

Operating, Installation & Maintenance Instructions For Flameproof Thermostats Cert. No. Baseefa03ATEX0120

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 thermostat 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 / SETTING OF THE THERMOSTAT'S 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.

Mechanical Installation Instructions

- The thermostat's is supplied with a gasket, ready to be bolted or screwed to the appropriate attachment on the vessel. It is not recommended that sealing compounds be used.
- After fitting the thermostat is fitted into the vessel, the system should be filled with the medium to be heated and a check made for leaks around the joint. The Vessel should be filled according to your standard procedure ensuring that all air pockets are purged from the system
- It is the USERS responsibility to check that correct Master & Control thermostats are fitted, bearing in mind the operational temperature & 'T' class rating. The Control thermostat is provided to regulate the temperature to the desired setting and preferably be set in

it's mid range. The master thermostat should be set approximately 15°-20°C above the control thermostat setting.

- **Note: Scald temperature of water is 66°C.**
- If any cleaning or sterilising solutions are to be 'flushed' through the system prior to commissioning, a check should be made to ensure that the solution would not damage the thermostat pocket.
- Where the thermostat is supplied with a threaded gland, the heater must be tightened using a spanner on the octagon. In no circumstance should a pipe wrench or stilsons be applied to the terminal enclosure.

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.

The thermostat must be connected to electrical supply via suitable flameproof certified cable gland (not supplied).

For cable entry sizes see General Assembly Drawing as supplied.

NOTE: ALL UNUSED CABLE ENTRIES MUST BE PLUGGED USING A FLAMEPROOF CERTIFIED PLUG. FAILURE TO DO SO WILL INVALIDATE THE THERMOSTAT CERTIFICATE.

- Ensure that the sizes and type of cables and contactors are adequate for the load they carry.
- Check that all electrical connections are tight.
- When all electrical connections have been made replace the thermostat 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.**
- Thermostats are designed to operate when they are totally immersed in the medium being heated.
- Should the vessel be drained at any time and the thermostat removed, 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 thermostat should be electrically isolated.

Thermostat Not Operating

Checks to be made by suitably qualified personnel only:

- a) Main Fuses.
- b) Main Electrical Supply.
- c) The control and/or high limit thermostat (if fitted) have been correctly set.
- d) Control Thermostat (if fitted) for failure in 'open' position.
- e) No loose electrical terminal connections.
- f) Check operation of thermocouples (if fitted.)

Maintenance

Very little maintenance of the thermostat is required. However, if the unit is to be fitted in an area with hard or aggressive water conditions, the life & operation could be adversely affected.

Failure of this thermostat to operate correctly due to the accumulation of solid material & lime deposits is not covered by Warranty. If water conditions warrant a properly maintained lime inhibitor or water softener should be installed with this heater.

It is the responsibility of the owner to ensure that the thermostat is properly maintained

Periodically

(Every 6 months for instance) check the thermostat insulation resistance.

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

In the case of major repair of the thermostat the thermostat should be returned to: -

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

Spare Parts & Replacements.

All spare parts are to be ordered from Ormandy Electric Heaters quoting the thermostat list number and serial number.

Spare Parts List

- High Limit Thermostat (if fitted)
- Control Thermostat (if fitted)
- Gasket
- Thermocouples (if fitted)

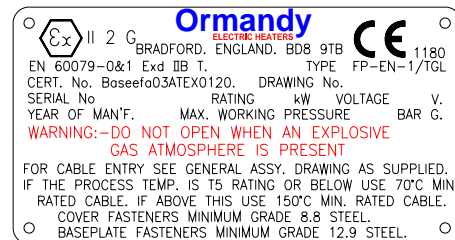
Equipment Warranty

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



Heating equipment for commerce and industry
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Bradford, West Yorkshire.
BD8 9TB. England
Telephone +44 (0) 1274 362798
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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.

