



D3  
53mm  
DIN rail mount



D4  
72mm  
DIN rail mount



P44  
48mmx48mm  
panel mount



P49  
48mmx96mm  
panel mount

## TEMPERATURE CONTROLLER TS3 PROBE with 24h TIMER

D3-TCT1  
D4-TCT1  
P44-TCT1  
P49-TCT1

### Operating instructions and Guarantee Certificate

[www.iconelectronics.co.za](http://www.iconelectronics.co.za)

#### **Description:**

This device incorporates a digital temperature controller and a 24 hour timer. These functions operate independently and control separate relays.

The settings may be locked and code protected to avoid changes from being made by unauthorized personnel.

#### **Operation:**

##### **Timer Relay:**

Whenever the current time (time of day) falls between the “ON” and “OFF” times, the timer relay is energized. Note that there are 2 “ON” and “OFF” times.

A manual override function is included to force the timer relay to remain energized for up to 24 hours.

**Adjustable parameters:** Please note: Depending on the model of the device purchased, some of the parameters listed below may not be available

- Pre-set temperature “°C” (default value: 25.0)

When the probe temperature reaches this value, the relay is de-energized.

- Clock setting “CLOC”

Set this value to match the current time.

- Manual override “Ourr”

Set the amount of time the relay must remain energized. This value is decremented every minute. When it reaches zero, the relay will revert to the pre-set on and off times.

- On time 1 “On 1”

Use this setting to adjust when the timer relay will energize.

- OFF time 1 “OF 1”

Use this setting to adjust when the timer relay will de-energize.

- On time 2 “On 2”

Use this setting to adjust when the timer relay will energize.

- OFF time 2 “OF 2”

Use this setting to adjust when the timer relay will de-energize.

- Hysterises “HYSt” (default value : 1.0 °C)

Once the relay has de-energized, the temperature must change by this amount before the relay will re-energize

- Reset (“rEst”)

Selecting this menu option resets all values to default press “+” & “-” or (“▼” and “▲”) to confirm reset.

**Notes:**

1. The display will show “Err” if the sensor is not connected correctly, or is faulty.
2. To avoid damage to the sensor, ensure that it is connected correctly BEFORE applying power.

**Specifications:**

Temperature range:	- 20.0 °C to + 105.0 °C
Accuracy:	+/-1.2 °C
Input voltage:	+/-15% of rated input voltage
Led indication:	Relay 1 and relay 2 status
Probe:	3-wire digital
Probe length:	3m, extendable to 200m (With external 220uF 16V capacitor)

**Menu operation (single display device):**

All adjustments are made via the three front mounted buttons.

Press the "MENU" button repeatedly until the desired setting is reached, press "SELECT" to display the current value of the selected parameter, or sub menu (if applicable).

The "+" and "-" buttons are used to change the value.

"ENTER" will return the device to the menu.

The "BACK" button will exit the menu.

**Menu operation (dual display device):**

Press the menu "⌂" button repeatedly until the desired setting is reached.

The "▲" and "▼" buttons are used to change the value.

"⌂" will display the next menu item.

To exit the menu hold "⌂" button for 3 seconds.

**Menu options:**

Exit the menu before making the following adjustments.

**Lock / unlock parameters:****(default: unlocked)**

Press "BACK" ("▼"), then "ENTER" ("⌂") and hold the 2 buttons until the desired option is displayed.

The display cycles between "Loc" (no changes allowed) & "u.Loc" (parameters may be adjusted)

**Full / reduced menu (default: Full)**

Press "SELECT" ("▲"), then "ENTER" ("⌂") and hold the 2 buttons until the desired option is displayed.

The display cycles between "rEdu" (limited menu) & "Full" (all parameters are accessible)

**Access Code: (default: no code)**

Once the above options have been set as required, Press "BACK" and "SELECT" ("▼" and "▲") simultaneously until "CODE" is displayed.

Now use the "+" & "-" ("▲" and "▼") to enter a code.

Once a code is entered, access to the options above is not permitted.

To clear the code, re-enter the same code again.

If the code is forgotten. Press and hold "+" & "-" ("▲" and "▼") until "CODE" is displayed while re-applying power to the device.

**Please Note ( for 1 and 2 relay devices ONLY):**

- As a power saving feature, the display dims if settings are not being made.
- Even though the device seems to operate correctly, the relay(s) will not energise if the input voltage is below the operating voltage.

**12 Month guarantee:**

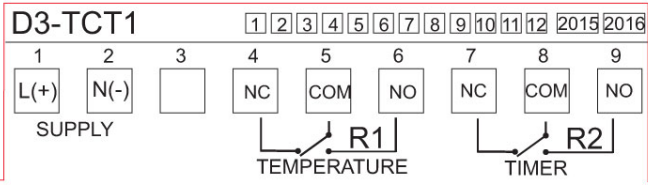
Our product is guaranteed for a 12 (twelve) month period from date of purchase. This guarantee is valid for defects arising from failure during specified conditions. This guarantee does not cover damage due to abuse, tampering or improper installation. Our company does not accept liability for any consequential damage or loss arising from product malfunction. Should this product prove to be defective, kindly return for inspection or repair.

**Relay specifications:**

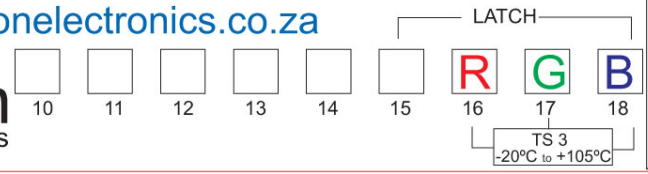
Contact rating: 10A 250 VAC 2500VA

Mechanical life: 30 million operations

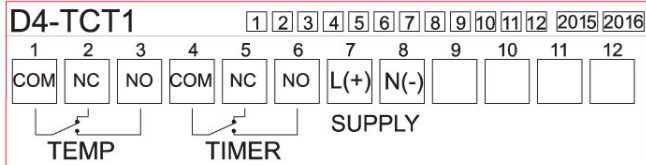
Electrical life: 250 000 operations (at maximum load)



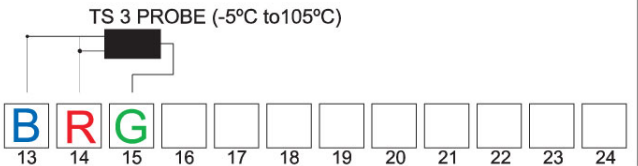
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- SUPPLY**
- 110V AC
  - 240V AC
  - 400V AC
  - 12V
  - 24V
  - 48V
  - .....
  - AC  DC
  - ISOLATED



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