## ESi

**ESRTP6COT / ESRTP6CWOT**

# Twin Zone Thermostat controller

## Installation Instructions



## 1. Installation

### Installation Safety Instructions

The unit must be installed by a suitably qualified person in accordance with the latest IEE Wiring Regulations. Isolate mains supply before commencing installation. Please read all instructions before proceeding.

Ensure that the fixed wiring connections to the mains supply are via a fuse rated at not more than 3 Amps and Class 'A' switch having a contact separation of a minimum of 3mm in all poles. The recommended cable sizes are 1.0mm sqr or 1.5mm sqr. No earth connection is required as the product is double insulated but ensure continuity of earth throughout the system.

### General Safety Instructions

This product complies with the essential requirements of the following EC Directives:
- Electro-Magnetic Compatibility Directive 2014/30/EU.
- Low Voltage Directive 2014/35/EU.
- EC Marking Directive 2014/30/EU.

Please leave the user instructions with the end user where they should be kept in a safe place for future reference.

### Warning Notices

> **WARNING:** *Always isolate the ac mains supply before installing. This product must be fitted by a competent person, and installation must comply with the guidance provided in the current editions of BS767 (IEE wiring regulations) and part "P" of the building regulations.*

### Maintenance

Always isolate the mains supply before commencing any work, servicing or maintenance on the system. And please read all instructions before proceeding.

Arrange for an annual maintenance and inspection schedule to be carried out by a qualified person on every part of the heating and hot water system.

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### Fitting the Programmable Room Thermostat

The ideal position to locate the Programmable Room Thermostat is about 0.9-1.2m above floor level, in a location where the thermostat is accessible, reasonably lit and free from extremes of temperature and draughts. Do not position the thermostat near sources of heat, such as radiators, lights, TV, direct sunlight or on an outside wall.



0.9-1.2m
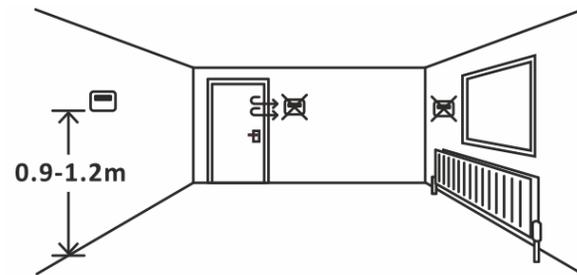
### Installing the Programmable Room Thermostat

1. Use a flat headed screwdriver to press the fastener at the top of the unit, then gently loosen from the unit, unhooking from top to bottom.
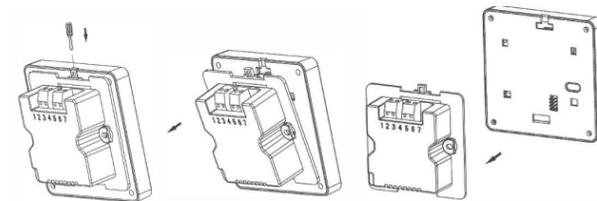


2. Fix the 35mm back box, terminals at the top, onto a 2 flange metal back box with 2 BM3.5x23 screws. If installing on a 4 flange metal back box, simply push down the flanges on the top and bottom to leave the flanges on the left and right hand side.
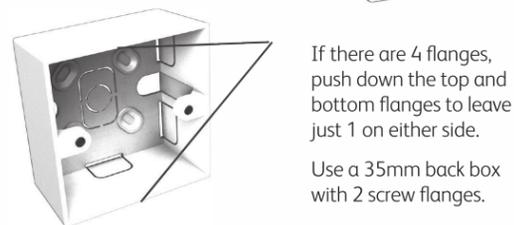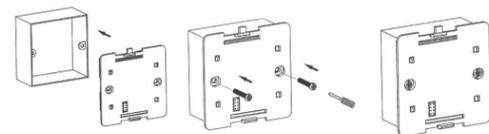


If there are 4 flanges, push down the top and bottom flanges to leave just 1 on either side.

Use a 35mm back box with 2 screw flanges.

3. Route the wires through the back of the wall plate. Fit the wires to the wall-plate in accordance with the relevant diagram and in accordance with I.E.E. regulations.

4. Fit the unit onto back-plate securing from bottom to top.



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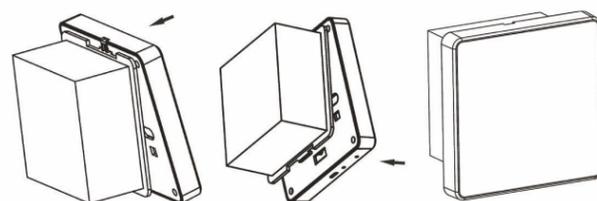
### Room Thermostat Connections



| +V | 0V |
|---|---|

**DC5V**

Opentherm — OT | OT

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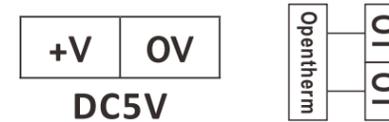
### Required during installation:
- Permanent 230V power
- Opentherm to Boiler Cable
- 2 x Low voltage 4 core cable from power supply to room thermostat

### Preparing the power supply for installation:
- Find a suitable location near the zone valves
- Loosen the 4 screws at the corner of the cover
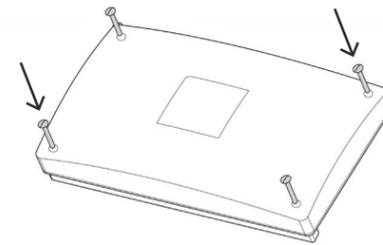


### Installing the cabling
- Remove the front cover to reveal the PCB and terminals on the back plate
- Secure the back plate to a non-combustible flat surface within 1 meter of the zone valves
- Install the 230V power supply, opentherm and 4 core low voltage cable
- Install the zone valve plugs, taking note of zone 1 and zone 2
- Use the cable clamps to secure all surface wiring
- Replace the cover then tighten the 4 screws
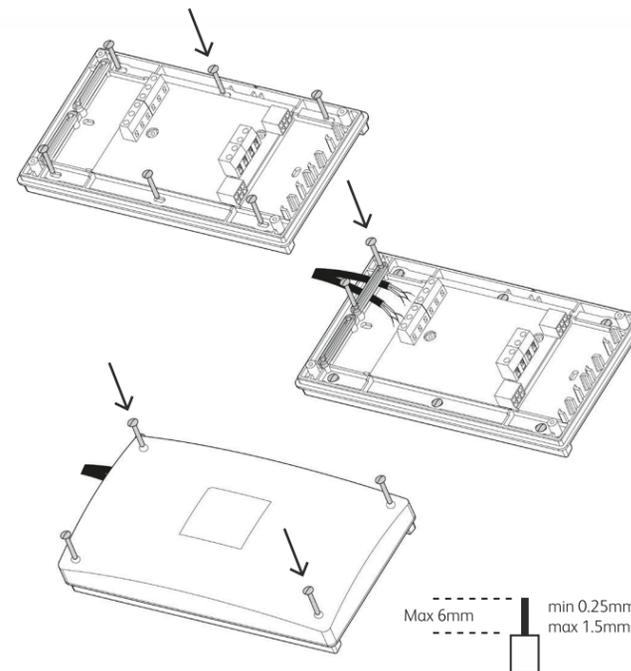


Max 6mm
min 0.25mm²
max 1.5mm²

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## 2. Technical Data

| | ESRTP6COT / ESRTP6CWOT Programmable Room Thermostat | Power Supply |
|---|---|---|
| Temperature Control Class | ErP Class VIII Product (5%) | |
| Energy Efficiency Technology | Multi-sensor room temperature control, with enhanced load compensator. | |
| Programming | 7 day, 5/2 day & 24 hour | |
| Power Supply | 5VDC | 230VAC |
| Temperature Adjustment Range | 5°C to 35°C | |
| Total Switch Rating | | 3(1)A |
| Heating Contact Type | 5VDC | 230VAC Switched Live |
| Temperature Sensor Type | Multi-thermistor with intelligent compensation | |
| Temperature Accuracy | +/- 1°C @ 20°C | |
| Enclosure material | Flame retardant thermoplastic | |
| Ingress Protection Class | IP30 | |
| Dimensions *(main unit, excluding connections)* | D14mm x W87mm x H88mm | D35mm x W120mm x H210mm |
| Programme Events | Fully programable, selectable 4 or 6 per day. | |
| Clock | Crystal controlled, Automatic time change Summer/Winter (BST/GMT). Settable time-zone offsets | |
| Standard Compliance | EN60730-1 EN60730 2.7, EN55014 1:2006+A1:2009+A2:2011, EN61000-3-2:2014, EN61000-3-3:2013, EN55014-2: 2015, EN60730-1:2011, EMC Directive 2014/30/EU, LVD Directive 2014/35/EU | |

*Continued overleaf*

**WARNING: Interference with sealed parts renders the guarantee void.**

In the interests of continuous product improvement we reserve the right to alter designs, specifications and materials without prior notice and cannot accept liability for errors.

## ESi
### Energy Saving Innovative Controls Limited
**www.esicontrols.co.uk**

We are continuously developing our products to bring you the very latest in energy saving technology and simplicity. However, should you have any questions setting up your controls please email us at **sales@esicontrols.co.uk**.

UK CA CE

Version 2.0

## 3. Optimisation Settings

- To enter the Advanced Menu, first wake the thermostat up by touching the home button.
- Touch and hold the ☰ until ADVANCED SETTINGS is displayed.
- Use the ⌄⌃ to navigate to the desired menu to be changed (OPTIMISATION).
- Touch the Home button to enter the menu, accept changes and move to the next settings.

| | | |
|---|---|---|
| OPTIMISATION | OPTIMUM STAR OFF | PTIMUM START ON |
| Use ⌄⌃ to navigate to optimisation. Touch the home button to enter optimisation settings. | Touch the home button to enter heating settings. Digits which are flashing can be adjusted using ⌄⌃. | Select either OFF (default) or ON by using the ⌄⌃. Touch the home button to accept and return to menu. |
| SAVING | OPTIMISATION | OPTIMUM STOP OFF |
| | Touch the home button to enter optimisation settings. Navigate to OPTIMUM STOP by using ⌄⌃. | Repeat the above to change all the settings. |
| SAVING | | |

## 4. Technical Settings

- To enter the Technical Menu, navigate to the Installer Settings whilst in the Advanced Menu, touch and hold the ☰ until TECHNICAL SETTINGS is dispalyed.
- Use the ⌄⌃ to navigate to the desired menu to be changed (INSTALLER DETAILS).
- Touch the Home button to enter the menu, accept changes and move to the next settings.

| | | |
|---|---|---|
| TECHNICAL SE | LOW TEMP PRO | LOW TEMPERAT 05s TEMPERATURE |
| Touch the home button to enter TECHNICAL SETTINGS. | Touch the home button to enter LOW TEMPERATURE PROTECTION menu. | USE the ⌄⌃ to set the desired temperature and touch the home button to save changes and return to the menu. |

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| | | |
|---|---|---|
| SWING | SWING 05s TEMPERATURE | SAVING |
| USE the ⌄⌃ to navigate to the SWING menu and touch the home button to enter menu. | USE the ⌄⌃ to set the desired temperature and touch the home button to save changes and return to the menu. | |
| TEMPERATURE | CALIBRATION 05s TEMPERATURE | SAVING |
| USE the ⌄⌃ to navigate to the TEMPERATURE CALIBRATION menu and touch the home button to enter menu. | USE the ⌄⌃ to set the desired temperature and touch the home button to save changes and return to the menu. | |

## 5. Entering Installer Details

- Navigate to the Technical Menu – See Section 4.
- Use the ⌄⌃ to navigate to the desired menu to be changed (INSTALLER DETAILS).
- Touch the Home button to enter the menu, accept changes and move to the next settings.

| | | |
|---|---|---|
| TECHNICAL SE | INSTALLER DE | NAME ____ |
| Use ⌄⌃ to navigate to INSTALLER DETAILS Touch the home button to enter optimisation settings. | USE the ⌄⌃ to enter the correct digit and touch the home button to move to the next digit. | Once name is completed continue to touch the home button until the screen shows saving. |
| SAVING | TELEPHONE _____ | SAVING |
| After saving is complete the screen will display the installer TELEPHONE NUMBER. | USE the ⌄⌃ to enter the correct number and touch the home button to accept and move to the next number. | Once number is completed continue to touch the home button until the screen shows saving. |

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## 6. DHW Temperature

- To enter the Advanced Menu, first wake the thermostat up by touching the home button.
- Touch and hold the ☰ until ADVANCED SETTINGS is displayed.
- Use the ⌄⌃ to navigate to the desired menu to be changed (OPENTHERM PARAMETER)
- Touch the Home button to enter the menu, accept changes and move to the next settings.

| | | |
|---|---|---|
| CONTROL | DHW CONTROL OFF | DHW CONTROL ON |
| Use ⌄⌃ to navigate to DHW CONTROL. Touch the home button to enter DHW control settings. | Touch the home button to enter heating settings. Digits which are flashing can be adjusted using ⌄⌃. | Select ON by using the ⌄⌃. Touch the home button to enter DHW temperature menu. |
| DHW CONTROL 60.0 | SAVING | |
| Use the ⌄⌃ to set the desired temperature and touch the home button to save changes and return to the menu. | | |
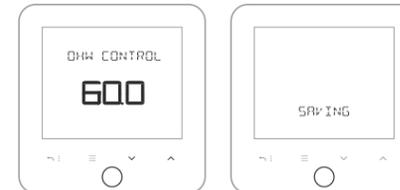
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## 7. Wiring Diagram