

## INTRODUCTION

### SAFETY FIRST

Please read these instructions before installing and operating this product.

### Infresco-T 6kW

The Infresco-T 6kW is part of a family of controllers designed to provide energy saving when used with Quartz Infrared Halogen Lamps or other Heating and Lighting Products. The 'T' model switches the lamps on for a pre-determined time period of between 1 and 30 minutes. Designed with ease of wiring in mind, this unit is ideal for controlling up to four 1.5kW lamps through the use of two additional cable entry points.

The microcontroller-based unit incorporates zero-voltage switching and a soft-start function to eliminate the lamps' initial high inrush current – potentially increasing lamp life by as much as 30% and reducing the stress on the mains supply. Typical use is for Infra Red Heating lamps, Garden lighting

Installation is simple and once installed is relatively maintenance free.

### Product Features and Benefits

Significant energy saving – lamps are on for a pre-determined time

Extends lamp Life

Ideal for controlling up to 4 x 1.5kW lamps

Soft-start/zero-voltage switch-off

Low-cost

Easy to install

### Installation

The Infresco-T 6kW unit should be positioned with the cable glands facing down and securely fixed via the four mounting holes accessible from the front of the unit or by the alternative rear mounting holes underneath the PCB. For the latter option, remove the four screws securing the PCB and carefully remove the PCB to allow access to the rear mounting holes. Cover any holes used with caps supplied with the unit.

### Wiring

**Warning! Ensure the mains supply has been isolated before wiring this unit.**

The unit is fitted with three cable glands. Only one cable should be fitted per gland to maintain the unit's IP rating. Two additional cable glands can be fitted to allow the connection of up to four lamps. See Figure 2.

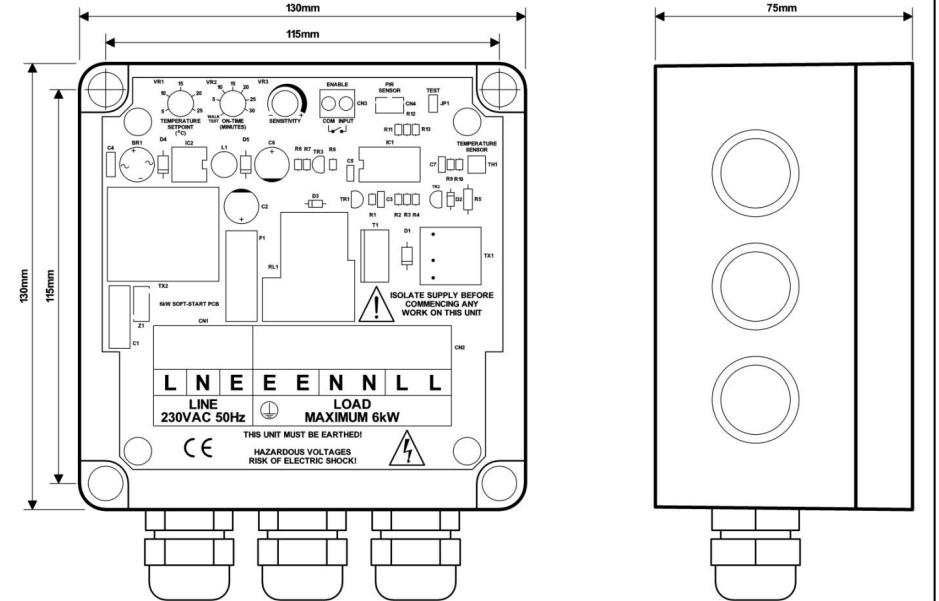
The mains supply connects to the terminal block marked 'LINE'. Connect the supply LIVE to the 'L' terminal, NEUTRAL to the 'N' terminal and EARTH to the 'E' terminal.

The lamps connect to the terminal block marked 'LOAD'. Connect the load LIVE to the 'L' terminal, NEUTRAL to the 'N' terminal and EARTH to the 'E' terminal. The load connections are paired to allow the connection of several lamps.

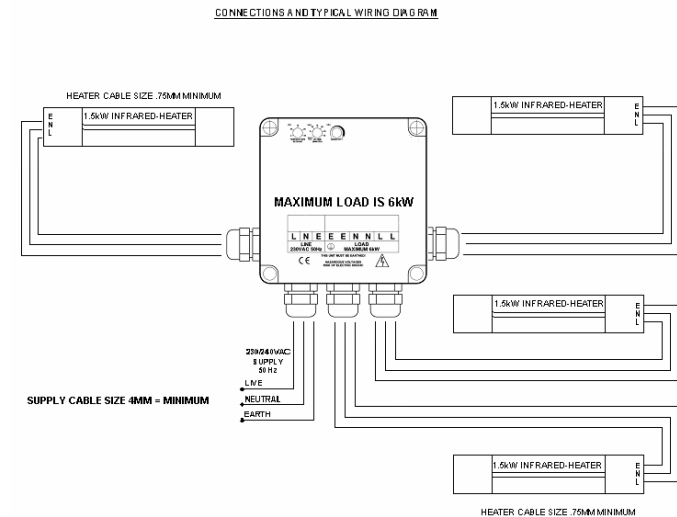
**Important: Ensure all earth wires are connected to maintain earth continuity to the lamp fittings.**

Check all wiring – particularly the line and load connections and make sure the cable glands

### Dimensions and Connections



### Example of wiring Diagram



### Operation

Adjust the lamp on-time preset (VR2) to between 1 and 30 minutes as required.  
Switch on the mains supply to the unit. Press the push button on the front of the unit to switch on the lamps.

### Technical Specification

Mains Voltage	230Vac +/- 10% 50 Hz
Operation Current	Max 25
Power Consumption	50mA
Set Time Period	1 to 30 Minutes
Factory Set Temperature trip point	20°C
Max load at 20°C ambient	6 kW
Max Unit Operating Temperature	65°C
IP Rating	65
Gland Diameter (Fitted)	Max Cable Entry 2.5mm <sup>2</sup>
4 Lamp Installation	Must be fitted in Parallel

**WARNING: THIS UNIT MUST BE EARTHED**

### Troubleshooting

**Problem:** Lamps do not switch on.

**Solution:**

- 1) Check the LINE and LOAD wiring connections to the unit and ensure the mains supply is switched on. Go to 2) if fault still exists.
- 2) Check the lamps/Lamp fittings. If possible, fit a known working lamp. Go to 3) if fault still exists.
- 3) Isolate the mains supply then check, and replace if necessary, the PCB-mounted fuse (F1). If the fault still exists, contact your supplier.

**Problem:** Lamps do not switch off.

**Solution:**

- 1) Check the on-time setting is set correctly. Any adjustment will only take effect the next time the lamp is activated. Go to 2) if fault still exists.
- 2) Check the

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.E. wiring regulations (BS7671) by suitably qualified/trained personnel. These regulations contain important requirements regarding safety of electrical equipment (for International Standards refer to I.E.C/ directive IEC950).

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# Users & Installation Manual

for

## Infresco T 6.0kW

RoHS Compliant  
Directive  
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