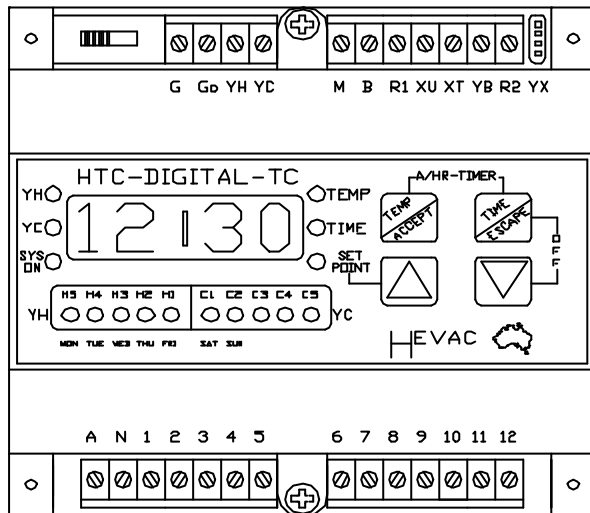


# HTC DIGITAL SERIES

## HTC-DIGITAL-TC MICROPROCESSOR BASED MULTISTAGE TEMPERATURE CONTROLLER and 365 DAY TWO CHANNEL TIME CLOCK



*The **HTC-DIGITAL-TC** is a fully programmable microprocessor based temperature controller and two channel 365 day time clock with optimiser function.*

*This controller is intended for use in air-conditioning applications where the control of ON/OFF stages of heating and cooling and/or sequencing of modulating actuators is required.*

*The **HTC-DIGITAL-TC** also incorporates an after hours run on timer function, and a temperature optimiser function.*

### Features

- Australian made and designed.
- Dual supply voltage 24v or 240v A.C (User Selectable)
- Five programmable 2 AMP (resistive) relay contacts.
- L.E.D display and indication of all outputs.
- Two analogue 0-10VDC Heating and Cooling outputs.
- Two channel 365 day time clock and optimiser.
- After hours override and run on timer facility.

**HTC-DIGITAL-TC Technical Specifications**

<i>Power supply (User Selectable)</i>	<i>24VAC or 240VAC</i>
<i>Power consumption 240 volts</i>	<i>7 VA</i>
<i>Power consumption 24 volts</i>	<i>1 VA</i>
<i>Relay 1 to 5 power ratings</i>	<i>240VAC 2 amp resistive,0.75 amp inductive</i>
<i>Temperature setpoint range</i>	<i>8 to 33 Degrees Celsius in 0.1 increments</i>
<i>Memory back-up</i>	<i>Replaceable 5 year 3volt Lithium battery CR1220</i>
<i>Relay switch ON points (deadband) from setpoint</i>	<i>0.1 to 9.9 Degrees Celsius</i>
<i>Relay Hysterisis (switching differential)</i>	<i>0.3 to 9.9 Degrees Celsius</i>
<i>Relay energise time delay</i>	<i>0.1 to 9.9 Minutes</i>
<i>YH / YC output voltage</i>	<i>0-10 VDC</i>
<i>YH / YC start point (deadband)</i>	<i>0.1 to 9.9 Degrees Celsius</i>
<i>YH / YC range (proportional band)</i>	<i>0.1 to 9.9 Degrees Celsius</i>
<i>Remote set point shift input on Terminal R1 (Potentiometric)</i>	<i>10 k Pot. Programmable authority of 0 to +/- 9 Degrees Celsius</i>
<i>Remote set point shift input on Terminal R2 (Voltage)</i>	<i>0-10 VDC. Programmable authority of 0 to +/- 9 Degrees Celsius</i>
<i>Unoccupied Economy mode added Deadband</i>	<i>1 to 9 Degrees Celsius added to both the Heat &amp; Cool Deadband settings</i>
<i>Terminal YB slave output</i>	<i>0 to 5 VDC over programmable temperature deviation from setpoint -9.9 to + 9.9 degrees Celsius</i>
<i>Relay status by RED/GREEN LED bar graph</i>	<i>RED Heating stage on/ GREEN Cooling Stage on</i>
<i>Terminal YX output</i>	<i>RS485 output to PC for remote monitoring and programming use</i>
<i>Time switch ONE</i>	<i>7 day Programmable with single ON/OFF settings per day</i>
<i>Time switch TWO</i>	<i>7 day Programmable with single ON/OFF settings per day (holiday override selectable)</i>
<i>Holiday Programming</i>	<i>12 Block dates, which can be individual days or group of dates</i>
<i>Daylight saving</i>	<i>START and FINISH days programmable</i>
<i>Optimiser function</i>	<i>Selectable ON or OFF (early start time limited to 3 hours maximum) self adaptive</i>
<i>After hours run override</i>	<i>Programmable from 1 to 4 hours,when activated the SYS ON LED flashes</i>
<i>SYSTEM ON indication</i>	<i>YELLOW sys on LED</i>

## HTC-DIGITAL-TC Terminal Designations

<b>G</b>	24 VOLT AC SUPPLY ACTIVE	<b>A &amp; N</b>	240 VOLT AC SUPPLY
<b>G0</b>	24 VOLT AC SUPPLY GROUND REFERENCE	<b>1</b>	RELAY ONE COMMON INPUT
<b>YH</b>	0-10VDC HEATING OUTPUT	<b>2</b>	RELAY ONE NORMALLY OPEN OUTPUT
<b>YC</b>	0-10VDC COOLING OUTPUT	<b>3</b>	RELAY TWO NORMALLY OPEN OUTPUT
<b>M</b>	COMMON FOR ALL MEASUREMENT AND CONTROL INPUTS	<b>4</b>	RELAY TWO COMMON INPUT
<b>B</b>	ROOM SENSOR INPUT	<b>5</b>	RELAY TWO NORMALLY CLOSED OUTPUT
<b>R1</b>	10 K OHMS REMOTE SETPOINT SHIFT INPUT	<b>6</b>	RELAY THREE NORMALLY OPEN OUTPUT
<b>XU</b>	UNOCCUPIED ECONOMY MODE INPUT	<b>7</b>	RELAY THREE COMMON INPUT
<b>XT</b>	AFTER HOURS RUN ON INPUT	<b>8</b>	RELAY THREE NORMALLY CLOSED OUTPUT
<b>YB</b>	AUXILIARY OUTPUT	<b>9</b>	RELAY FOUR COMMON INPUT
<b>R2</b>	0-10VDC REMOTE SETPOINT SHIFT INPUT	<b>10</b>	RELAY FOUR NORMALLY OPEN OUTPUT
<b>YX</b>	RS485 COMMUNICATIONS OUTPUT	<b>11</b>	RELAY FIVE COMMON INPUT
		<b>12</b>	RELAY FIVE NORMALLY OPEN OUTPUT

## Dimensions

ALL DIMENSIONS IN MILLIMETRES

