

IWK keyboards can be used for remote access of IWP series power board functions by displaying functional parameters and the operating temperature.

The Split version of the Wide device consists of two units:

- an IWK keyboard available in several sizes*
- an IWP power module. The IWK keyboard is connected to the IWP power module via a "powered" serial connection.

***Different IWK keyboard models are available: this technical data sheet describes the Eliwell standard 32x74 IWK keyboard. For information on other keyboards, refer to the relevant technical data sheets.**

LEDs



Alarm
• ON for active alarm;
• blinking when a silenced alarm is still present

Fans
• ON when fan is on;
(if active)

Defrosting
• ON when defrosting is in progress;
• blinking when dripping is in progress

compressor
• ON for relay on (energized);
blinking for protection delay or enabling blocked

"eco"
• ON for parameter programming level 2; (if present)
• blinking when OSP reduced set is entered
OSP (if present)

Set point/Reduced set point
• ON to modify Set-Point;
• blinking when reduced set point is entered (if present)

auxiliary

- ON for active auxiliary relay (if present);
- blinking if... (see IWP board instructions)

aux

the unlit LEDs indicate:
• OFF for normal operating;
• unspecified cases;

UP Key
Scrolls through the menu items
Increases the values
Parameter programmable*



DOWN key
Scrolls through the menu items
Decreases the values
Parameter programmable*



*see IWP board instructions



UP key +esc key pressed simultaneously

(press for 2 seconds)
• Locks/unlocks keyboard



esc key
ESC function (quit)
Parameter programmable*



Set point key
(press once)
MACHINE STATUS MENU
• Accesses set point
• Displays alarms (if active)
• Displays probe values (if present)
(hold down)
• Accesses Parameter Programming menu

USER INTERFACE

The user has a keyboard with a 6 LED display and four keys for controlling instrument status and programming.

ACCESSING AND USING MENUS

LOCAL KEYBOARD PROGRAMMING MENU

Hold down the "UP" and "DOWN" keys for at least 3 seconds to access the "Keyboard Local Programming" menu. If specified, the access PASSWORD will be requested (see parameter "PA3") and, if the password is correct, the **PLO (Local Parameters) label will appear. This folder contains the keyboard local parameters (see Keyboard Local Parameters table).**

If the password is incorrect, the display will show the PA3 label again. **NOTE: the folder may NOT be visible; if this is the case, keyboard local programming cannot be accessed)**

To enter the folder, press "set". The label

of the first visible parameter will appear.

To scroll through the other parameters, use the "UP" and "DOWN" keys.

To change the parameter, press and release "set", then set the desired value using the "UP" and "DOWN" keys and confirm with the "set" key. Move on to the next parameter.

KEYBOARD LOCAL PASSWORD

Password "PA3" allows access to the keyboard local parameters. This password is not present in the standard configuration. To enable it (value <> 0) and assign it the required value, access the "Keyboard Local Programming" menu in the "PLO" folder.

If the password is enabled, it will be requested when entering the "PLO" menu.

INSTALLATION

The unit has been designed for:

- 32x74 4-key IWK keyboard: panel mounted. Drill a 29x71 mm hole, insert the keyboard and fix it in place with the special brackets provided.

Do not install the keyboard in excessively humid and/or dirty locations. It is suitable for use in locations with normal pollution levels. Always make sure that the area next to the unit cooling slits is adequately ventilated.

ELECTRICAL WIRING

Warning! Always switch off machine before working on electrical connections.

The unit is fitted with:

- **standard 4-key IWK keyboard:** screw connectors** (or quick disconnect connectors) for connection of electrical cables;

**with diameter of 2.5 mm²max. (only one conductor per terminal for power connections): for terminal capacity, see the label on the instrument.

ELIWELL STANDARD 4-KEY 32X74 IWK KEYBOARD TECHNICAL DATA

Front protection: IP65.

Casing: PC+ABS UL94 V-0 resin plastic body, polycarbonate front, thermoplastic resin keys.

Dimensions: front 74x32 mm, 30 mm depth.

Mounting: on panel, with drilling template 71x29 mm (+0.2/-0.1 mm).

Operating temperature: -5...55 °C.

Storage temperature: -30...85 °C.

Usage ambient humidity: 10...90 % RH (non-condensing).

Storage ambient humidity: 10...90% RH (non-condensing).

Display range: -50...110 (NTC); -55...140 (PTC) °C without decimal point (parameter selectable), on display 3 digits + sign.

Measurement range: from -55 a 140 °C.

Accuracy: better than 0.5% of bottom scale +1 digit.

Resolution: 1 or 0.1 °C.

Analogue Inputs, Digital Inputs and Outputs: on associated IWP power board

Serials: see Associated IWP Power Board Technical Data Base Board-KeyBoard

Connection: via "powered" serial using +12V, GND and DATA lines Consumption: see Associated IWP Power Board Technical Data

Power supply: 12V=from IWP power module.

CONDITIONS OF USE

PERMITTED USE

For safety reasons the instrument must be installed and used in accordance with the instructions supplied. Users must not be able to access parts with dangerous voltage levels under normal operating conditions. The device must be adequately protected from water and dust depending on the specific application and only be accessible using special tools (except for the front panel). The device is ideally suited for household use and/or similar use in the refrigeration sector and has been tested with regard to safety in accordance with the European har-

monized reference standards: It is classified as follows:

- as an automatic electronic control device to be independently mounted as regards its construction;
- as a 1 B type operated control device as regards its automatic operating features;
- as a Class A device as regards the category and structure of the software.

UNPERMITTED USE

The use of the unit for applications other than those described is forbidden.

RESPONSIBILITY AND RESIDUAL RISKS

Eliwell & Controlli s.r.l. shall not be liable for any damages deriving from:

- installation/use other than that prescribed and, in particular, which does not comply with the safety standards specified in the regulations and/or those given herein;
- use on boards which do not guarantee adequate protection against electric shock, water or dust when assembled;
- use on boards which allow dangerous parts to be accessed without the use of tools;
- tampering with and/or alteration of the product;
- installation/use on boards that do not comply with the standards and regulations in force.

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KEYBOARD PARAMETERS

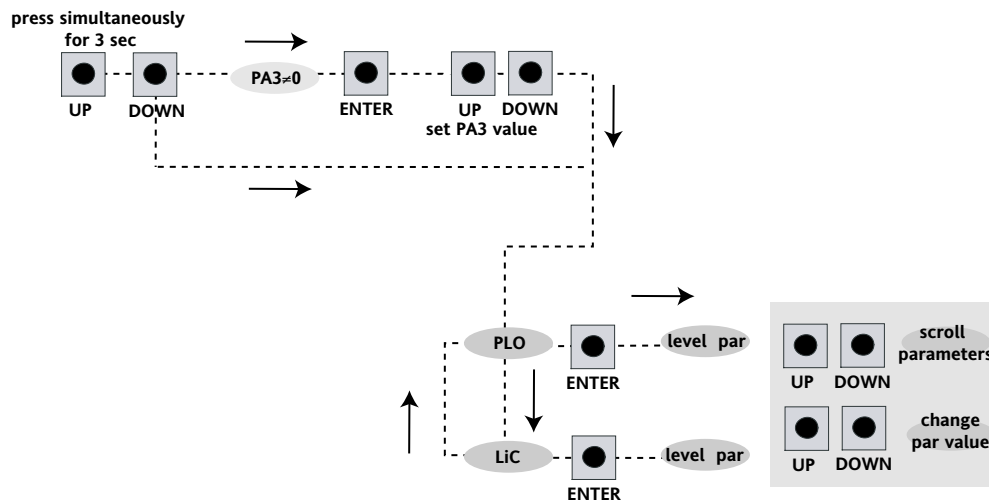
PARAMETER	DESCRIPTION	RANGE	DEFAULT*	U.M.
ECO	ECO (folder with "PLO" label) Type of keyboard 0= Master keyboard 1= ECO keyboard address base.	0...1	0	num
adb	Base address. By changing the address of the power board in a LINK, this parameter can be used to logically connect the keyboard to a different power board so that menu navigation, parameter programming, etc is possible.	0...4	0	num
PA3	Keyboard PAssword. When enabled (value is not 0) it represents the access key for the local keyboard parameters.	0...255	0	num
rEL	reLease firmware. Device version: read only parameter.	0...999	0	num
toA	time-out Address. tbA address timeout.	0...250	10	sec
Li1	LiC (folder with "LiC" label) Broadcast communication n= keyboard communicates with adb address base (see.)(in this case, there are several bases); y= keyboard communicates with broadcast address base (in this case, there is only one base).	n/y	n	num
tbA	Temporary navigation base address. Temporary address for network navigation. -1= disabled	-1...4	0	num

* DEFAULT column: The term default identifies the standard factory-set configuration;

(!) CAUTION!

- We strongly recommend that you switch the instrument off and on again each time parameter configuration is changed in order to prevent malfunctioning of the configuration and/or ongoing timings.

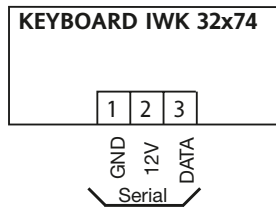
KEYBOARD LOCAL PARAMETER MENU DIAGRAMS



	set	UP	DOWN	ESC	aux/light	on/off
wide keyboard						
6-key open keyboard						
32x74 keyboard						

32x74 IWK KEYBOARD CONNECTIONS

screw
terminals

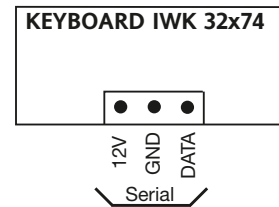


TERMINALS

“POWERED”

1	GND
2	12V
3	DATA

quick
conn.



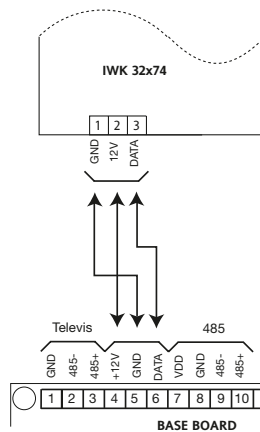
TERMINALS

“POWERED”

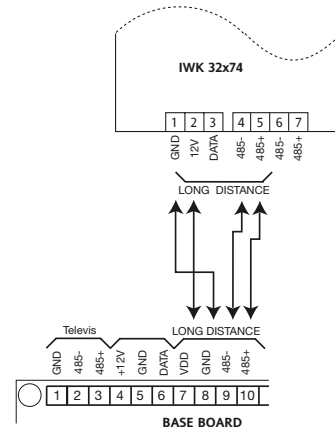
from left to right	12V
	GND
	DATA

BASE UNIT/KEYBOARD WIRING

Link Plus
serial
connection



Link Plus
“long
distance”
serial
connection
(optional for
semi-finished
product)



Link Plus Serial Connection

+12V	12V- power supply
GND	GND “Powered” serial connection
DATA	DATA- powered serial connection

RS485 Long Distance serial connection

VDD	VDD 12V GND Power supply
GND	RS485 485-
485-	Serial connection - RS485
485+	485 Serial connection - RS485 Serial connection

NOTE : BASE UNIT/KEYBOARD CONNECTION/PROGRAMMING.

1 — THE BASE UNIT/KEYBOARD PROGRAMMING/CONFIGURATION CANNOT BE CARRIED OUT IF THE DEVICES ARE CONNECTED TO THE LINK NETWORK. THEREFORE, IT IS FIRST NECESSARY TO CONFIGURE THE MASTER AND SLAVE DEVICES (WITH RELATED KEYBOARDS) AND THEN CONNECT THEM TO THE LINK NETWORK.
2 — “FLICKERING” OF THE DISPLAYS ON THE KEYBOARD INDICATES THAT THE CONNECTED UNITS ALL HAVE THE SAME ADDRESS: DISCONNECT THE LINK NETWORK AND PROGRAM EACH UNIT AS DESCRIBED ABOVE.



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