



1 **EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 EC - Type Examination Certificate Number: **Baseefa03ATEX0427 Issue 3**

4 Equipment or Protective System: **Heat Detector Type HD1 & HD1R**

5 Manufacturer: **Cooper MEDC Limited**

6 Address: **Sutton-in-Ashfield, NG17 5FB**

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No's. **GB/BAS/ExTR13.0018/00**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 EN 60079-11:2012

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include the following :

⊕ II 1G Ex ia IIC T(see schedule) Ga (T_{amb} = -55°C to +55°C)

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **0676**

Project File No. **12/1069**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa

Baseefa

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Registered in England No. 4305578. Registered address as above.

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Schedule

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Certificate Number Baseefa03ATEX0427 Issue 3

15 Description of Equipment or Protective System

The Heat Detector Type HD1 is a thermal switch which operates at a pre-determined temperature. The detector consist a normally open (N.O.) or normally closed (N.C.) voltage free thermal switch contained in a metallic tube which is affixed to a plastic junction box. Connections are made via a terminal strip contained in the junction box.

$$\begin{aligned}U_i &= 30V \\I_i &= 300mA \\C_i &= 0 \\L_i &= 0\end{aligned}$$

The marking code for the HD1 is: Ex II 1G Ex ia IIC T6 Ga ($T_{amb} = -55^{\circ}\text{C}$ to $+55^{\circ}\text{C}$)

A variant called the HD1R exists which includes the addition of up to two resistors, up to two diodes, or up to two zener diodes.

$$\begin{aligned}U_i &= 30V \\I_i &= 300mA \\P_i &= 1.2W \\C_i &= 0 \\L_i &= 0\end{aligned}$$

The marking code for the HD1R is: Ex II 1G Ex ia IIC T4 Ga ($T_{amb} = -55^{\circ}\text{C}$ to $+55^{\circ}\text{C}$)

16 Report Number

GB/BAS/ExTR13.0018/00

17 Specific Conditions of Use

None.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

New drawings submitted for this issue of certificate.

Number	Sheet	Issue	Date	Description
196-219	1	A	11/02/2013	HD1 Exi Heat Detector ATEX/IECEX Certification GA
465-108	1	B	13-05-03	ATEX Certification Details Heat Detector HD1 EXD IIB Version
196-225	1	1	25/01/2013	HD1 Ex ia Certified Wiring Diagram ATEX & IECEX
196-220	1	A	24-01-13	HD1 Exia Heat Detector ATEX & IECEX Certification Label
196-223	1	A	11-02-13	HD1R Exia Heat Detector ATEX & IECEX Certification Label

These drawings are held with IECEX BAS 13.0010 issue 0.



Current drawings also associated with this certificate.

Number	Sheet	Issue	Date	Description
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None.

20 Certificate History

Certificate No.	Date	Comments
Baseefa03ATEX0427	21 July 2003	The release of the prime certificate. The associated test and assessment is documented in Test Report 03(C)0547
Baseefa03ATEX0427/1	6 August 2004	To permit the introduction of the Heat Detector Type HD1R.
Baseefa03ATEX0427/2	6 August 2012	To permit minor electrical changes.
Baseefa03ATEX0427 Issue 3	1 March 2013	To permit minor drawing changes. This issue incorporates previously issued primary and supplementary certificates into one certificate, updates the company address from Sutton-in-Ashfield NG16 6JF and confirms that the current design meets the requirements of EN 60079-0:2012 and EN 60079-11:2012. Additionally the equipment is now covered by certificate IECEX BAS 13.0010.

For drawings applicable to each issue, see original of that issue.