

# Operating, Installation & Maintenance Instructions For Flameproof Bracket Mounted Air Heaters. Cert. No. Baseefa03ATEX0586X

## Installation

BEFORE INSTALLATION, REFERENCE SHOULD BE MADE TO THE FOLLOWING STANDARDS

BS EN 60079-14  
BS EN 60079-10

**THIS EQUIPMENT CARRIES A NAMEPLATE (Fig 1) INDICATING THE GAS & TEMPERATURE CLASS GROUPS FOR WHICH IT IS CERTIFIED. PLEASE ENSURE THAT THIS CORRESPONDS WITH THE CLASSIFICATION OF THE ZONE INTO WHICH THE EQUIPMENT IS TO BE INSTALLED.**

This heater has been manufactured with great care from the highest quality materials and thoroughly inspected before leaving the works.

It must be handled with great care and stored in dry conditions, not exposed to a wet or damp atmosphere, as befits any electrical apparatus

**It is supplied ready for operation and prior to start up requires only the connection of supply cabling via a suitable Exd flameproof certified cable gland (not supplied).**

For cable entry sizes see General Assembly Drawing as supplied.

ALL TESTING, CHECKING OF THE HEATER ELEMENTS INVOLVING THE USE OF ELECTRICAL EQUIPMENT, WHICH MAY PRODUCE SPARKS, MUST BE CARRIED OUT IN A SAFE AREA BY SUITABLY QUALIFIED PERSONNEL.

**When handling the terminal box flanges, adequate precautions should be taken not to damage the mating flanges and threads on the main enclosure body.**

## Special Conditions for Safe Use

1. The units are to be only mounted within the orientations and electrical ratings specified on the certificate schedule.

## Mechanical Installation Instructions

- The heater is supplied with 2 mounting brackets which must be securely fixed to a suitable flat surface.
- One bracket is supplied fixed to the enclosure whilst the other bracket is supplied loose for fitting at the end of the heating tube. This bracket is a sliding fit and in the case of the plain tube unit, which can be up to 5.5 metres the bracket can be positioned on tube to give reduced fixing centres for better support.

**Warning: Do not cover the heater terminal enclosure.**

## Electrical Installation Instructions

**Before removing the terminal box cover, the heater should be electrically isolated.**

**All electrical wiring must be carried out by a qualified person and must be compliant with the current I.E.E Regulations to B.S.7671.**

**Before connection ensure that the supply available corresponds with that of the rating plate.**

We recommend that the insulation of each circuit within the heater be checked prior to installation. The minimum insulation reading between live and earth should not fall below  $2M\Omega$ . (B.S.7799: 1998)

If there is an unacceptably low insulation reading on any of the elements, this will have been caused by dampness due to storage in a moist atmosphere. It will be necessary to dry them out. The heater should be disconnected and returned to Ormandy Electric Heaters, Bradford.

Checks for continuity, i.e., the ohms/ph are approximately equal. See fig 2 for typical wiring diagrams.

**The air heater must be connected to electrical supply, via suitable flameproof certified cable gland (not supplied). For cable entry sizes see General Assembly Drawing as supplied.**

**Cable entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof adapter. Unused entries are to be fitted with suitable certified flameproof stopping plugs. The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a component) under an EC Type Examination Certificate to Directive 94/9/EC.**

- Ensure the sizes and type of cables and contactors are adequate for the load current they will carry. Also for temperature environment
- Check that all electrical connections are tight.
- When all electrical connections have been made replace the heater terminal enclosure.
- Ensure that the mating surfaces on the terminal enclosure and cover are free from swarf, and coated with Hylomar Universal Joint Compound. Assemble the components, tightening the screws in a diametrically opposite sequence and NOT consecutively around the flange, ensuring that a proper seal is made. The screws should be tightened without using undue force.
- After assembly, the joint surfaces should be examined by feeler gauge when the gap **should not exceed 0.15mm.**

- Should a replacement heating element be fitted at any time this installation procedure must be repeated before proceeding to switch on the heater.

**WARNING: THIS APPLIANCE MUST BE EARTHED**

### Operational Faults

**Before removing the terminal box cover, the heater should be electrically isolated.**

### Heater Not Operating

**Checks to be made by suitably qualified personnel only:**

- Main Fuses.
- Main Electrical Supply.
- Wiring to heater (No loose connections).
- Element continuity (resistance) - If faulty order a replacement element (See spare parts section).

### Maintenance

Very little maintenance of the heater is required. It is the responsibility of the owner to ensure that the heater is properly maintained

### Periodically

(Every 6 months for instance) check the elements for continuity and insulation resistance. Ensure termination soundness.

**Before removing the terminal box cover, the heater should be electrically isolated.**

In the case of major repair or element replacement the heater should be returned to

Ormandy Electric Heaters, Duncombe Road, Bradford, BD8 9TB

### Spare Parts and Replacements

All spare parts are to be ordered from Heatrae Industrial Ltd quoting the heater list number and serial number.

### Spare Parts List

- Removable core type heating element.

### Equipment Warranty

The manufacturer will make good, by repair or at his option by the supply of a replacement, defects which, after proper installation, appear in the goods, within a period of twelve calendar months after the goods have been delivered and arise solely from faulty design, materials or workmanship. Provided always that defective parts are promptly returned by the user free to the manufacturer's works, unless otherwise arranged, the repaired or new parts will be repaired or new parts will be delivered by the manufacturer free of charge.

The policy of Ormandy Electric Heaters is that of continuous improvement and development, the right is therefore reserved to change specifications without notice.

Fig. 1

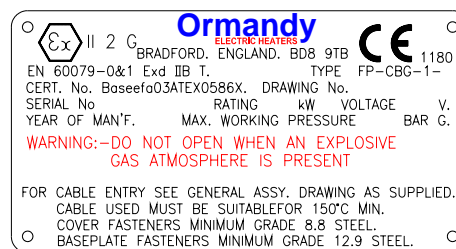
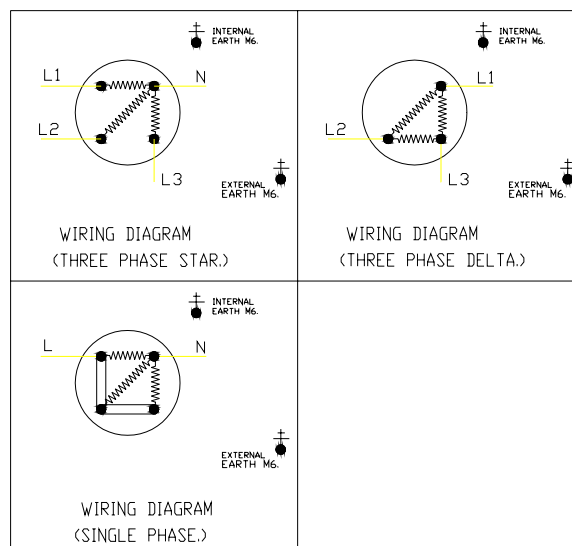


Fig. 2



Heating equipment for commerce and industry  
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These instructions are given without prejudice and may from time to time be amended as considered necessary. We cannot be held responsible for any claims out of incorrect interpretation of these recommendations

