

CONTROLLER OVERVIEW

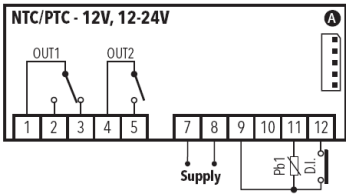
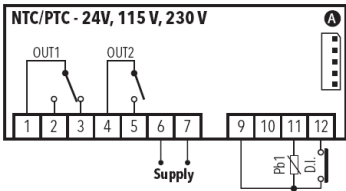
USER INTERFACE



ICPlus 915

KEYS	
 UP Press and release Scroll menu items Increases values Press for at least 5 sec Function can be configured by the user (H31)	 STAND-BY (ESC) Press and release Returns to the previous menu level Confirms parameter value Press for at least 5 sec Function can be configured by the user (H33)
 DOWN Press and release Scroll menu items Decrease values Press for at least 5 sec Function can be configured by the user (H32)	 SET (ENTER) Press and release Displays alarms (if active) Opens Machine Status menu Confirm commands Press for at least 5 sec Opens Programming menu

NTC/PTC MODEL

CONNECTIONS	INPUT/OUTPUT CHARACTERISTICS
 NTC/PTC - 12V, 12-24V	Display range: NTC : -50...110°C (-58...230°F) PTC : -50...140°C (-58...302°F) on display with 3½ digits + sign
	Digital input: 1 digital voltage free input
	Analogue input: 1 NTC or 1 PTC (selectable by parameter H00)
	Serial: TTL for connection to Copy Card or Televis/ Modbus remote control systems
	Digital outputs: OUT1 : 1 SPDT relay 8(4)A 250 V~ OUT2 : 1 SPST relay 8(4)A 250 V~
	Buzzer output: only on models where this is provided
	Measurement range: -50 ... 140°C (-58 ... 284°F)
	Accuracy: better than 0.5% of end of scale + 1 digit
	Resolution: 0.1°C (0.1°F up to +199.9°F; 1°F over)
 NTC/PTC - 24V, 115 V, 230 V	

TERMINALS			
1-2-3	regulator relay OUT1	*7-8	Power supply 12V~/~ and 12-24V~/12-36V~.
4-5	regulator relay OUT2	9-11	Probe Pb1 Input
*6-7	Power supply 24V~, 115V~ and 230V~.	9-12	Digital Input (D.I.)
A	TTL input for Copy Card and TelevisSystem connection	* depends on model	

ACCESSING AND USING THE MENUS

The resources are organized into 2 menus which are accessed as follows:

- ‘Machine Status’ menu: press and release the **<SET>** key.
- ‘Programming’ menu: hold down the **<SET>** key for 5 seconds.

Either do not press any keys for 15 seconds (timeout) or press the **<0>** key once, to confirm the last value displayed and return to the previous screen.

PROGRAMMING MENU

To access the ‘Programming’ menu, press the **<SET>** key for more than 5 seconds. If specified, an access PASSWORD will be requested: ‘**PA1**’= 0 for User parameters and ‘**PA2**’= 15 for Installer parameters.

User Parameter: When accessed, the display will show the first parameter (e.g. ‘diF’). Press **<▲>** and **<▼>** to scroll through all the parameters on the current level. Select the desired parameter by pressing **<SET>**. Press **<▲>** and **<▼>** to modify it and **<SET>** to save the changes.

Installer Parameter: When accessed, the display will show the first folder (e.g. ‘CP’). Press **<▲>** and **<▼>** to scroll through the folders on the current level. Select the desired folder using **<SET>**. Press **<▲>** and **<▼>** to scroll through the parameters in the current folder and select the parameter using **<SET>**. Press **<▲>** and **<▼>** to modify it and **<SET>** to save the changes.

NOTE: Make sure you switch the instrument off and on again each time the parameter configuration is changed, in order to prevent malfunctioning in the configuration and/or timing in progress.

DIAGNOSTICS

Alarms are always indicated by the alarm icon **<!>**, the buzzer and the relay (if defined).

To switch off the buzzer, press and release any key; the corresponding icon will continue to flash.

N.B.: If alarm exclusion times have been set (see ‘AL’ folder in the parameters table) the alarm will not be signalled.

ALARMS				
Label	Fault	Cause	Effects	Remedy
E1	Probe1 faulty (ambient)	• measured values are outside operating range • Probe faulty/short-circuited/open	• Display label E1 • Alarm icon permanently on • Relay activation (if setting) • Disable max/min alarm controller • Compressor operation based on parameters On1/2 and OF1/2	• check probe type (H00) • check probe wiring • replace probe
AH1/2	Alarm for HIGH value (Probe1)	value read by Pb1 > HA1/2 after time of tAO . (see ‘MAX/MIN TEMP. ALARMS’)	• Recording of label AH1/2 in folder AL • Relay activation (if setting) • No effect on regulation	Wait until value read by Pb1 returns below HA1/2 .
AL1/2	Alarm for LOW value (Probe1)	value read by Pb1 < LA1/2 after time of tAO . (see ‘MAX/MIN TEMP. ALARMS’)	• Recording of label AL1/2 in folder AL • Relay activation (if setting) • No effect on regulation	Wait until value read by Pb1 returns above LA1/2 .
EA	External alarm	Digital input activated (H11 = ±5)	• Recording of label EA in folder AL • Alarm icon permanently on • Relay activation (if setting) • Regulation locked	Check and remove the external cause which triggered the alarm on the D.I.

SET UP CONTROLLER

New controller must be configured by changing several parameters. Enter to 'Installers' MENU. Scroll through folders, then select '**rE1**' folder by pressing <**SET**> key. Select '**HC1**' parameter and change it to '**C**' – cooling if it's not.

Go back to folders menu by pressing <**0**> key. Select '**rE2**' folder and change '**HC2**' parameter to '**H**' if it's not.

Then find 'CnF' folder and change '**H00**' to **Ptc (0)**.

For more information see Eliwell ICPLus 915 controller manual.