



## 5. TECHNICAL DATA

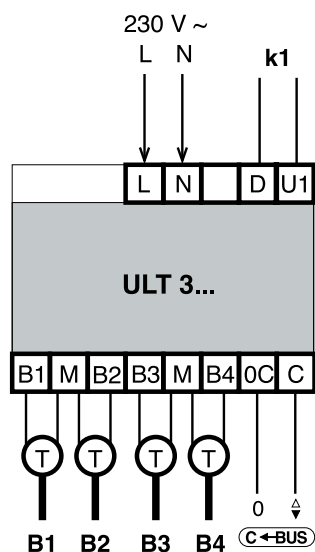
Power supply	230 V ~ ± 10%	Ambient humidity	Class F DIN 40040
Frequency	50 ... 60 Hz	Weight	0.27 kg
Consumption	2 VA	Measurement ranges ULT 328 :	
Protection	IP40	B1 detector NTC 1 kΩ (outside)	-40...40 °C
Radio disturbances	VDE0875/0871	B2 detector NTC 10 kΩ (room)	0... 40 °C
Vibration test	with 2g (DIN 40 046)	B3 & B4 detectors NTC 10 kΩ (water)	0... 99.5 °C
Construction standard	Italian Electrotech. Committee (CEI)	Measurement ranges ULT 348 :	
Enclosure	DIN 3E module	B1...B4 detectors NTC 10 kΩ (water)	0... 99.5 °C
Mounting	on DIN 35 rail	Number of recordings (max)	240
Materials:		Settings by PC :	
Base	NYLON	Recording frequency	5...30...240 min
Cover	ABS	Delay acquisition alarms for exceeding threshold	0...1...255 min
Ambient temperature :		Delay acquisition end alarm for exceeding threshold	0...1...255 min
Operating	0 ... 45 °C	Attempts alarm calls	2...5...200
Storage	- 25 ... + 60 °C	Interval between calls	2...10...210 min
		Enabling alarm for fault sensors	YES / NO
		Enabling alarm for exceeding thresholds	YES / NO
		Velocità C-Bus	1200, 2400, 4800, 9600 bps

## 6. INSTALLATION

ULT must be installed in a dry location that respects the relevant ambient conditions given under 5. TECHNICAL DATA. If installed in a location classified as "Hazardous" it must be installed in a cabinet for electrical equipment constructed according to the regulations in force for the class of danger concerned.

The controller can be mounted on a DIN rail and housed in a standard DIN enclosure.

## 7. WIRING DIAGRAM



### ULT 328 :

- B1 – Detector NTC 1 kΩ (-40...40 °C)
- B2 – Detector NTC 10 kΩ (0...40 °C)
- B3 - B4 – Detector NTC 10 kΩ (0...99.5 °C)

### ULT 348 :

- B1...B4 – Detector NTC 10 kΩ (0...99.5 °C)
- k1 – Input alarm contact to be connected to terminals D and E1/E2/E3 of the equipment C-Bus
- L – 230 V~
- N – Neutral
- C-Bus – Telemangement transmission of data

## 8. ELECTRICAL CONNECTIONS

Proceed as follows:

- Separate the base and cover (remove the securing screws (3.3))
- Mount the base on the DIN rail and check that the securing elements (3.4) anchor it securely
- Make the electrical connections according to the diagram and in observance of the safety regulations in force using the following cables :
  - 1.5 mm<sup>2</sup> for the power supply..
  - 1 mm<sup>2</sup> for detectors and alarm switch.
  - 1 mm<sup>2</sup> for C-Bus. For length limits see data sheet T 021.
- Switch on power (230 V~) and check its presence at terminals L and N.
- Switch off power, replace cover on base/terminal block and secure it with the two screws supplied (3.3) .

You are advised not to insert more than two cables in a single terminal of the controller and, if necessary, to use an external junction box.

9. CONFIGURATION DETECTORS

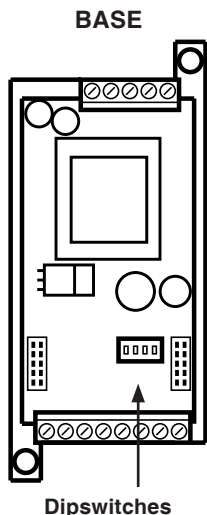
It is possible to use the detectors for another COSTER controller, which must be wired in parallel:



- Dipswitch 1 : Detector 1
- Dipswitch 2 : Detector 2
- Dipswitch 3 : Detector 3
- Dipswitch 4 : Detector 4

Dipswitch set to On = Detector connected to ULT only

Dipswitch set to Off = Detector connected in parallel to ULT and to another COSTER device, wired in parallel.



COSTER devices compatible with ULT 348 :	
Detectors B1...B4 (NTC 10 kΩ ; 0...100 °C) :	DAM 675; DCC 602; DCC 602 S1; DCS 633; DPS 638; DSE 600; DSE 600 S1 DSE 602; DTC 648; DCF 648; DTC 618; DTC 628; DTE 600; DTE 600 S1; DTE 600 S2; DTE 602; DTE 611; DTE 611 S1; GPT 728; OCR 344; OCR 348; RCS 633; RPS 638; RTC 604; RTE 602; RTE 611; RTE 643 ; UPT 678 (solo B6); XCC 602; XCS 633; XSS 633; XTP 678 (solo B6); XTC 628; XSE 600; XSE 600 S1; XSE 602; XTE 600; XTE 600 S1; XTE 602; XTE 611
Coster devices compatible with ULT 328 :	
Detector B1 (NTC 1 kΩ ; -40...+40 °C) :	DAM 675; DCC 602; DCC 602 S1; DCS 633; DSE 600; DSE 600 S1; DSE 602; DTC 618; DTC 628; DTC 648; DCF 648; DTE 600; DTE 600 S1; DTE 600 S2; DTE 602; DTE 611; DTE 611 S1; FTC 738; FTC 738 C1; GPT 728 (solo B7); MRL 608; RCS 633; RTC 604; RTE 602; RTE 611; RTE 643; UPT 678 solo (B7); XPT 678 (solo B7). XCC 602; XTC 638; XCC 618; XCC 638; XCS 633; XSS 633; XSE 600; XSE 600 S1; XSE 602; XTE 600; XTE 602; XTE 611; XTP 600.
Detector B2 (NTC 10 kΩ ; 0...40 °C) :	DAM 675; DCS 633; DSE 600; DSE 600 S1; DSE 602; DTE 600; DTE 600 S1; DTE 600 S2; DTE 602; DTE 611; DTE 611 S1; FTC 738; FTC 738 C1; RCS 633; RTC 604; RTE 602; RTE 611; XTE 600; XTE 600 S1; XTE 602; XTE 611; XTC 638; XCC 638; XCS 633; XSS 633; XSE 600; XSE 600 S1; XSE 602; XTP 600.
Detector B3 - B4 (NTC 10 kΩ ; 0...100 °C) :	As ULT 348

10. OPERATION

For each measurement input you can: :

- **Display the actual temperatures measured by the detectors:** Press → key 4.5 (less than 10 seconds): at each press the measurement changes and the LED 4.2 corresponding to the detector concerned lights.
- **Display the minimum and maximum values measured by the detectors:** Press → key 4.5 until LED 4.2 for the detector concerned lights. Press "PEAKS" 4.4, key: the minimum and maximum values reached by the measurements are displayed alternatively. To reset the values keep the "RESET" key 4.4 pressed for 10 seconds or until the three dashes appear.
- **Program the minimum and maximum limits for triggering the alarm :** Press → 4.5 key until LED 4.2 for the detector concerned lights. Press "MIN" 4.6 key to display the minimum value or "MAX" 4.7 key to display the maximum value; if excluded OFF appears. To adjust, press the appropriate key (min or max) for at least five seconds: there appears "— — —". Release the key and press again: the limit value appears. To adjust this value, continue to press. When required value is reached, do not press any keys for 10 seconds: the measurement is again displayed. To exclude the limit, press "MIN" 4.6 or "MAX" 4.7 key until dashes appear and then release the key and wait about 10 seconds until the temperature measured re-appears on the display .
- **Program the Telemangement address:** Press → 4.5 key until all the LEDs flash: the current address appears. Release the key : "— — —" appears. If no adjustments required do not press any key. After 10 seconds normal operation re-starts. If you want to make adjustments, tap → 4.5 key until the desired address appears. Do not press any keys for 10 seconds. The address is acquired and normal operation re-starts.
- **Set C-Bus transmission speed:** press button → 4.5 until the current speed appears (factory setting b 12 = 1200 bps), release the button and "— — —" will appear. Use the same button to set the desired speed
  - b 12 = 1200 bps
  - b 24 = 2400 bps
  - b 48 = 4800 bps
  - b 96 = 9600 bps
- **To return to factory settings:** power ULT while keeping pressed the → 4.5 and "MIN" 4.6, keys: the sign "ini" appears on the display.

From the remote management PC it is possible to:

- set the system's identification name
- set the identification name of each sensor (e.g. send sensor / ambient sensor)
- set minimum and maximum values for the triggering of threshold breach alarms
- receive threshold breach alarms for each measurement and alarms for sensor shut-off or short-circuit
- reset the minimum and maximum value reached by measurements
- enable minimum and maximum threshold breach alarm.
- set threshold breach alarm acquisition delay time (between 0 and 255 minutes)
- set threshold breach alarm off acquisition delay time (between 0 and 255 minutes)
- view and archive measurement recordings
- set recording frequency times
- set remote management password
- enable threshold breach alarm
- enable sensor fault alarm

#### Amendments to data sheet

Data	Revision No.	Page	Section	Details of amendment	Firmware version	Software version
31.03.08 LB 10.09.08 MM	<b>01</b>	3 2	9. Configuration detectors 7. Wiring diagram	Updated devices list. Update "k1" description		
22.03.10 VM	<b>02</b>	2 3	5. TECHNICAL DATA 10. OPERATION	C-Bus speed settings added. Addressing procedure modified		



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