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## CENTRAL HEATING UNIT CU1B, ASSEMBLY AND INSTALLATION

### 1. Construction

Central heating unit CU1B includes temperature control and overtemperature cut-out functions. Loval central heating units are assembled of the following components (Picture 1):

Immersion heater Max 6000W 230-240V

Stand-off .

Terminal box S6, including temperature control/overtemperature cut-out unit.

### 2. Assembly and installation

#### Mounting of immersion heater

Screw on the immersion heater (1) together with the gasket onto the mating boss on the boiler. Check that the thread size and the immersed length of the heater are suitable for the boiler. The operating position of the immersion heater is not limited, however, it must be completely immersed in water.

#### Installation with stand-off

Connect the supplied long wires (2.5mm<sup>2</sup> 3 pcs) to the terminal screws of the immersion heater (r1 ,r2 ,r3).

Screw on parts 1a to n1 and n2. Screw parts 2a to parts 1a. Terminate wires 4mm<sup>2</sup> 2pcs to terminals n1, n2 (1a/2a 2pcs).

Screw on the studs (9) to the element head. Then put on the stand-off (10) over the terminal wires and studs. Open the lid (5) of the terminal box and mount the base of the box (2) onto the stand-off, using the clamp ring (3). Remove the screws on the clamp ring and secure the box using the nuts on the studs. To make this easier, the temperature control unit (4) can be removed. Push the bulbs of the temperature control unit into the pocket tube of the heater. Terminate the wires from the element terminals to the push-on terminals 11, 21 and 31 of the temperature control unit. The wires on the other side are factory installed from terminals 12, 22 and 32 to the push-on terminals A, C and D on the terminal block. Terminate wires (4mm<sup>2</sup> 2pcs) from the element to push-on terminals E, F.

Next mount the temperature control unit. Make sure not to loosen the push-on wire terminals. The supply cable can now be connected. Strip back the earth wire slightly longer than the phase wires. Terminate the phase wires to terminals L, N.

Terminate the earth wire to the PE terminal on the base of the terminal box.

When fixing the lid, make sure the fixing bracket of the temperature control unit remains within the grooves on the base of the terminal box.

#### Installation of thermal insulation

Make sure that the thermal insulation of the boiler is tightly around the stand-off. This ensures as small thermal conduction as possible into the terminal box. The connecting cable and the terminal box have to remain outside of thermal insulation.

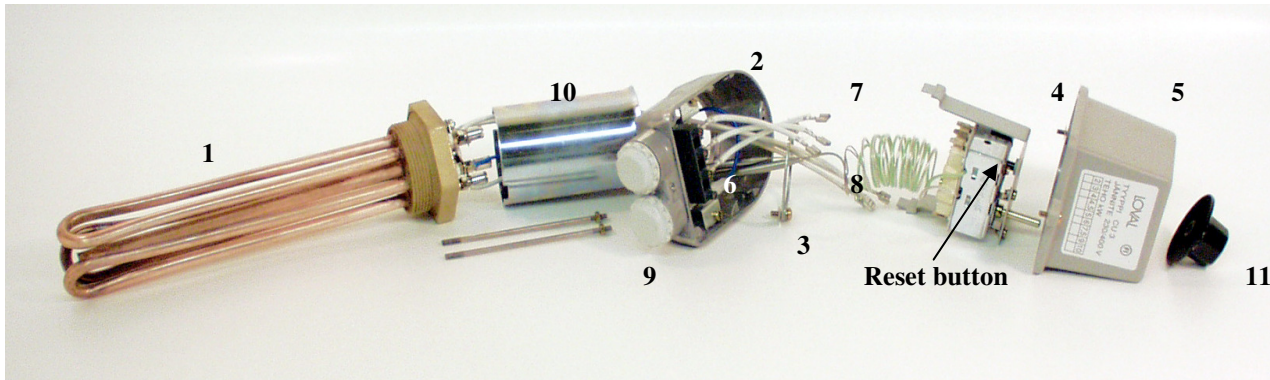
#### Notes on electric installation

The supply cable must be suitable for the chosen power. If the stand-off is sufficiently high and in accordance with this instruction, then plastic sleeved supply cable (MMJ) can be used. If no stand-off is used, the temperature rating of the supply cable must be min. 170 °C.

A switch must be provided to enable switching off of all phases of the unit from the mains supply.

**If the heater doesn't work for some reason: first press the black reset button on the temperature control/cut out unit to check that the cut out unit has not operated.**

PICTURE 1. CENTRAL HEATING UNIT CU1B



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|------------------------|-------------------|-------------------------|-------------------------|
| 1. Immersion heater    | 2. Base of box    | 3. Clamp ring           | 4. Thermost / Cut-out   |
| 5. Lid of terminal box | 6. Terminal block | 7. Terminal block wires | 8. Terminal screw wires |
| 9. Studs               | 10. Stand-off     | 11. Control knob        |                         |

