cod. 9IS43076
rel. 11/07 ENG

IWK wide

wide format panel keyboard for IWP boards

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 wide format IWK keyboard. For information on other keyboards, refer to the relevant technical data sheets.**

USER INTERFACE

The wide IWK keyboard is conceived as a keyboard with a 6 LED display, 6 keys and 5 more LEDS for controlling instrument status and programming.

KEYS AND MENUS

UP key

• Scrolls the menu items
• Increases values
• can be associated with a direct function

DOWN key

• Scrolls the menu items
•Decreases values
• can be associated with a direct function

ESC key

(press once)
•ESC function (quit)
(hold down)
•activates manual defrosting if specified*
*(see IWP board instructions)

Set point key

(press once)
MACHINE STATUS MENU
•Accesses set point
•Displays alarms (if present)
•Displays any probe values*
*(see IWP board instructions)

(hold down)
Accesses keyboard local parameter programming menu

UP key+ESC key pressed simultaneously

(press for 2 seconds)
•Locks/unlocks keyboard NOTE: To indicate that the keyboard is locked, the Lock LED lights up.

On-off key (STAND-BY)

(press for 2 seconds)
• Switches device on/"off"
(the device remains on (on STAND-BY) the on-off LED lights up and the display is switched off

AUX/LIGHT key

• The auxiliary relay/light is activated (1)
•fan forcing ON **(if enabled)** (2)
(IF PRESENT)
—>aux/light (1) or R.H.% (2) LED lights up

LED (ON DISPLAY)

eco

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

Compressor

•ON when compressor is on;
•blinking for delay, protection or enabling blocked

Defrosting

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

Alarm

•ON for active alarm;
•blinking when a silenced alarm is still present (NOTE: silencing the alarm only removes the acoustic signal (buzzer, if present)

Fans

•ON when fan is on;
(IF PRESENT)

LED (ON KEYBOARD)

lock

•ON for lock (keyboard locked);

on/off
•ON when unit is "off" (on **STAND-BY**);
•OFF when unit is on;

"manual defrosting"
•ON for manual defrosting

"aux/light"
•ON for active output
NOTE: ON when output is also active from D.I. (Digital Input)

"R.H. %"

•ON for key fan forcing*•OFF normal fan operating*
*(IF PRESENT)

PLEASE NOTE: the LEDS are OFF in any other circumstances not described here

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.

PLEASE NOTE: 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 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 to be panel-mounted: Drill a 150x31 mm hole **(see CUT-OUT diagram)** and insert the device fixing it on the front using the special screws supplied.

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.

Make sure that the power voltage complies with the device voltage. Serial cables should be kept separate from the power cables.

IWK WIDE KEYBOARD TECHNICAL DATA

Casing: PC+ABS UL94 V-0 resin plastic body, polycarbonate front, thermoplastic resin keys.
Dimensions: front 180x37 mm, depth 23 mm.
Mounting: on panel, with drilling template 150x31 (+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 °C (NTC)*, –55...140 °C (PTC)* without decimal point, 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 harmonized reference standards:

It is classified as follows:

• as an automatic electronic control device to be 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 equipment that does not guarantee adequate protection against electric shock, water or dust when assembled.
- use on equipment that allows dangerous parts to be accessed without the use of tools;
- tampering with and/or alteration of the product;
- use on equipment that does not comply with the standards and regulations in force.

DISCLAIMER

KEYBOARD PARAMETERS

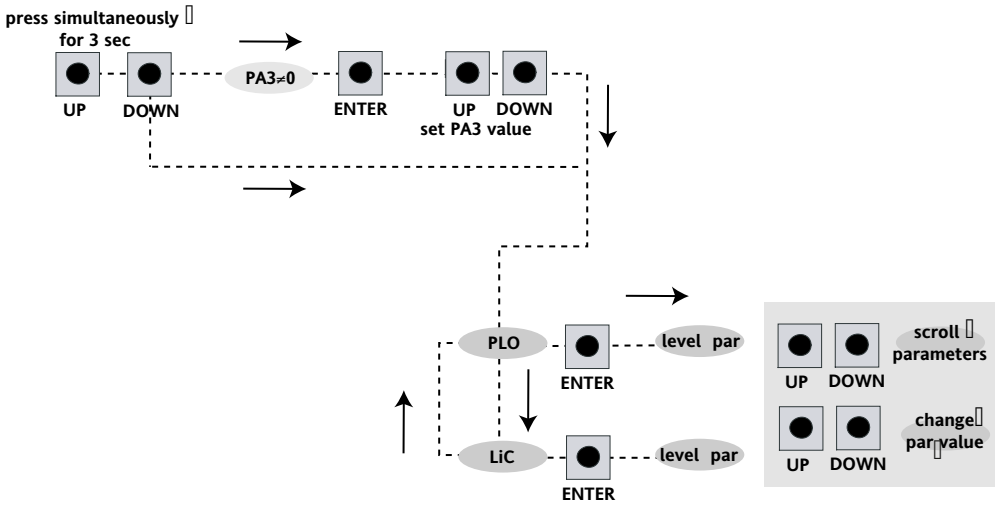
PARAMETER	DESCRIPTION	RANGE	DEFAULT*	U.M.
	ECO (folder with "PLO" label)			
ECO	Type of keyboard 0= Master keyboard 1= ECO keyboard address base.	0...1	0	num
adb	Base address. By changing the address of the power board in a LINK, this parameter can be used to logically connect the keyboard to a different 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
	LiC (folder with "LiC" label)			
Li1	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!

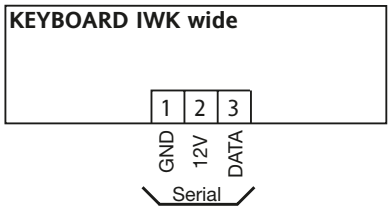
• We strongly recommend that you switch the instrument off and on again each time parameter configuration is changed in order to prevent malfunctioning of the configuration and/or ongoing timings.

KEYBOARD LOCAL PARAMETER MENU DIAGRAMS



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

IWK wide KEYBOARD CONNECTIONS



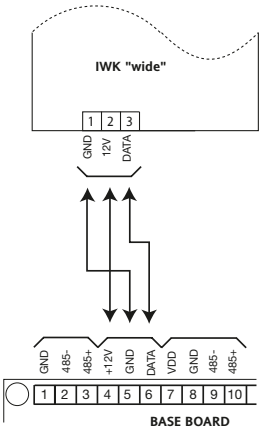
screw terminals

TERMINALS

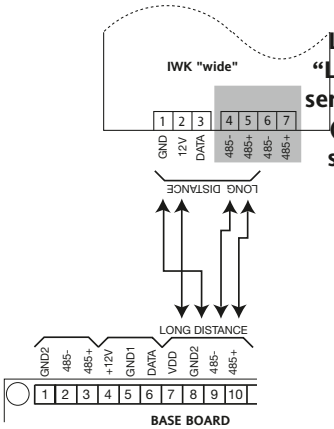
“POWERED” SERIAL	
1	GND
2	12V
3	DATA

BASE UNIT/KEYBOARD WIRING

Link Plus serial connection



Link Plus 485 “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

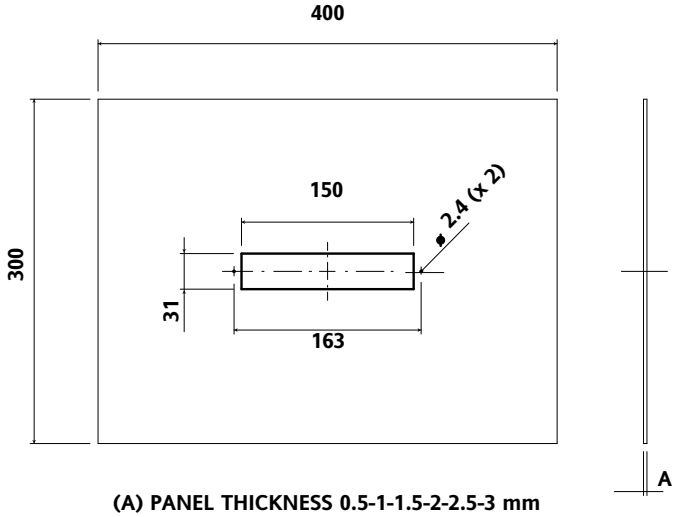
485 Long Distance serial connection	
VDD	12V Power supply
GND	RS485 Serial connection
485-	485- RS485 Serial connection
485+	485+ RS485 Serial connection

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.

CUT OUT



(A) PANEL THICKNESS 0.5-1-1.5-2-2.5-3 mm

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