IWC 740-750

Electronic controllers for "ventilated" refrigeration units

eliwell - 18.0

KEYS AND LEDS

UP Key
- Scrolls menu entries
- Increases values
- programmable key (can be associated a direct function)

DOWN Key
- Scrolls menu entries
- Decreases values
- programmable key (can be associated a direct function)

set key
(press once)
- Accesses the setpoint
- Displays the alarms (if active)
- Displays Pb1 and Pb2 (see)
(hold down) Accesses the parameter programming menus

defrost/ESC Key
(press once)
- ESC function (exit) (hold down)
- activates manual defrosting

AUX/LIGHT Key
- Turns on the auxiliary relay/light (1)
- forcing fans ON (see par. H34) (2) (WHEN AVAILABLE)
-->the aux/light LED (1) R.H. % or the LED (2) turns on.

on-off key (STAND-BY)
(press for 2 seconds)
- Turns the instrument On/Off the on-off LED turns on and the word OFF is displayed

Alarm
- ON for alarm active;
- blinking when the alarm is silenced

Fans
- ON when fan is on;

Compressor
- ON for compressor on;
- blinking in case of delay, protection, or blocked enabling

Defrosting
- ON when defrosting;
- blinking during dripping

eco

Set/Reduced set
- ON for Set-Point changing;
- blinking when the reduced set is on

"R.H. %"
- ON for fans forcing by key (see par. H31-32-34=4)
- OFF normal fans functioning

lock (LED belongs to lock key)
- ON for lock (keyboard locked);
- ON for lock (keyboard locked);
"manual defrosting" (LED belongs to defrost key)
- ON for manual defrosting
- ON for manual defrosting
STANDBY (LED belongs to on/off key)
- ON for instrument "turned off"
- OFF for instrument turned on;

MACHINE STATUS MENU - SETTING THE SET POINT

a) You can access the machine status menu by pressing and releasing the 'set' key.
You can use the "UP" and "DOWN" keys to scroll through all the folders in the menu in normal conditions, which are:
- SET Setpoint setting folder.
- Pb1, Pb2: probe 1 and 2 folders.
The first label displayed is 'SEt. To display the Setpoint value press the "set" key.

The value of Setpoint appears on the display.
To change the Setpoint value, press the "UP" and "DOWN" keys within 15 seconds. If you press the "set" key again or press the "fnc" key or a time of 15 seconds elapses, the last value displayed

will be saved and the label "SEt" will reappear on the display.
b) To view the temperature value read by the probes, scroll through the menu labels and press the "set" key corresponding to the desired probe, "Pb1" or "Pb2".

c) If an alarm condition exists, when accessing the "Machine Status" menu the "AL" folder label appears. Press the "set" key to display the alarms present in the folder.

(e.g. in the presence of maximum and minimum temperature alarms)

"Use UP" and "DOWN" keys to scroll the list of active alarms

PROGRAMMING MENU

To access the Programming menu, hold the "set" button down for more than 5 seconds.

- When the 'set' button is pressed, the first folder in the menu is displayed. (e.g.: "CP" folder)

- By using the 'UP' e 'DOWN' buttons, you can scroll through all the folders in the programming menu

- By pressing the "set" button for the selected folder (in this example, 'dEF/dtY') the first parameter is displayed. Use the "UP" and "DOWN" buttons to select the required parameter.
- Press "set" to display the selected parameter value and use the "UP" and "DOWN" buttons to change it.

Once the "set" button has been pressed (or the 15 second time out elapses) the new value is stored and the label of the corresponding parameter will be displayed.

PASSWORD

Access to parameter handling can be limited by using a password. The password can be enabled by setting the PA1 parameter in the 'diS' folder. The password is enabled if the value of the PA1 parameter is not 0.

- To enter the Programming menu hold the "set" button down for more than 5 seconds.
If specified, the PASSWORD will be requested

- If the PA1 password is enabled (not 0) you will be asked to enter it. Do this by selecting the correct value using the UP and DOWN buttons and confirm by pressing the 'set' button.

If the password is not entered correctly, the device will display the 'PA1' label again and the step will have to be repeated.

On each level of both menus, if you press the "fnc" key or a time of 15 seconds elapses, you will return to the level above and the last value on the display will be saved.

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COPY CARD

The Copy Card is an accessory connected to the TTL serial port which allows for quick programming of the instrument parameters (upload and download parameters map to or from one or more instruments of the same type). The operations of upload (label UL), download (label dL) and key formatting (label Fr) are performed as follows:

- The commands needed to use the Copy Card are contained in the 'FPr' folder. Press 'set' to access the functions.

- Scroll using 'UP' and 'DOWN' to display the required function. Press the 'set' key to perform the upload (or download).

- If the operation is successful, the display will show 'y', if not it will show 'n'.

Download reset
Connect the key with the instrument OFF. When the instrument is switched on, the programming parameters will be loaded into the instrument. After the lamp-test the display will read the following for about 5 seconds:
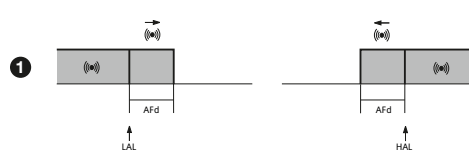- label dLY if copy operation successful
- label DLn if not

DOWNLOAD
UPLOAD

Uploading and downloading parameters to and from instrument

NOTE:
- after the download operation, the instrument will work with the newly loaded parameters map.
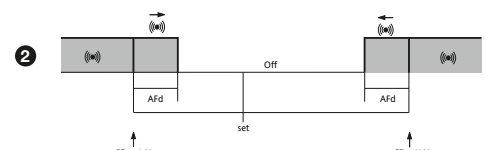- **see** "FPr" folder in Parameters table and Parameters description

ALARMS

LABEL	ALARM	CAUSE	EFFECTS	Resolving problems	NOTES
E1	Probe 1(control) faulty	• measuring of values outside the nominal reading range • control probe faulty/shorted/open probe	"E1" label appears on display; Controller enabled as indicated by the Ont and OFt parameters if programmed for the Duty Cycle	• check the probe wiring • replace the probe	
E2	Probe 2 (evaprator) faulty	• measuring of values outside the nominal reading range • control probe faulty/shorted/open probe	"E2" label appears on display;	• check the probe wiring • replace the probe	
AH1	High temperature alarm	• value read by probe 1 > HAL after time equal to "tAO". (see " MIN MAX ALARMS" and description of "HAL", "Att" and "tAO" parameters)	Alarms created in the "AL" folder with the AH1 label	• Wait for temperature value read by probe 1 to fall below HAL	
AL1	Low temperature alarm	• value read by probe 1 < LAL after time equal to "tAO". (see " MIN MAX ALARMS" and description of "LAL", "Att" and "tAO" parameters)	Alarms created in the "AL" folder with the AL1 label	• Wait for temperature value read by probe 1 to go above LAL	
Ad2	End of defrost due to time-out	• If defrost ends because of a time-out (instead of being caused by a defrost end temperature detected by the defrosting probe), an alarm is generated an the icon is turned on consequently.	Alarms created in the "AL" folder with the "Ad2" label	• Automatic back swing occurs when the next defrost starts • By pressing any key during the alarm condition, the signal light disappears. In order to really erase the alarm you must wait the next defrost.	
Opd	Open door alarm	• In case of an open door, in response to delay defined by tdO parameter the Open Door alarm is signaled.	Alarms created in the "AL" folder with the "Opd" label NOTE: parameter tAo does not set to zero in case the door is closed: actually, in case of continuous opening and closing of the door alarms would never be signalled.	• Automatic reset	
EA	External alarm	• control of alarm from active D.I. if "H11" = -5/5 (see description of "H11" parameter)	Alarms signalled in the "AL" folder with the EA label. Blocks controllers only if "H11"=-5 /5		
			ALL see Alarm LED – Signalling through buzzer. **ONLY IN MODELS WITH BUZZER AVAILABLE**	**ALL** • Manual silencing by pressing button	ALL – If there are alarm exclusion times (see parameter table "AL" folder) the alarm will not be signalled.

MAX-MIN ALARMS

Temperature expressed as an absolute value (par "Att"=0) Abs(olute)

Temperature in relation to set point (par "Att"=1) rEL(ative)

❶

AFd
LAL

AFd
HAL

❷

AFd

Off
set

AFd

SEt + LAL

SEt+ HAL

	Temperature expressed as an absolute value (par "Att"=0) Abs(olute)	Temperature in relation to set point (par "Att"=1) rEL(ative)
Minimum temperature alarm	Temperature lower than or equal to LAL (LAL with sign)	Temperature lower than or equal to set point +LAL (LAL positive only)
Maximum temperature alarm	Temperature greater than or equal to HAL (HAL with sign)	Temperature greater than or equal to set point +HAL (HAL positive only)
Minimum temperature alarm back swing	Temperature higher than or equal to LAL+AFd	Temperature greater than or equal to set point + LAL + AFd set point - |LAL| +AFd
Maximum temperature alarm back swing	Temperature lower than or equal to HAL-AFd	Temperature lower than or equal to set point+HAL-AFd
		if Att=reL(ative) LAL must be negative: therefore set point+LAL<set point because set point+(-|LAL|)=set-|LAL|

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KEYBOARD LOCKING

The instrument includes a facility for disabling the keyboard:
• using the keys (pressing **UP+DOWN simultaneously** for 2 seconds; see KEYS AND LEDS)
• by programming the "Loc" parameter (see folder with "diS" label).

If the keyboard is locked, you can access the "Programming" Menu by pressing the "set" key.

The Setpoint can also be viewed.

PARAMETERS TABLE

PAR.	RANGE	DEFAULT	U.M.
SEt	LS1...HS1	0.0	°C/°F

Compressor - label CP

PAR.	RANGE	DEFAULT	U.M.
diF	-0.1...30.0	2.0	°C/°F
HSE	LS1...302	50.0	°C/°F
LSE	-58.0...HS1	-50.0	°C/°F
OSP	-30.0...30.0	0	°C/°F
Cit	0...250	0	min
CAt	0...250	0	min
Ont	0...250	0	min
OFt	0...250	1	min
dOn	0...250	0	sec
dOF	0...250	0	min
dbi	0...250	0	min
OdO	0...250	0	min

Defrost - label dEF

PAR.	RANGE	DEFAULT	U.M.
dty	0/1/2	0	num
dit	0...250	6h	h/min/sec
dct	0/1/2	1	num
dOH	0...59	0	min
dEt	1...250	30	min
dSt	-50.0...50.0	8.0	°C/°F
dPO	n/y	n	flag

Fans - label FAn

PAR.	RANGE	DEFAULT	U.M.
FSt	-50.0...150.0	2.0	°C/°F
FAd	1.0...50.0	2.0	°C/°F
Fdt	0...250	0	min
dt	0...250	0	min
dFd	n/y	y	flag
FCO	n/y/d.c.	y	num
Fod	n/y	n	flag
FdC	0...99	0	min
Fon	0...99	0	min
FoF	0...99	0	min

Alarms - label AL

PAR.	RANGE	DEFAULT	U.M.
Att	0/1	0	flag
AFt	1.0...50.0	2.0	°C/°F
HAL	LAL1..150.0	50.0	°C/°F
LAL	-50.0..HA1	50.0	°C/°F
PAO	0...10	0	h
dAO	0...999	0	min
OAO	0...10	0	h
tdO	0...250	10	min
tAO	0...250	0	min
dAt	n/y	n	flag
EAL	n/y	n	flag
AOP	0/1	0	flag

label Lit

PAR.	RANGE	DEFAULT	U.M.
dSd	n/y	n	flag
OFL	n/y	n	flag
dOd	n/y	n	flag
dAd	0...250	0	min

Display - label diS

PAR.	RANGE	DEFAULT	U.M.
LOC	n/y	n	flag
PA1	0...250	0	num
ndt	n/y	n	flag
CA1	-12.0...12.0	0	°C/°F
CA2	-12.0...12.0	0	°C/°F
ddL	0/1/2	2	num
dro	0/1	0	flag

Configuration - label CnF

PAR.	RANGE	DEFAULT	U.M.
H06	n/y	y	flag
H11	-6...6	3	num
H21	0...6	1	num
H22	0...6	2	num
H23	0...6	3	num
H24	0...6	4	num
H25*	0...6	5	num
H26**	0...6	4	num
H31	0...6	0	num
H32	0...6	0	num
H34	0...6 2 (IWC 750)/4 (IWC 740)		num
H42	n/y	y	flag
rEL	/	/	/
tAb	/	/	/

label FPr

PAR.	RANGE	DEFAULT	U.M.
UL	/	/	/
dL	/	/	/
Fr	/	/	/

The following functions are available in the FnC folder (last folder visible from the Programming Menu):
* default
NOTE: to modify the status of a specified function press the 'set' button
NOTE: If the unit is switched off, the function labels go back to their default status.

label FnC

Function	Function label	
	ACTIVE	INACTIVE
reduced Set	OSP	SP*

*parameter visible ONLY FOR IWC 750
**parameter visible ONLY models with a BUZZER

DESCRIPTION OF PARAMETERS

COMPRESSOR CONTROL (folders with label "CP")

diF Compressor relay activation differential: the compressor stops on reaching the Setpoint value (as indicated by the adjustment probe) and restarts at a temperature value equal to the Setpoint plus the value of the differential.
Note: the value 0 cannot be assumed.

HSE Maximum possible setpoint value.

LSE Minimum possible setpoint value.
NOTE: The two sets are interdependent: HSE (maximum set) cannot be less than LSE (minimum set) and vice versa

OSP Temperature value to be added algebraically to the setpoint if reduced set enabled (Economy function). The reduced set can be enabled by pressing a key which must be specially configured for this purpose.

Cit Minimum compressor activation time before disabling. If set to 0, it is not active.

CAt Maximum compressor activation time before disabling. If set to 0, it is not active.

Ont Compressor activation time in the event of a faulty probe. If set to "1" with Oft set to "0", the compressor is always on, while with OFt >0 it operates in duty cycle mode.

OFt Compressor off time in the event of a faulty probe. If set to "1" with Ont at "0", the compressor is always off, while with Ont>0 it operates in duty cycle mode.

dOn Starting delay. The parameter indicates that a protection is active on the relay actuations of the generic compressor. Between the request and effective activation of the compressor relay, at least the specified time must elapse.

dOF Delay after switching off. The parameter indicates that the protection is active on compressor relay actuations. At least the indicated time must elapse between switch-off of the compressor relay and the successive switch-on.

dbi Delay between switch-ons. The indicated time must elapse between two subsequent switch-ons of the compressor.

OdO Delay time in activating the outputs after switch-on of the instrument or after a power failure. 0= not active.

DEFROSTING CONTROL 1/2 (folders with labels "dE1""/"dE2")

DEFROSTING CONDITIONS
The instrument allows defrosting to be performed in the following conditions:
• the evaporator temperature is lower than the defrost end temperature set by the dSt parameter;
• manual defrosting is not already activated (see); in this case the request for automatic defrosting will be cancelled.

dty Type of defrost.
0 = electrical defrosting;
1 = cycle inversion defrosting (hot gas);
2 = Free mode defrost (independent of compressor).

dit	Interval between the start of two subsequent defrosting operations.
	0= the function is disabled (defrosting is NEVER performed)
dCt	Selection of count mode for the defrosting interval.
	0 = compressor hours of operation (DIGIFROST® method); Defrosting active ONLY with the compressor on.
	NOTE: compressor time of operation is counted regardless of the evaporator probe (counting is active if evaporator probe is absent or faulty).
	1 = hours of appliance operation. Defrost counting is always active when the machine is on and starts at each power-on.
	2 = compressor stop. Every time the compressor stops, a defrosting cycle is performed according to parameter dty.
dOH	Defrost start delay time from start up of instrument.
dEt	Defrost time-out: determines the maximum duration of defrosting.
dSt	Defrosting end temperature (determined by the evaporator probe).
dPO	Determines whether the instrument must enter **defrosting at start-up** (if the temperature measured by the evaporator allows this operation). y = yes, starts defrosting at start-up; n = no, does not start defrosting at start-up.

FAN CONTROL (folder with "FAn" label)

FSt	Fan lock temperature: if the evaporator probe reads a higher value than the set value, the fans are stopped. The value is positive or negative and, depending on parameter FPt, can represent the temperature as an absolute value or relative to the Setpoint.
FAd	Fan activation intervention differential (see par. "FSt" and "Fot").
Fdt	Delay time at fan activation after a defrosting cycle.
dt	Dripping time.
dFd	Allows exclusion of the evaporator fans to be selected or not selected during defrosting. y = yes (fans excluded); n = no.
FCO	It allows the fan lock to be selected or not when the compressor is OFF. y = fans active (with thermostat; depending on the value read by the defrosting probe, see "FSt" parameter); n = fans off; dc = duty cycle (through "Fon" and "FoF" parameters).
FOd	Allows fan lock to be selected when the door is open and fan restart when the door is shut (if they were active). n=fan lock; y=fans unchanged
FdC	Fan switch off delay time after compressor stop. In minutes. 0= function excluded
Fon/FoF	Time fans are ON/OFF per duty cycle. Use of fans in duty cycle mode; valid for FCO = dc

ALARMS (folder with "AL" label)

Att	Parameter "HAL" and "LAL" modes, as temperature absolute value or as differential relative to the Setpoint. 0 = absolute value; 1 = relative value.
AFt	Alarm differential.
HAL	Maximum temperature alarm. Temperature value (understood as distance from the Setpoint or as an absolute value based on Att) which if exceeded in an upward direction triggers the activation of the alarm signal. **See Max/Min. Alarm Diagram.**
LAL	Minimum temperature alarm. Temperature value (understood as distance from the Setpoint or as an absolute value based on Att) which if exceeded in a downward direction triggers the activation of the alarm signal. **See Max/Min. Alarm Diagram.**
PAO	Alarm exclusion time after instrument is switched on following a power failure.
dAO	Alarm exclusion time after defrost.
OAO	RitAlarm signalling delay after digital input disabling (door open). Alarm means high/low temperature alarm.
tdO	Time out after alarm signal following digital input disabling (door open).
tAO	Temperature alarm signal delay time.
dAt	Alarm signal for defrosting end due to time-out. n = alarm not enabled; y = alarm enabled.
EAL	External alarm to lock controls (n=does not lock, y=locks).
AOP	Polarity of alarm output. 0 = alarm active and output disabled; 1 = alarm active and output enabled.

LIGHT AND DIGITAL INPUTS (folder with "Lit" label)

| dSd | Enabling light relay by door switch. n = door open, the light does not turn on; y = door open, the light turns on (if it was off). |
| OFL | The light key always disables the light relay. Enables switching off via the cell light switch even if the delay after closing the door set by dLt is enabled |

| dOd | Door switch switches off loads. On digital input command, programmed as door-switch, this allows all loads to be stopped when the door is opened and restarted when the door is closed (respecting any timings in progress). |
| dAd | Digital input activation delay |

DISPLAY (folder with "diS" label)

LOC	Keyboard locking. It is still possible to enter parameter programming and modify the parameters, including the status of this parameter, in order to allow keyboard unlocking. y = yes (keyboard locked); n = no.
PA1	When enabled (value other than 0), it constitutes the access key for level 1 parameters.
ndt	View with decimal point. y = yes (view with decimal point); n = no (only integers).
CA1/CA2	Calibration 1/2. Positive or negative temperature value added to the value read by probe 1/2
ddL	Viewing mode during defrosting. 0 = shows the temperature read by the thermostat probe; 1 = locks the reading at the temperature value read by thermostat probe when defrosting starts and until the next time the Setpoint value is reached; 2 = displays the label "deF" during defrosting and until the next time the Setpoint value is reached.
dro	Select °C or °F for displaying the temperature read by the probe. 0 = °C, 1 = °F. **PLEASE NOTE: switching between °C and °F or vice versa DOES NOT modify the setpoint, differential, etc. (for example set=10°C become 10°F).**

CONFIGURATION (folder with "CnF" label)

H06	key/aux input/light door switch active when the instrument is off (but powered)
H11	Configuring digital inputs/polarity.
	0 = disabled 1 = defrosting 2 = reduced set
	3 = door switch 4 = external alarm 5 = on-off (STAND-BY)
	6 = NOT USED
H21	Digital output configurability (A)
	0 = disabled 1 = compressor 2 = defrosting
	3 = fans 4 = alarm 5 = auxiliary/light
	6 = stand-by
H22	Digital output configurability (B) (Analogous to H21)
H23	Digital output configurability (C) (Analogous to H21)
H24	Digital output configurability (D) (Analogous to H21)
H25*	Digital output configurability (E) (Analogous to H21)
H26**	BUZZER output configurability 0= disabled; **4 = enabled**; 1-3, 5-6 = not used

*parameter visible ONLY FOR IWC 750
**parameter visible ONLY models with a BUZZER

H31	UP key configurability
	0 = NOT used 1 = defrost 2 = light 3 = reduced set
	4 = function R.H.% 5 = stand-by 6 = maintenance requested
H32	DOWN key configurability (Analogous to H31)
H34*	Aux key configurability (Analogous to H31)

*parameter visible dependng on model

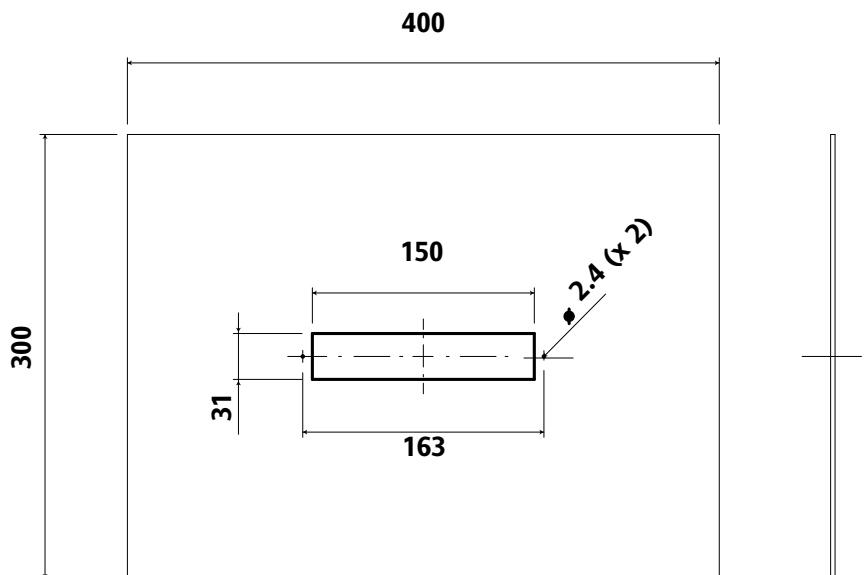| H42 | Evaporator probe presence. n= not present; y= present. |
| rEL | Device version: read only parameter. |
| tAb | Reserved: read-only parameter. |

COPY CARD (folder with label "Fpr") - (see "Copy Card" section)

UL	Upload. Programming parameter transfer from instrument to Copy Card.
dL	Download. Programming parameter transfer from Copy Card to instrument.
Fr	Format. Erasing all parameters in the key. **PLEASE NOTE: using the "Fr" parameter (key formatting) results in permanent loss of data inserted in key. The operation cannot be cancelled.**

CUT-OUT

400

300

150

31

163

2.4 (x 2)

A

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

NOTE: The technical specifications stated in this document regarding the measurement (range, accuracy, resolution, etc.) refer strictly to the instrument and not to any accessories provided, such as the probes.
This means, for example, that the error introduced by the probe must be added to the error of the instrument.

MECHANICAL ASSEMBLY

The instrument is designed for mounting on a panel. Drill a 150x31 mm hole and insert the instrument, securing it to the front panel using the screws provided.
Do not mount the instrument in humid and/or dirty places. It is suitable for use in places with ordinary or normal levels of pollution. Always make sure that the area next to the cooling openings of the instrument is adequately ventilated.

ELECTRICAL CONNECTIONS

Warning! Turn the machine off before working on electrical connections.
The instrument is equipped with screw terminal boards for connection of electrical cables with a diameter of 2.5 mm^2 (one conductor only per terminal for power connections). For the capacity of the terminals, see the label on the instrument.
The relay outputs are voltage free. Do not exceed the maximum permitted current; in case of higher loads, use an appropriate contactor. Make sure that power supply is the correct voltage for the instrument.
Probes have no connection polarity and can be extended using a normal bipolar cable (note that the extension of the probes influences the instrument's electromagnetic compatibility (EMC): take great care with the wiring).
Probe cables, power supply cables and the TTL serial cables should be routed separately from power cables.

CONDITIONS OF USE

PERMITTED USE
For safety reasons, the instrument must be installed and used according to the instructions provided. In particular, parts with dangerous voltage levels must not be accessible in normal conditions.
The device must be adequately protected from water and dust according to the application and must also only be accessible by the use of tools (with the exception of the front panel).
The device is ideally suited for use on household appliances and/or similar refrigeration equipment and has been tested for safety aspects in accordance with harmonised European reference standards.
It is classified as follows:
• according to its construction, as an independently mounted automatic electronic control device;
• according to its automatic operating characteristics, as a 1B-type operated control type device;
• according to its software class and structure, as a Class A device.
UNPERMITTED USE
The unit must not be used for applications other than those described.
Note that the relay contacts provided are of a functional type and therefore subject to malfunction. Any protection devices required by product standards or dictated by common sense for obvious safety reasons must be applied externally to the instrument.

RESPONSIBILITY AND RESIDUAL RISKS

Eliwell shall not be liable for damage or injury deriving from:
- installation/use other than as prescribed and in particular not complying with the safety provisions established in the standards and/or stated herein;
- use on panels that do not guarantee adequate protection against electric shock, water or dust when assembled;
- use on panels that allow dangerous parts to be accessed without the use of tools;
- tampering with and/or alteration of the product;
• installation/use on panels that do not comply with the standards and regulations in force.

ELIWELL CONTROLS s.r.l.
Via dell'Industria, 15 Zona Industriale Paludi
32010 Pieve d'Alpago (BL) ITALY
Telephone +39 0437 986111
Facsimile +39 0437 989066
Internet http://www.eliwell.it

Technical Customer Support:
Telephone +39 0437 986300
Email: techsuppeliwell@invensyscontrols.com

Invensys Controls Europe
**An Invensys Company**
1-06 – GB -
cod. 9IS43025

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Container	PC+ABS UL94 V-0 resin plastic casing, polycarbonate glass
Dimensions	front 180x37 mm, depth 69mm
Mounting	panel mounting with 150x31mm (+0.2/-0.1mm) drilling template
Usage temperature	-5°C...55°C
Storage temperature	-30°C...85°C
Usage and storage environment humidity	10...90% RH (non-condensing)
Display range	NTC: -50...110°C (-58...230°F) on display 3 and a half digits and sign
Analog inputs	2 NTC type inputs
Digital Input	1 voltage-free
Serial	TTL for Copy Card connection
Digital outputs (configurable)	4 relay outputs (IWC 740) / 5 relay outputs (IWC 750) • (A) 1 SPST 12A 2 hp 250V~, • (B) 1 SPDT 12A 1 hp 250V~, • (C) (D) 1 SPST 8(3)A 1/2 hp 250V~, (IWC 750 only) • (E) 1 SPST 8(3)A 1/2 hp 250V~,
Buzzer output	only on models where provided - ON DEMAND ONLY -
Measurement range	from -50 to 110°C
Accuracy	better than 0.5% of full-scale +1 digit.
Resolution	0.1°C (0.1°F up to +199.9°F; then 1°F)
Consumption	9 VA
Power supply	230 V~ 10% 50/60 Hz.
	PLEASE NOTE: please refer to label on the instrument for relay capacity, power supply and terminals layout.

TERMINALS

12 - 13	Power Supply **230V~**
14 - 15	Probe Input (termostatazione) **Pb1**
16 - 17	Probe Input (evaporator) **Pb2**
18 - 19	Digital Input **D.I.**
A	TTL Input for Copy Card
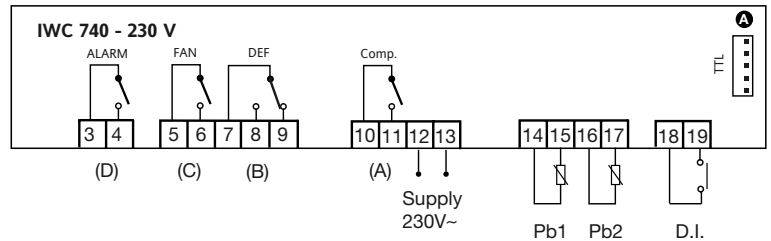
RELAY OUTPUTS

relay	load	associated par. & default
model IWC 750 only		
1 - 2	N.O. relay (E) AUX/LIGHT	H25=5
models IWC 740 - IWC 750		
3 - 4	N.C. relay (D) ALARM	H24=4
5 - 6	N.O. relay (C) FAN	H23=3
7 - 8	N.O. relay (B) DEF	H22=2
7 - 9	N.C. relay (B) DEF	
10 - 11	N.O. relay (A) Comp.	H21=1

IWC 740 - 230 V

IWC 750 - 230 V
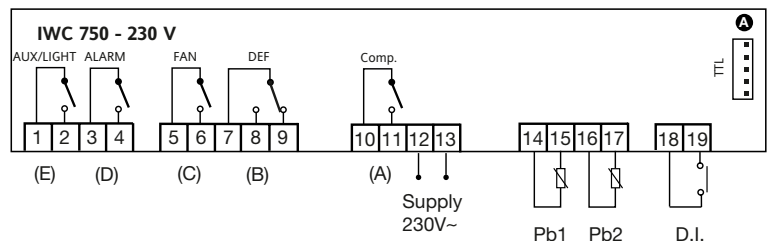
TERMINALS

14 - 15	Power Supply **230V~**
16 - 17	Probe Input (termostation) **Pb1**
18 - 19	Probe Input (evaporator) **Pb2**
20 - 21	Digital Input **D.I.**
A	TTL Input for Copy Card
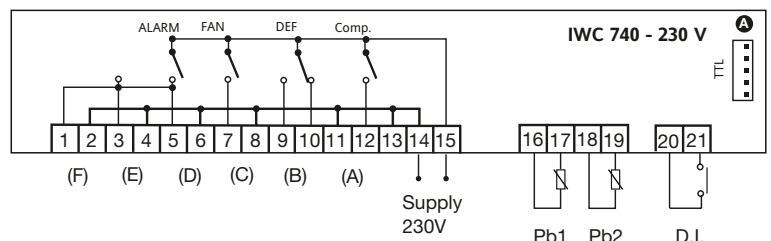
RELAY OUTPUTS

relay	load	associated par. & default
model IWC 750 only		
3 - 4	N.O. relay (E) AUX/LIGHT	H25=5
models IWC 740 - IWC 750		
5 - 6	N.C. relay (D) ALARM	H24=4
7 - 8	N.O. relay (C) FAN	H23=3
9 - 11	N.O. relay (B) DEF	H22=2
10 - 11	N.C. relay (B) DEF	
12 - 13	N.O. relay (A) Comp.	H21=1

IWC 740 - 230 V

IWC 750 - 230 V
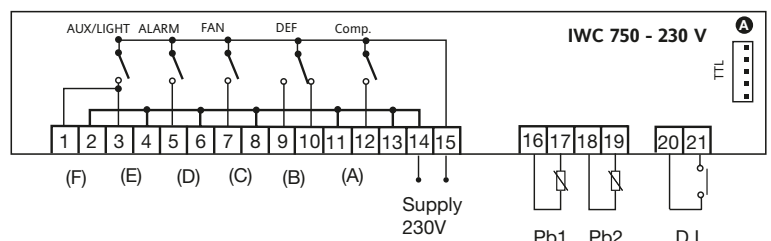
• Default user settings

• all relays configurable by parameter

• for the capacity of the relays, see the label on the instrument.

IWC 740-750