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# Thermotube Tubular Heater Installation & Wiring Instructions

v.4.1

**IMPORTANT:** Read these instructions before commencing the installation.

**DO** ensure that all electrical connections (including the plug and any extensions lead, for example) are properly made and in accordance with these instructions.

**DO** fit a suitable safety guard if necessary (see Ventilation & Safety Guards).

**DO** ensure the plug is removed from the supply before removing any fixed cover or grille on the appliance. If permanently connected then switch off the main supply feed.

**DO** ensure the appliance is correctly used by all the family.

**DO** ensure the electrical lead does not come into contact with the heater.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Caution – Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present. **DO NOT** continue to use the appliance if you are in any doubt about whether or not it is functioning normally. Disconnect the appliance from the main supply and consult your supplier.

**DO NOT** COVER ANY HEATING APPLIANCE that is switched on with clothing, etc.. Overheating can cause fires and damage and shorten the life of the tubular heater.

**DO NOT** let children push anything into holes or slots in the appliance.

**DO NOT** guess or take chances with any kind of electrical appliance - it is better to be safe than sorry.

**DO NOT** locate the heater immediately below a fixed socket outlet.

**DO NOT** handle this appliance with wet hands.

Children less than 3 should be kept away unless continuously supervised.

Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.

**WARNING**: This heater is not equipped with a device to control the room temperature. Do not use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own, unless constant supervision is provided.

**CAUTION:** Thermotubes are NOT waterproof

## **Applications**

Thermotube tubular IP54 heaters are rustproof and when sealed are more resistant to damp. By applying a silicone sealing compound\* around the sealing shoulder of the terminal cover, the rivets and the sealing edge of the end cap allows the use of thermotubes in certain horticultural applications such as greenhouses and garden frames along with use in many industrial applications.

Thermotubes are not suitable for soil heating, if covered with soil they may overheat and eventually corrode.

Thermotubes are particularly easy to install either singly or in banks, although it is essential to observe a few precautions when installing for use under severe conditions. To maintain economy of operation thermostatic or timed control is essential and is often desirable in other applications - please see our range of approved timers and thermostats at our website.

\*Care should be taken to use a heat resistant grade of silicone sealing compound.

#### Thermotube Installation

To ensure safe operation, Thermotubes MUST always be mounted horizontally on the wall or floor.

Thermotubes must not be mounted less than 50mm from the ceiling and not less than 30mm from the floor or skirting. A minimum of 50mm should be allowed beneath any shelf or projection.

A spacing washer is provided beneath the fixing clips of both the 1-way and 2-way brackets and should be discarded from the bracket fixed at the terminal end of the Thermotube. This allows a tight and positive fit at one end with clearance for normal expansion and contraction at the other.

Double banks of Thermotubes can be installed using our linking kit, (TBX2-PK) and mounted in accordance with the mounting details for banked Thermotubes.

Thermotubes may be banked more than two high using the approved TBX2-PK and ensuring that the supply cables are suitably rated for the required loading and that the correct fuse is used.

All Thermotubes are supplied with two 1-way wall mounting brackets and cable gland.

Heaters must be fitted to a switched outlet having a contact separation of 3mm in both poles.

The 110V Thermotube must only be used with a 110V isolating transformer.

**Please Note:** All wiring to be in accordance with the current I.E.E. Regulations or the appropriate standards of your country and must be installed by a suitably qualified person

### **Ventilation & Safety Guards**

The surface temperature of Thermotubes becomes high when the product is in continuous use and Thermotubes should be sited with care to allow a free circulation of air.

Guards (Thermoguards) must be fitted in situations where the tube heater mounted height is less than 1850mm or where this is a possibility of clothing or materials coming into contact with the tubular heater, (e.g. airing cupboards and drying rooms) or in situations where there is an possibility of accidental bodily contact.

A Thermoguard does not give full protection for young children or the infirm.

#### WARNING: THIS APPLIANCE MUST BE EARTHED

#### Wiring

If not supplied, heat resistant 3 core flex high temperature silicone insulated mains supply lead of 0.5mm minimum section must be used with a 4mm to 9mm diameter (e.g H05V2V2-F 3G 0.75mm2).

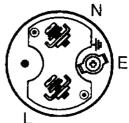
When plugging in the heater for the first time you may experience slight smoking from the heater for up to 1 minute, however if smoking persists please switch the heater off and consult your dealer.

When fitting the cable gland ensure that no excess cable is inside the terminal cover.

### Wiring a Single 110v or 230v Thermotube

- A1. Remove the terminal cover by loosening the fixing screw.
- A2. Feed the 3 core flex through the cable gland and through the gland opening in the terminal cover toward the Thermotube.
- A3. Make the electrical connections as indicated in FIG. 1. A separate earthing conductor must be used, the size of which should be determined by the I.E.E. Regulations.
- A4. Replace the terminal cover ensuring that none of the wires are trapped then tighten the fixing screw and cable gland ensuring a tight grip on the flex.

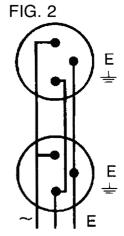




### Wiring Banked Thermotubes

The TBX2-PK which includes 2-way brackets, interconnector and connecting wires are available to buy, to install using a TBX2-PK proceed as follows:

- Remove the terminal cover by loosening the fixing screw and care-B1. fully remove the knockout section of the terminal cover.
- B2. Attach the cable gland to the screwed entry of the terminal cover then feed the 3 core flex through the cable gland and through the gland opening in the terminal cover toward the Thermotube.
- B3. Make the electrical connections as indicated in FIG. 1. A separate earthing conductor must be used, the size of which should be determined by the I.E.E. Regulations.
- B4. Join the terminal covers together using the interconnector and feed through the 3 connecting wires and make the connections as indicated in FIG. 2 using FIG. 1 as a reference.
- B5. Replace the terminal cover ensuring that none of the wires are trapped then tighten the fixing screw and cable gland ensuring a tight grip on the flex.



This product is manufactured to comply with the radio interference requirements of the Council Directive 87/308/FFC



# The Waste Electrical and Electronic Equipment (WEEE) Regulations 2006

UK - This product must be disposed of separately at your local waste recycling centre. Do not dispose of in household waste bin.

DE - Dieses Produkt muss separat bei Ihrem örtlichen Recyclinghof Abfälle entsorgt werden. Werfen Sie in den Hausmüll.

FR - Ce produit doit être éliminé séparément à votre centre de recyclage des déchets locaux. Ne jetez pas dans la poubelle des ménages.

IT - Questo prodotto deve essere smaltito separatamente al centro di riciclaggio dei rifiuti. Non gettare nel bidone dei rifiuti domestici.

NL - Dit product moet gescheiden worden ingezameld bij uw plaatselijke recycling centrum. Gooi geen huishoudelijk afval in de afvalbak.

ES - Este producto debe ser eliminado por separado a su centro local de reciclado de residuos. No tire al cubo de la basura doméstica.

SE - Produkten måste kasseras separat på din lokala återvinning av avfall centrum. Släng inte i hushållsavfall bin.

NO - Dette produktet må avhendes separat på din lokale avfallet gjenvinningsstasjon. Ikke kast i husholdningsavfall bin.

DK - Dette produkt skal bortskaffes adskilt på din lokale genbrugsstation genbrugsstation. Må ikke bortskaffes med husholdningsaffaldet bin.

FI - Tämä tuote on hävitettävä erikseen paikalliseen jätteiden kierrätyskeskuksen. Älä hävitä kotitalouksien roskakoriin.

GK - Αυτό το προϊόν πρέπει να απορρίπτονται ξεχωριστά σε τοπικό κέντρο ανακύκλωσης των αποβλήτων σας. Μην πετάτε στα σκουπίδια των νοικοκυριών.

PL - Ten produkt musi być utylizowane oddzielnie w lokalnym centrum recyklingu odpadów. Nie wrzucać do pojemnika z odpadami domowymi.

TK - Bu ürünün yerel atık geri dönüşüm merkezine ayrı ayrı atılmalıdır. evsel atık kutusuna atmayınız. HU - Ezt a terméket kell megsemmisíteni elkülönítve a helyi hulladék újrahasznosító központba. Ne dobjuk a háztartási hulladék bin.

PT - Este produto deve ser descartado separadamente em seu centro local de reciclagem de resíduos. Não descarte em lixo doméstico.

This statements do not affect the statutory rights of a consumer

#### Service To You

This product is made of high quality material and great care has been taken in its manufacture. It is designed to give good service, provided it is properly operated and maintained.

Thermo Products Ltd sell this product subject to the understanding that if any defect in manufacture or material shall appear within 24 months from the date of consumer sale the dealer from whom the product was purchased will arrange for such defect to be rectified by way of repair or replacement without charge, providing:

- (1) Reasonable evidence is supplied that the product was purchased within 24 months prior to date of claim.
- (2) The defect is not due to use of the product on any incorrect voltage or contrary to the operating instructions or to accidental damage (whether in transit or otherwise), misuse, neglect or inexpert repair.

Should service be required please apply to the dealer from whom the product was purchased or Thermo Products Ltd.

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