Technical Manual for the Heat Detector HD1UL

Please note that every care has been taken to ensure the accuracy of our technical manual. We do not, however, accept responsibility for damage, loss or expense resulting from any error or omission. We reserve the right to make alterations in line with technical advances and industry standards.

© MEDC 2005

1.0 INTRODUCTION

The HD1 heat Detector has been designed for use in flammable atmospheres and harsh environmental conditions. The Glass Reinforced Polyester is suitable for use offshore or onshore, where light weight combined with corrosion resistance and strength is required.

2.0 INSTALLATION

The Heat Detector is mounted via 4 x Ø 9/32" (7mm) fixing holes in feet on the base of the unit.

The fixing holes have been designed to accept a ¼" (M6) caphead screw or bolt.

MEDC recommend the use of stainless steel fasteners.

The Heat Detector will operate in any attitude

2.1 Removing the Cover

Unscrew the 4 x M5 cover fixing screws and lift the cover clear of the enclosure.

See 2.2 Cable Termination.

After cable termination has been completed the cover can be replaced and secured to the enclosure.

2.2 Cable Termination

Cable termination should be in accordance with specifications applying to the application. MEDC recommend that all cables and cores should be fully identified.

Ensure that only the correct certified glands are used and that the assembly is shrouded and correctly earthed.

All cable glands should be of an equivalent IP rating to that of the Heat Detector.

In order to maintain the IP rating, the glands should be sealed to the Heat Detector using a sealing washer or sealing compound.

The internal earth terminal must be used for the equipment grounding connection.

2.3 General

When installing and operating explosion-proof electrical equipment, the relevant national regulations for installation and operation (e.g. EN60079-14 and IEE Edition Wiring Regulations) must be observed.

Ensure that all nuts, bolts and fixings are secure.

Ensure that only the correct certified stopping plugs are used to blank off unused gland entry points. We recommend the use of 'HYLOMAR PL32 COMPOUND' on the threads of the stopping plugs in order to maintain the IP or NEMA rating of the unit.

© MEDC 2005

3.0 OPERATION

The Heat Detector consists of a sealed element containing a single normally open (N.O.) thermal switch which operates at a fixed temperature. The sensor element is fully sealed and no attempt must be made to modify this in any way. Adjustment of the temperature setting is not possible.

4.0 MAINTENANCE

During the working life of the Heat Detector it should require little or no maintenance. However, if abnormal or unusual environmental conditions occur due to plant damage or accident etc., then visual inspection is recommended.

If a fault should occur, then the unit can be repaired by MEDC.

UNDER NO CIRCUMSTANCES SHOULD ANY ATTEMPT BE MADE TO EITHER UNSCREW THE HEAT DETECTOR ELEMENT FROM THE ENCLOSURE OR GAIN ACCESS TO THE INSIDE OF THE HEAT DETECTOR ELEMENT.

EITHER OF THESE ACTIONS WILL RESULT IN THE ASSEMBLY BECOMING UNSAFE FOR USE IN A POTENTIALLY EXPLOSIVE ATMOSPHERE.

If you have acquired a significant quantity of Heat Detectors, then it is recommended that spare units are also made available, (please discuss your requirements with MEDC's Technical Sales Engineers).

5.0 CERTIFICATION/APPROVALS

Please refer to marking on the unit for specific approval details.

- Listed/certified for use in USA and Canada, Class I, Division 2, Groups A, B, C & D

6.0 CERTIFIED TEMPERATURE

–4°F to +131°F (–20°C to +55°C).

© MEDC 2005

MEDC Ltd, Colliery Road, Pinxton, Nottingham NG16 6JF, UK.
Tel: +44 (0)1773 864100 Fax: +44 (0)1773 582800
Sales Enq. Fax: +44 (0)1773 582830 Sales Orders Fax: +44 (0)1773 582832
E-mail: sales@medc.com Web: www.medc.com

MEDC Stock No.
TM186-ISSA