



INSTALLATION OPERATION AND MAINTENANCE INSTRUCTIONS EXHEAT HIH TYPE FLAMEPROOF INSTRUMENT HOUSING

**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 suitably qualified personnel.
- 1.2 Equipment must be handled with care and stored in dry conditions.
- 1.3 Carefully remove all protective packaging and visually inspect unit for any transit damage.
- 1.4 All prevailing rules, regulations and bylaws in force at the time and place of installation must be observed.
- 1.5 Any modification not carried out by Exheat Limited or its approved agent will invalidate certification and warranty.
- 1.6 This is a hazardous area product. Reference must be made to IEC/EN 60079-17 & IEC/EN 61241-17.
- 1.7 All electrical testing must be carried out in a non-hazardous area.
- 1.8 Precautions must be taken to prevent damage to machined surfaces and threads of flameproof enclosures.
- 1.9 Ensure that any special conditions for safe use detailed on the hazardous area certification (and that of the transmitter, where fitted) are complied with.

2.0 INSTALLATION

- 2.1 The instrument housing should be securely fixed in position using the M8 side mountings or with the wall brackets supplied.
- 2.2 All terminal connections checked for tightness before energising.
- 2.2 At no time is this equipment to be used outside its approved ambient temperature range of -50°C to +60°C (this may be restricted further by the limitations of the transmitter (where fitted) – refer to the transmitter certificate where applicable).

3.0 ELECTRICAL CONNECTIONS

- 3.1 Enclosure may be used for connection of sensor to field wiring.
- 3.2 Cable entries must be machined by Exheat and may be positioned on the side and rear of the terminal enclosure.
- 3.3 Where a transmitter is fitted, the transmitter instructions must be adhered to.
- 3.4 Where a display is fitted, the display instructions must be adhered to.
- 3.5 Ensure that the sizes and types of cables to be used are suitable for the installation.
- 3.6 The cables must enter the terminal box via certified Ex d IIC cable glands (not supplied) and be fitted by a qualified person. Any unused entries should be plugged with certified Ex d plugs.
- 3.7 The cover of the terminal enclosure is removed by unscrewing after releasing the locking grub screw fitted from the reverse of the locking ring on the terminal enclosure body. When re-fitting ensure that the 'o' ring seal is in good condition and correctly located, noting that it is secured in place with RTV. The main cover thread faces **MUST** be kept clean and free from any debris at all times.
- 3.8 The installer or end user must connect to the Exheat supplied terminals within the terminal box - **DO NOT** connect to or disturb factory fitted wiring.

4.0 EARTH CONNECTION

- 4.1 **WARNING – these enclosures MUST BE EARTHED.**
- 4.2 The external earth connection is located adjacent to one of the terminal box cable entries.
- 4.3 An internal earth connection is provided inside the terminal box.

5.0 OPERATION

- 5.1 Refer to the transmitter and display instructions where fitted.
- 5.2 When the enclosure is used purely to house the connection of a sensor to field wiring, operating instructions are not applicable.

6.0 MAINTENANCE

- 6.1 All prevailing site safety regulations shall be adhered to at all times.
- 6.2 Equipment shall be checked regularly for any dust accumulation which must be removed from all surfaces.
- 6.3 Before and whilst any maintenance activity is carried out, it must be ensured that there are no hazardous gases or dusts present.
- 6.4 Equipment is to be fully isolated from the electrical supply before and whilst any work is being carried out.
- 6.5 Any damage or faults should be notified to Exheat Limited immediately.
- 6.6 Any replacement parts required must be obtained directly from Exheat. The use of any other parts will void any certification and warranty.
- 6.7 Equipment is certified for use in a hazardous area and reference should be made to EN60079-17 (especially table 1) & IEC 61241-7 in addition to the following recommendations.

6.7.1 3 Monthly

- a. Generally inspect the equipment for external damage.

6.7.2 6 Monthly

- a. Isolate the electrical supply and remove the cover (refer to 3.7 above)
- b. Internals should be clean and dry.
- c. Ensure terminals are intact and secure.
- d. Refit cover with new gasket or 'o' ring if required (refer to 6.6 above).
- e. Check the threaded cover flamepath for damage.
- f. Earth continuity must be maintained between all earth points and main structure.

6.7.3 Annually

- a. Carry out 3 monthly and 6 monthly checks as above.
 - b. Check for element failure or low insulation resistance.
- 6.8 If equipment is being left unused for a period greater than 3 months, carry out 6 monthly maintenance before energizing.

7.0 Marking

- 7.1  II 2 G/D
Ex d IIC T6 Ex tD A21 IP66 T85°C

8.0 Certification

- 8.1 LCIE 08 ATEX 6059 X
IECEX LCI 08.0025X



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89/336/EEC
94/9/EC

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