:21   -21°                    -20°
11:23   -19°                    -18°
11:25   -22°                    -21°
11:27   -20°                    -19°
11:27   *** Chilling Phase ended: Positive Holding begin
```

5 ALARM

The Alarms shown in the display are:

ALARMS		Cause of alarm
B5	No space on USB	Memory full/ USB not reconize
B6	Error during copy	remove the usb before end download or still inserted on swicht on the unit
B7	Logger not connected	Connection missing between Main and logger board or still inserted on swicht on the unit
E13	Real time clock failure	no set the correct value on DAY_Month_Year_H.our

5.1 To download all alarms logged in USB key, follow the procedure below:

Enter Factory menu :

keep presed both arrows till on display shows the label FACT

ok now insert the USB key.

The download will be as described in paragraf 3.1 pag 8.

5.2 At the END of Download in the folder BCF will be now another active folder named SERVICE:

Haccp

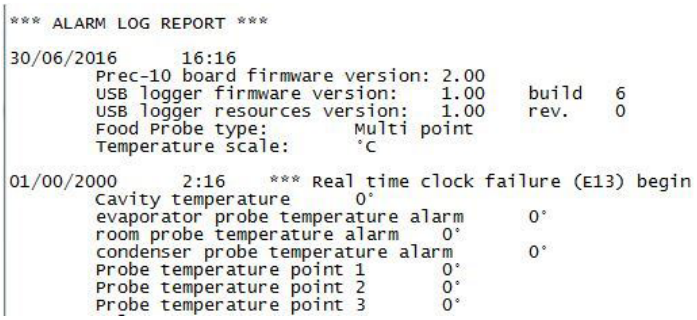
Service

Inside the Service folder there will be another folder named ALARMS.

Alarms

Inside this folder there is the subfolder ***ALARM LOG REPORT* with datailed with file in .TXT**

6 ALARM LOG REPORT



```
*** ALARM LOG REPORT ***

30/06/2016      16:16
        Prec-10 board firmware version: 2.00
        USB logger firmware version:    1.00    build   6
        USB logger resources version:   1.00    rev.    0
        Food Probe type:        Multi point
        Temperature scale:      °C

01/00/2000      2:16    *** Real time clock failure (E13) begin
        Cavity temperature      0°
        evaporator probe temperature alarm      0°
        room probe temperature alarm    0°
        condenser probe temperature alarm       0°
        Probe temperature point 1       0°
        Probe temperature point 2       0°
        Probe temperature point 3       0°
```

In file TXT will be all alarms present in the history with reference to:

Date

Firmware version

USB logger firmware version

Food probe type:

Temperature scale

Type of alarm with all dettails and temperature.

6.1 PARAMETER TO SET

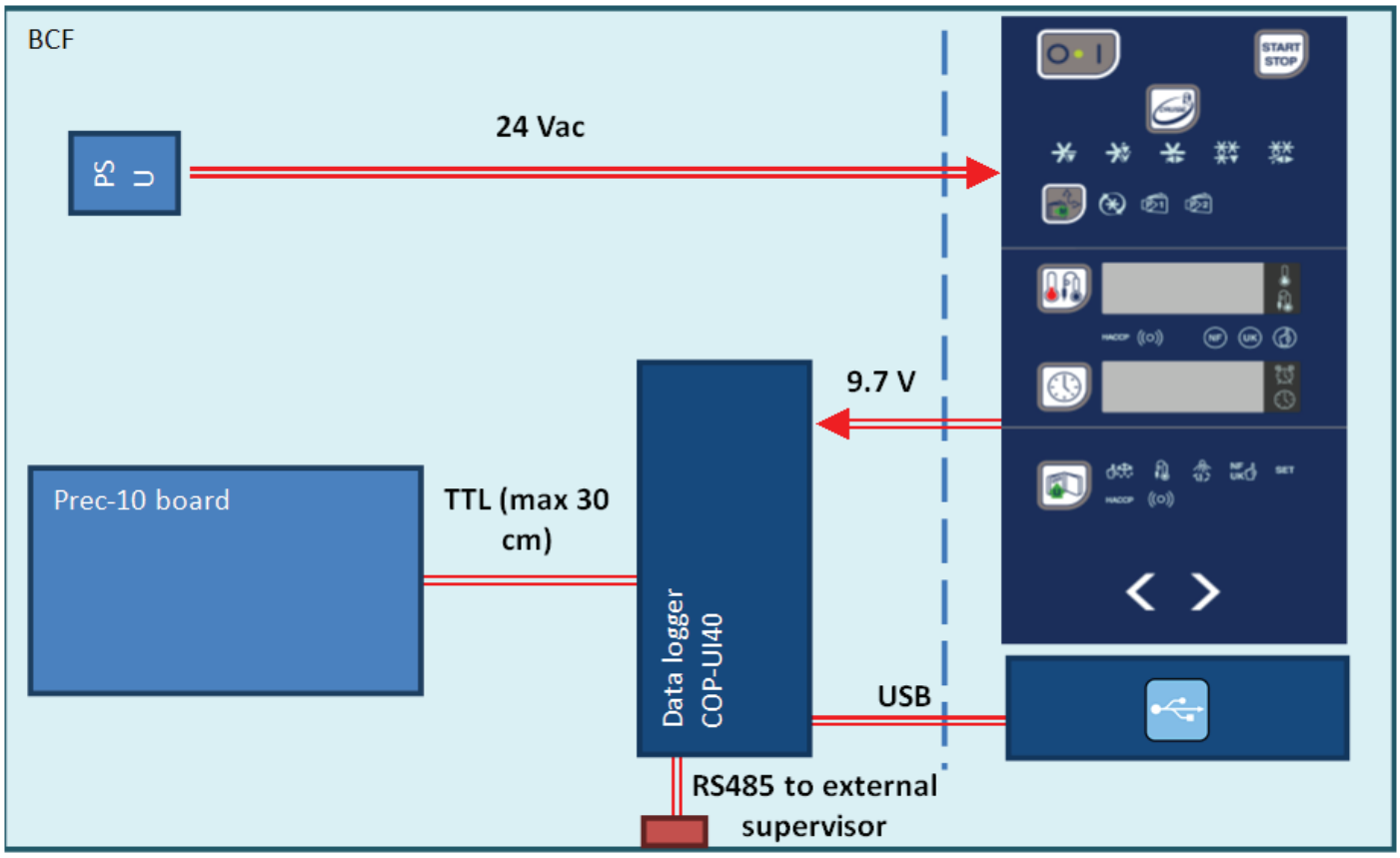
It is possible to select through a parameter how many days to export in the USB key, to change the sampling frequency and the language.

The parameters to set are available in the table below:

Parameter number	Parameter name	Description	Unit	Value	when to set
110	tPra	Frequency for USB logger. The parameter value is interpreted as 10s (value 6 = 60s). 0 means no log	**10S**	**from 0 to 255**	to set before start the cycle
111	**tPrC**	Time set of the historical data copied on USB stick expressed in days, where a cycle have to be started and ended	**DAY**	**from 1 to 255**	to set before to download the log report
112	**PALL**	Able the print probe-temperture:Y=all probe N=only the cell and max food probe temp.	**N**	**Y or N**	to set in case you want print value of all probe
113	**PrnL**	Printing language	**IT-Gb-dE-fr-Es-Se**	**from 0 to 5**	to set before to download the log report

The board selected for the logs features is COP-UI40 and will be connected to Prec-10 board through TTL communication port.

7 SYSTEM ARCHITECTURE



7.1 HACCP CONNECTIONS (ACCESSORIES)

The board has a serial communication line for interacting with other units or an HACCP network control station.

It can be connected to an RS485 communication network, and entering Adr="Network address".

7.2 The data history are memorized on datalogger COP_U40. In case of replacement of the user interface or main board the dates stored will not be cancelled.

8 ELECTRICAL CONNECTION

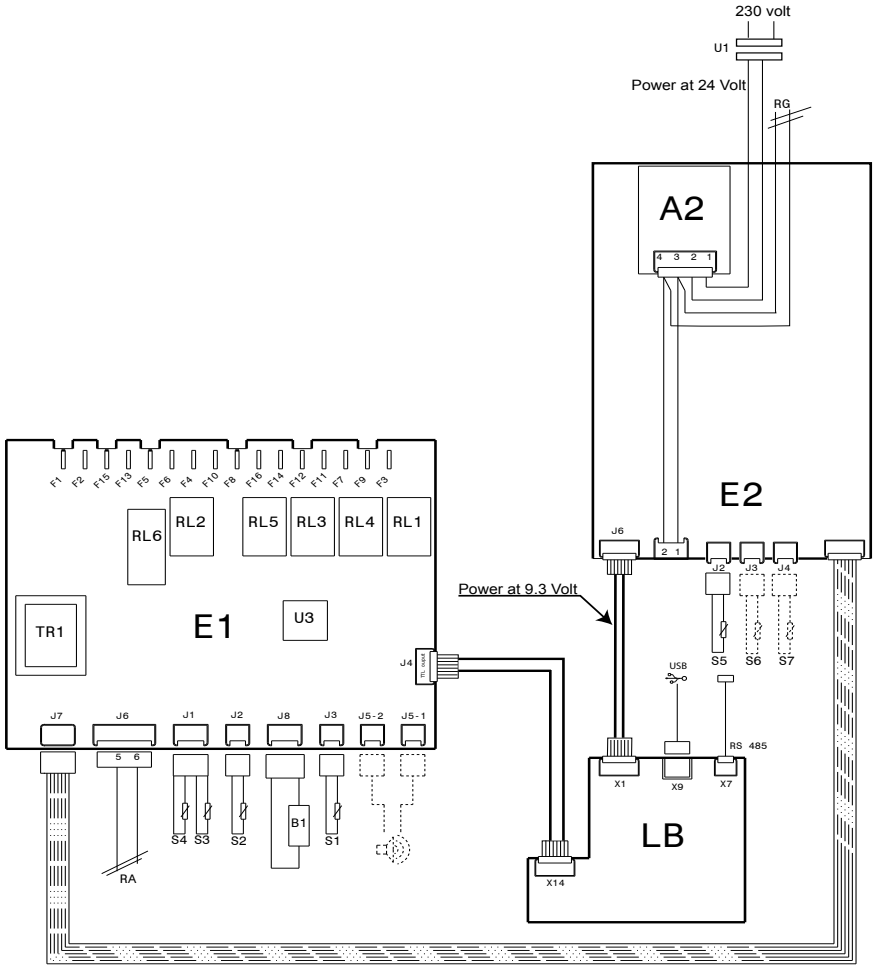
Legend:

E1= Main board

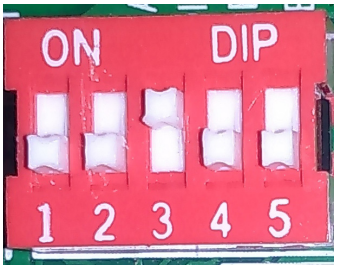
E2= User board

LB =Main data logger COP_U40

A2= Button ON/OFF



8.1 Data logger COP_UI40 “picture”



8.2 The UI40 has the disp swicth that can be set from 1 to 5.

Standard configuration must be set to 5 as picture show.

9 Data logger COP_UI40 COMUNICATION ERROR

9.1 Comunication error with the main power.

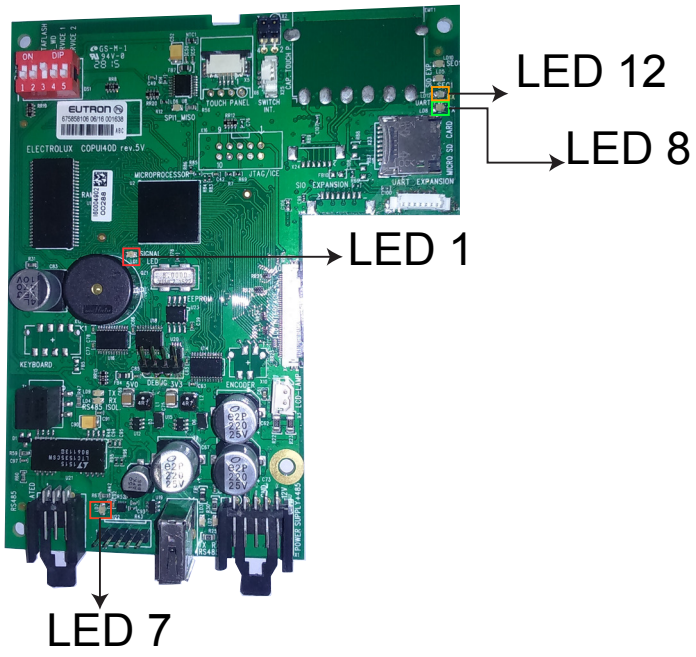
Verify that the green and orange led (LD 8 and LD 12) are blinking together with the unit ON.

If the green led is blinking and the orange is OFF, the power board must be changed since it is not responding.

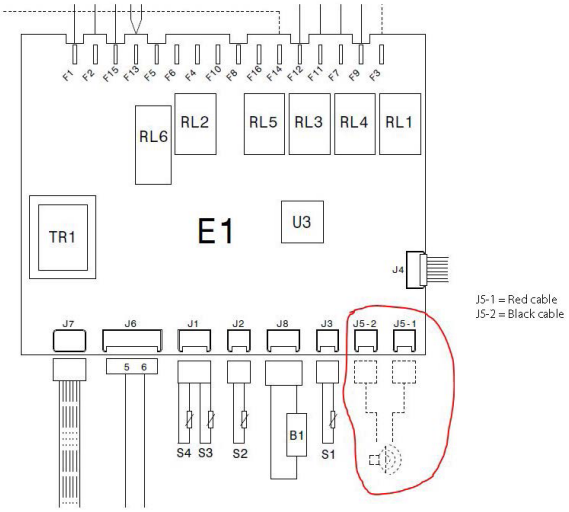
If the orange led is blinking and the green one is OFF, the user interface must be changed.

9.2 if the LED 1 blinking RED when there is the microprocessor is working

9.3 if the LED 7 is RED fix theBoard COP_UI40 is supplied



10 BUZZER REPLICATION KIT CODE 881143

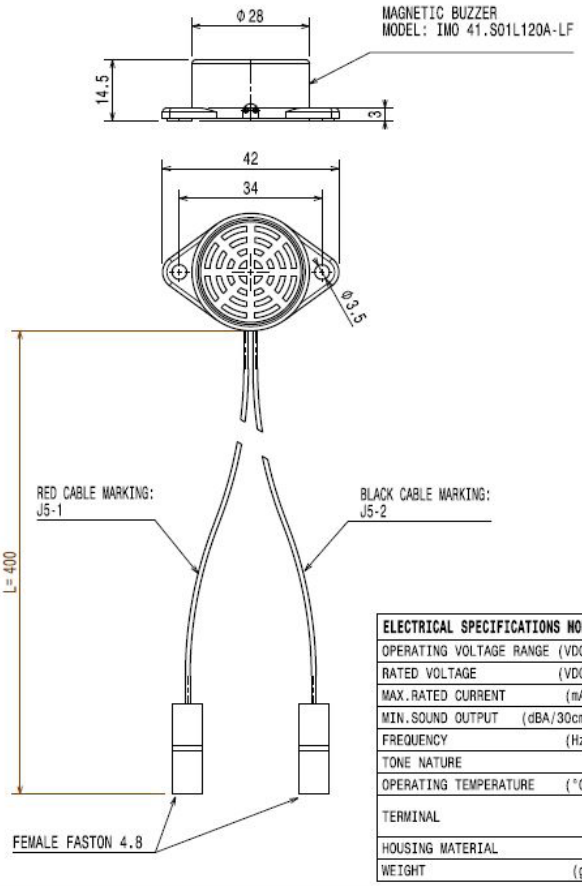


PARAMETER SETTING:

RCFG **:**REFERT TO TABLE BELOWE

CONNECTION**:**

CONNECT THE CABLE OF THE BUZZER FOLLOW THE COLOR AND LABEL PRESENT ON CABLE.



ELECTRICAL SPECIFICATIONS MODEL 41.S01L120A-LF		
OPERATING VOLTAGE RANGE	(VDC)	9~15
RATED VOLTAGE	(VDC)	12
MAX.RATED CURRENT	(mA)	40
MIN.SOUND OUTPUT	(dBA/30cm)	90
FREQUENCY	(Hz)	2800+/-200
TONE NATURE		SINGLE
OPERATING TEMPERATURE	(°C)	-20~+60
TERMINAL		CABLE (UL1007,AWG28)
HOUSING MATERIAL		ABS
WEIGHT	(g)	17

REGOLAZIONE USCITA ALLARME REMOTO (BUZZER LOGGER USB E USCITA AUX J5 1-2)	REMOTE ALARM OUTPUT (BUZZER LOGGER USB AND AUX OUTPUT J5 1-2):
0=SEGNALAZIONE ALLARMI DI SERVIZIO (BUZZER PREC10 + ALLARME AUX)	0= ONLY SERVICE ALARMS (BUZZER PREC10 + AUX OUTPUT)
1=SEGNALAZIONE DI FINE ABBATTIMENTO (BUZZER PREC10 + ALLARME AUX)	1=ONLY END CYCLE (BUZZER PREC10 + AUX OUTPUT)
2=SEGNALAZIONE DI ALLARMI DI SERVIZIO O FINE ABBATTIMENTO (BUZZER PREC10 + AUX)	2=SERVICE ALARMS AND END CYCLE (BUZZER PREC10 + AUX OUTPUT)
3= SOLO BUZZER PREC10 ATTIVO PER TUTTI GLI ALLARMI	3= ONLY PREC10 BUZZER FOR ALL ALARMS
4= SOLO BUZZER USB LOGGER ATTIVO PER TUTTI GLI ALLARMI	4= ONLY USB LOGGER BUZZER FOR ALL ALARMS
5= BUZZER USB LOGGER ATTIVO + ALLARME AUX PER TUTTI GLI ALLARMI	5= USB LOGGER BUZZER + AUX OUTPUT FOR ALL ALARMS