

Icon Electronics



D3
53mm
DIN rail mount



D4
72mm
DIN rail mount



P44
48mmx48mm
panel mount



P49
48mmx96mm
panel mount

CLOCKWORK TIMER

D3-CWT1
D4-CWT1
P44-CWT1
P49-CWT1

Operating instructions and Guarantee Certificate
www.iconelectronics.co.za

Description:

This device is an alternative to a mechanical clockwork timer.

The display indicates the remaining time.

In case of a power failure, the timer will continue from where it left off when the power is restored.

One of 2 ranges may be selected: 0-99 min. OR 0-99 hours.

The timer may also be controlled by the start and auxiliary terminals.

The aux. terminals are intended to be connected to the aux. terminals of the contactor used to power the pump. Should the pump stop for any reason (eg. running dry), the device will de-energise the relay and stop the timing cycle until the fault condition is removed. (eg. borehole refills).

Operation:

Use the menu to program the time range and time duration. To start the timing cycle, pulse the "START" terminals or select the "Start" option from the menu.

The device will energise the relay for the duration set.

The display indicates the remaining time before the relay will be de-energised.

The timing value may be adjusted at any time (whether the cycle is running or not).

To stop the cycle manually select "STOP" from the menu.

Should the power fail during the cycle, the device will continue from where it left off when the power is restored.

On completion of the cycle the display will indicate the last value entered.

To start a new cycle for the same length of time select the "START" option from the menu or short the "START" terminals.

When using the auxiliary Terminals: (activated via the menu)

As a safety feature the relay is de-energised if the aux. terminals are NOT shorted within 15 seconds of the cycle being started.

If the short is removed during a timing cycle, the relay is immediately de-energised and the timer is stopped until the terminals are shorted again.

The display will flash "- - -" if the timer is stopped due to the short being removed. Select "START" via the terminals or the menu to re-energise the relay for 15 seconds.

If the aux. terminals are still not shorted, the relay will once again de-energise until the cycle is either re-started manually, or the aux terminals are closed.

Adjustable parameters:

- **Set point “SEt” (duration or timing cycle)**

Depending on the value of the time range parameter, this value determines the length of the cycle. 0-99 hours, or 0-99 minutes. Note that adjusting this value during a cycle will not only affect the next cycle's length, but also the remaining time of the current cycle.

- **Start / Stop the current cycle.**

Depending on whether the cycle is currently active, selecting this parameter will either START or STOP the timing cycle.

- **Time range “rang” (default 0-99 hours)**

Toggle between “nn.SS” = 0-99 min (min & sec) & “hh.nn” = 0-99 hours (hours & min).

- **Auxiliary input select Au.iP”**

Toggle between “Yes” and “No”.

If this setting is set to “Yes”, the terminals MUST be shorted within 15 seconds of starting the device.

- **Reset (“rESt)**

Press “▼” and “▲” when “ConF” is displayed to reset all settings to default.

Specifications:

- Timing range:
 - hours & min: 0 to 99 hours & 59 min
 - min & sec : 0 to 99 min & 59 sec
- Accuracy: $\pm 0.02\%$
- Input voltage: $\pm 15\%$ of rated input
- Led indication: Relay status

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:

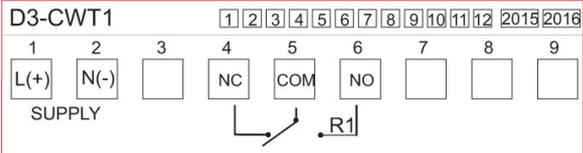
Our product is guaranteed for a 12 (twelve) month period from date of purchase. This guarantee is valid for defects arising from failure during specified conditions. This guarantee does not cover damage due to abuse, tampering or improper installation. Our company does not accept liability for any consequential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

Relay specifications:

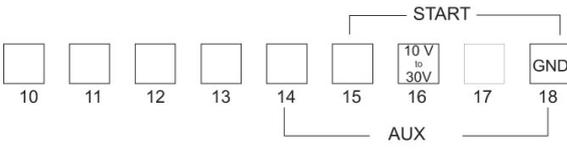
Contact rating: 10A 250 VAC 2500VA

Mechanical life: 30 million operations

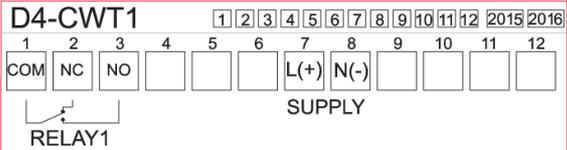
Electrical life: 250 000 operations (at maximum load)



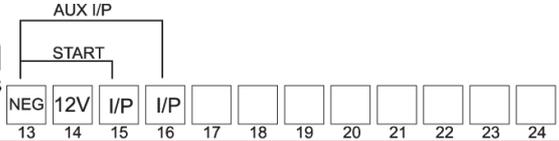
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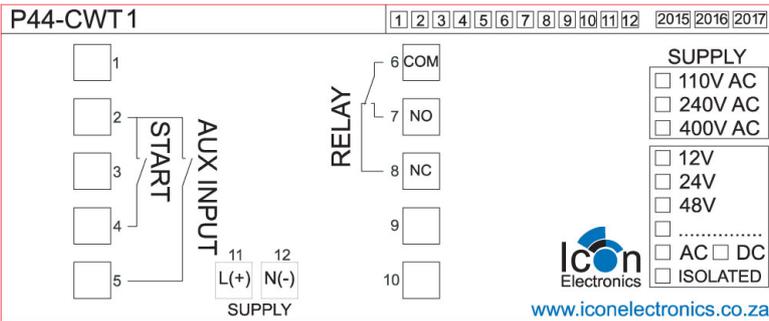
- SUPPLY
- 110V AC
 - 240V AC
 - 400V AC
 - 12V
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 - AC DC
 - ISOLATED



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