



**INSTALLATION OPERATION AND
MAINTENANCE INSTRUCTIONS FOR
EXHEAT INDUSTRIAL FXE TYPE
FLAMEPROOF ENCLOSURE HEATERS & FXT
TYPE THERMOSTATS**



Please read these instructions thoroughly before installation and ensure they are passed on to the end-user.

1.0 GENERAL

- 1.1 All work should be carried out by suitable qualified personnel.
- 1.2 Carefully remove all protective packaging and visually inspect unit for any transit damage.
- 1.3 FXE/FXT'S must be handled with care and stored in dry conditions.
- 1.4 **CAUTION** – These units are designed for industrial use only and additional personnel protection against contact with hot surfaces may be required in some installations.
- 1.5 Before connection ensure that the supply corresponds with that specified on the rating label.
- 1.6 Each unit must be protected by a suitably rated over current device.
- 1.7 All prevailing rules, regulations and bylaws in force at the time and place of installation must be observed.
- 1.8 The units should be securely fixed in position and all 'end user' made connections checked for tightness before energising.
- 1.9 Any modification not carried out by Exheat Industrial Ltd or its approved agent will invalidate certification and warranty.
- 1.10 Reference must be made to IEC / EN 60079-14 & IEC / EN 60079-17.
- 1.11 All electrical testing must be carried out in a non-hazardous area.

2.0 INSTALLATION

- 2.1 The installer or end user shall ensure that the unit has free and unrestricted airflow.
- 2.2 The FXE must only be orientated vertically.
- 2.3 The FXT/FXT-I can be orientated vertically or horizontally.
- 2.4 The appliances must be securely fitted to an enclosure wall or din rail using the mounting bracket provided.
- 2.5 The cable glands and bungs must not be removed under any circumstances.

3.0 ELECTRICAL SUPPLY CONNECTION

- 3.1 The flying lead provided must be terminated using suitable terminals in a certified enclosure in accordance with IEC / EN 60079-14 (see fig. 1).

4.0 EARTH CONNECTION

- 4.1 **WARNING** – the FX Range **MUST BE EARTHED**.
- 4.2 The external earth connection is located on the bracket and is supplied with an M5 fixing nut and bolt.

4.3 The internal earth connection is within the cable provided and should be terminated in a suitable terminal in accordance with IEC / EN 60079-14.

5.0 OPERATION

5.1 **WARNING** – The FX range enclosure heater and thermostat must at no time be covered during operation, as this could lead to dangerous overheating.

5.2 Once energized the enclosure heater will continue to operate until de-energised by an external control device (such as the FXT range).

5.3 The permitted ambient temperature range for operation of the standard FX Range is as fig. 2. The end user must ensure that no excursions outside these ambient temperature limits are allowed to occur at any time.

6.0 MAINTENANCE

6.1 All prevailing site safety regulations shall be adhered to at all times.

6.2 Before and whilst any maintenance activity is carried out, it must be ensured that there are no hazardous gases present.

6.3 Equipment is to be fully isolated from the electrical supply before and whilst any work is being carried out.

6.4 Any damage or faults should be notified to Exheat Industrial Ltd immediately.

6.5 Any replacement parts required must be obtained directly from Exheat Industrial Ltd. The use of any other parts will void any certification and warranty.

6.6 Reference must be made to IEC / EN60079-17 (especially table 1) in addition to the following recommendations:

6.6.1 3 Monthly

a. Generally inspect the equipment for external damage.

b. Ensure that the spaces between the element fins remain clear and that the airflow remains unrestricted.

7.0 Marking and certification reference FX Enclosure Heaters.

7.1  II 2 G D (ATEX certified units only)

Ex d IIC (Gas) T3 or T4 Gb

Ex t IIIC (Dust) T200°C or T135°C Db

IP6X

$-50^{\circ}\text{C} \leq T_{\text{amb}} \leq +80^{\circ}\text{C}$

Do not open while energised

Do not open in presence of explosive atmosphere

LCIE 12 ATEX 3040 X (ATEX certified units)

IECEX LCI 12 0008 X (IECEX certified units)

7.2 Marking and certification reference FXT Enclosure Thermostats.

 II 2 G D (ATEX certified units only)

Ex d IIC (Gas) T6 Gb

Ex tb IIIC (Dust) T85°C Db

IP6X

$-60^{\circ}\text{C} \leq T_{\text{amb}} \leq +78^{\circ}\text{C}$

Do not open while energised

Do not open in presence of explosive atmosphere

LCIE 12 ATEX 3086 X (ATEX certified units)

IECEX LCI 12 0030 X (IECEX certified units)

Fig. 1.

Model	LIVE	NEUTRAL	EARTH	
FXE HEATERS	RED / BROWN	BLACK / BLUE	GREEN AND YELLOW	
	SUPPLY LIVE	SWITCHED LIVE	NEUTRALS	EARTH
FXT THERMOSTAT	RED / BROWN	BLACK / BLUE (SLEEVED TO SUIT LIVE)	NO NEUTRAL IS REQUIRED	GREEN AND YELLOW
FXT – I THERMOSTAT IN LINE WITH FXE	RED / BROWN	N/A	BLACK / BLUE	GREEN AND YELLOW

Fig. 2.

Model	Voltage	Output	Mounting	T-Class	Ambient
FXE 30	110-120V 220-254VAC	30W	Wall / Rail	T3 T4	80°C 40°C
FXE 50	110-120V 220-254VAC	50W	Wall / Rail	T3 T4	80°C 40°C
FXE 75	110-120V 220-254VAC	75W	Wall / Rail	T3	60°C
FXE 100	110-120V 220-254VAC	100W	Wall / Rail	T3	60°C
FXT	110-120V 220-250VAC	1.3A MAX ALLOWED	Wall / Rail	T6	78°C
FXT-I	110-120V 220-250VAC	1.3A MAX ALLOWED	Wall / Rail	T6	78°C

EXHEAT INDUSTRIAL LTD

**Threxton House, Threxton Road Industrial Estate
Watton, Thetford, IP25 6NG**

Tel: +44 (0)1953 886210

Fax: +44 (0)1953 883853

For sales and new product information see our website

www.exheat-industrial.com



2006/95/EC

89/336/EEC

(As amended by 92/31/EEC & 93/68/EEC)

94/9/EC

Issue E