

New Features for 2005

All MCT products now include full calendar functionality for automated switching between BST and GMT.

Also introducing an optional 'Remote' Boost button.



MCT Range - Combined 3kW and 4kW Low tariff Immersion heater timers

The MCT range provides a family of products that allow the individual control of a combination of 3kW and 4kW heaters in a single unit.

All MCT's have four programmable on-time periods over 24hrs and an integral boost button for 30, 60 or 120 minutes heat boost. Any combination of heaters can be set to operate during any of the timer and boost periods.

The timer control channels can also be used to switch other associated equipment, such as pumps or valves.

The flexible design of the MCT range allows for OEM variants to be produced to match your specific system requirements. This may include bespoke menu structures, functionality and branding options to provide you with a unique system solution.

MCT Range

The MCT Range is divided into three series, categorized by the number of 3kW and 4kW heater channels provided. The first number in the model name specifies the series, whilst the second number indicates the optional expansion card, fitted.

MCT product selection table

	3kW Channels				
	0	1	2	3	4
4kW Channels	0	MCT10	MCT10	MCT11	MCT11
	1	MCT20	MCT30	MCT21	MCT31
	2	MCT22	MCT32		

ie: MCT xy where

x = 1 - Two independent 3kW channels

2 - One 4kW channel

3 - One 3kW and one 4kW channel

Use the product selection table above to determine the most suitable unit for your particular application based on the number of 3kW and 4kW channels required.

y = 0 - No expansion fitted

1 - Two further independent 3kW channels

2 - One further 4kW channel

MCT Features

Intuitive User Interface

- LCD screen to display time, status information and menus
- Navigational buttons for easy programming
- Timer and Boost LED's for instant feedback
- Manual boost button (30, 60 and 120 minute settings)

Programmable Timers

- Multiple tariff presets for rapid installation
- One programmable auxiliary time period
- 3 Programmable off peak time periods
- Off peak 'time base' selection (GMT or GMT+BST)

External Controls

- Optional Remote Boost button available
- Safety protection input for 'overtemp' thermostat or water level sensor
- Low power thermostat connections for 4kW channels
- Auxiliary input for additional thermostat or water level sensor

Clock and Calendar

- Automatic switching between GMT & BST
- Battery backup (clock and user time settings)
- 24 Hour clock with 1 minute resolution (displays hours, minutes, day & date)

MCT Automatic GMT/BST Switching

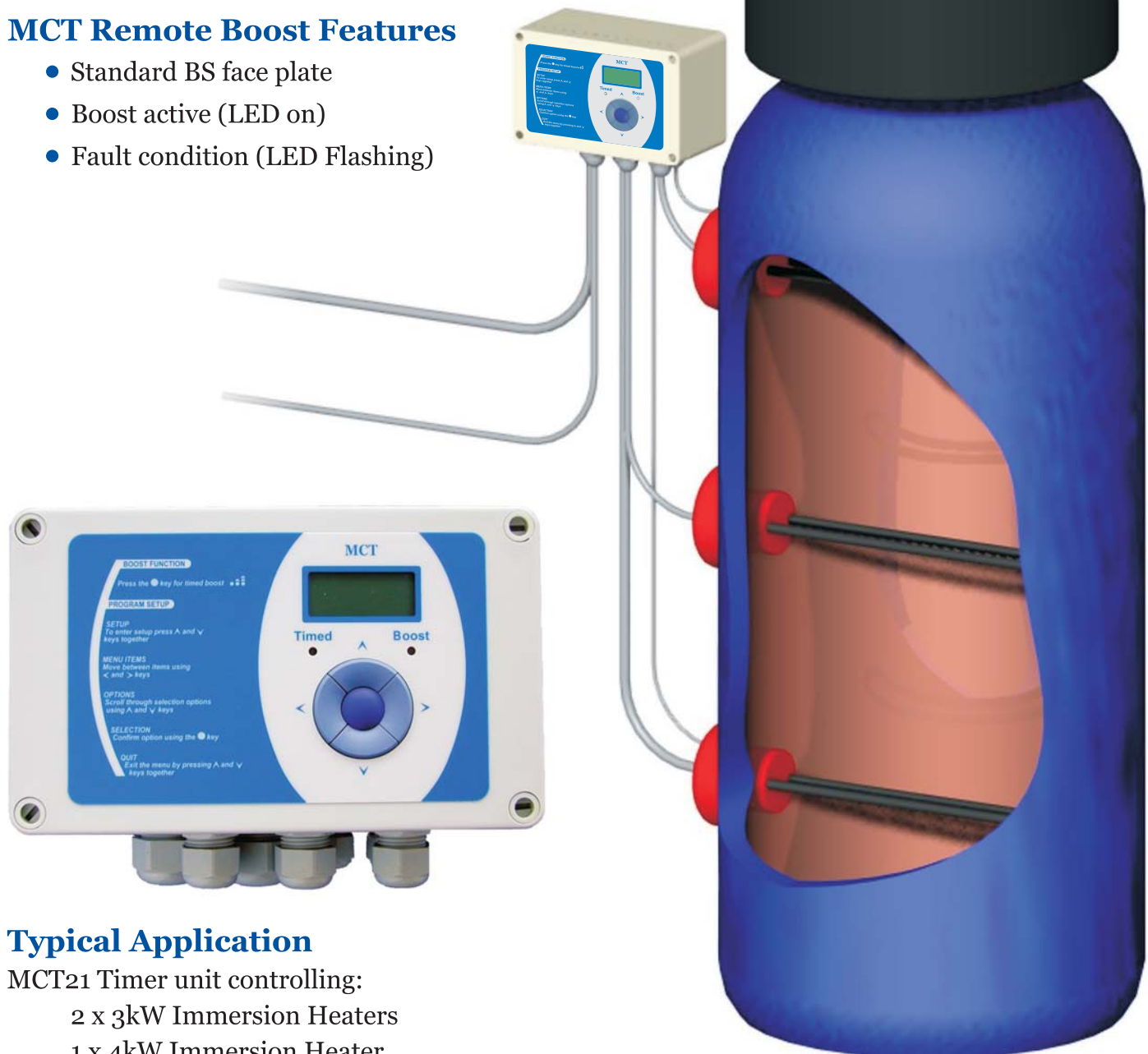
The standard range now comes with a 'Fit & Forget' solution for the clock function. The clock automatically switches between GMT & BST at the appropriate date & time and also automatically compensates for leap-years. The setting of the calendar day, month and year is very easy using our intuitive menu structure. In normal operation the clock will also display day & date details.

MCT Remote Boost Button

A remote boost button is now available that allows the boost function to be controlled from outside the 'water tank' cupboard. The button has a visual indicator which shows boost activity or a fault condition.

MCT Remote Boost Features

- Standard BS face plate
- Boost active (LED on)
- Fault condition (LED Flashing)

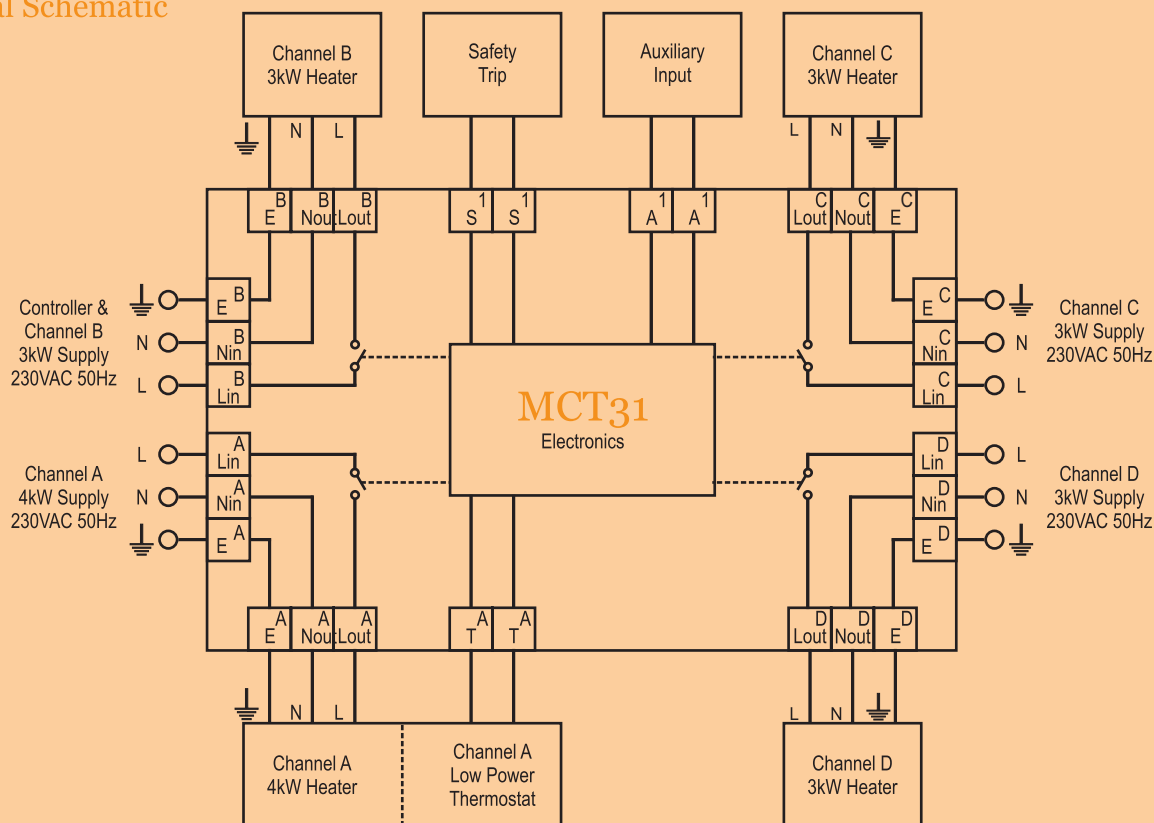


Typical Application

MCT21 Timer unit controlling:
 2 x 3kW Immersion Heaters
 1 x 4kW Immersion Heater

Multi-channel immersion heater timer

Typical Schematic



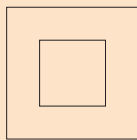
Physical

Overall dimensions : W x H (inc. cable glands) x D in mm	180 x 140 x 90
Typical Weight : grams (g)	800

General specification

Purpose of control : Sensing
 Classification : Type 1.B
 Contacts : Micro-disconnection
 Rated impulse voltage : 4000V
 Construction : Independently surface mounting control

Mounting : Surface mounting
 Enclosure : Flame retardant high impact polystyrene-HIPS
 Shock protection : Class II
 Ball pressure test : 75°C
 Enclosure protection : IP30
 Operating temperature range : 0°C to 40°C
 Pollution control situation : Pollution degree 2
 EMC directive : (EMC) (89\336\EEC), (92\31\EEC)
 LV directive : (LVD) (72\23\EEC), (93\68\EEC)
 Product identity : Can be badged for OEM



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