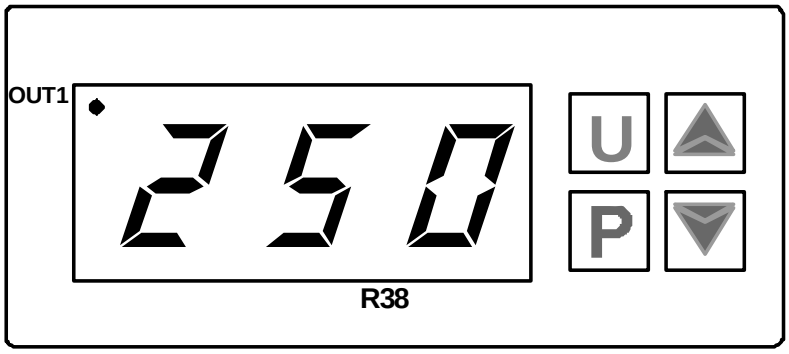
Operating Instructions

Temperature Controller

R38



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See also the main manual for the oven or other product to which the controller is fitted.

1. R 38 – DESCRIPTION

1.1. R38 - PID

This is a PID version of the R38 PID controller by Technologic. The PID control produces pulsed power to the elements. It features simple adjustment of the setpoint, a large display of the current temperature, and an indication of when heating is occurring.

2. OPERATION

2.1. Operating Cycle

The oven is fitted with a combined Supply light and Instrument switch. The light (green) is on whenever the oven is connected to the supply. The switch cuts off power to the control circuit.

If the oven has fan-assisted circulation; the fan is on when the instrument switch is on.

Connect the oven to the electrical supply. The Supply light should glow.

Operate the instrument switch to activate the temperature controller. The controller becomes illuminated and goes through a short test cycle.

If no process timer is fitter, the controller becomes illuminated and goes through a short test cycle. If a timer is fitted, the controller may not become illuminated when the oven is switched on – to start the controller, press the U button on the timer once (see section 3).

Adjust the temperature controller - see section 2.2.

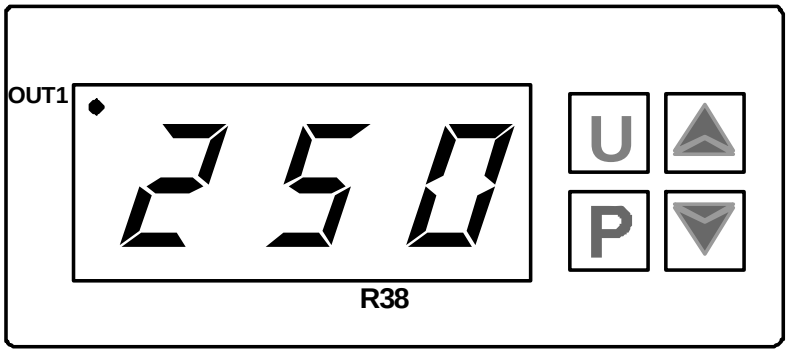
Process timer option. See section 3 for timer setting and operation.

Overtemperature option. If the hydraulic thermostat overtemperature option is fitted, set the rotary dial to the desired protection temperature.

Unless a process timer is fitted, and is off, the oven starts to heat up according to the controller set point.

To turn the oven off, set the Instrument switch to it's off position; the controller display will go blank. If the oven is to be left off unattended, isolate it the electrical supply.

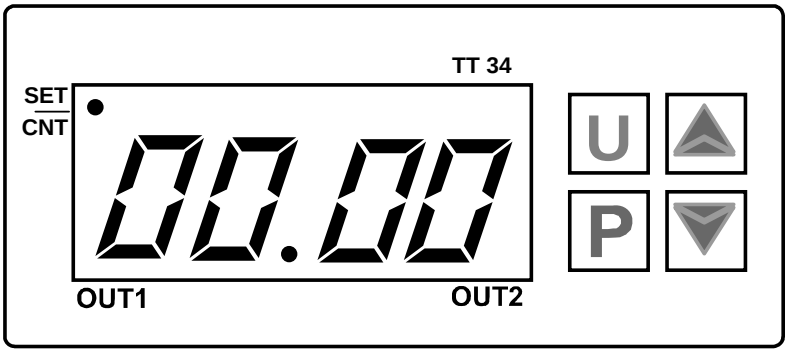
2.2. Controller Operation



When switched on, the controller lights up, goes through a short test routine, and then displays the measured temperature and starts to control. The output light OUT1 indicates when heating is occurring.

To alter the setpoint, press the up or down arrow key once, "SPI" flashes. Then use the up and down arrow keys to adjust the setpoint. Press the **P** key to accept.

3. PROCESS TIMER (IF FITTED)



To set a process time:

Press the **P** key; t 1 shows momentarily on the display and the SET/CNT light flashes quickly. Use the arrow keys to adjust the process time, which is in hours and minutes (hr.mn). Wait 5 seconds without pressing a key, or press the U key once, and the display returns to normal.

If a process time of zero is set then the timer is disabled and the controller operates as though the timer is not present.

To start the timer:

Press the **U** key once. Timing starts. The SET/CNT light flashes slowly while timing is in progress, and the display counts down (at the end of each minute).

At the end of timing the OUT light comes on continuously and power to the temperature controller is cut off.

To reset the timer after timing has finished:

Press the **U** key once. The timer is now idle: it is not stopping the oven from heating, nor is it timing.

Power is only supplied to the temperature controller when the timer is reset or is timing.

To stop the timer during timing:

A press of **U** during counting down stops the timer. The temperature controller remains on.

It is not possible to resume timing from where it stopped: the next press **U** resets the timer.

3.1. Overtemperature Control (if fitted)

The hydraulic thermostat overtemperature controller should typically be set at 15°C above the main controller. If an overtemperature condition occurs, always investigate the possibility that the main control system has failed.

An overtemperature condition always cuts off power to the heating elements. To reset the condition, first either allow the oven to cool, or increase the overtemperature setting.

If the overtemperature trip operates then a click occurs and a warning light near the thermostat lights up; the reset button on the thermostat pops out. The reset button is hidden behind the control dial: to reset the oven it is necessary to turn the thermostat dial till the hole lines up with the reset button and press it using a small diameter rod.

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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