HD1 Range - HEAT DETECTOR

COOPER

EExd, EExem & Intrinsically Safe (EExia)

Features

- Zone 0, Zone 1 and Zone 2 use.
- ATEX Approved
- EExd IIB T3/T6
- Exd IIC
- EExem II T4/T6
- EExia IIC T4/T6
- UL listed for USA and Canada
    Class I, Div 2, Groups A-D.
- GOST 'R' & 'K' certified.
- Chinese (CQST) certified.
- Brazilian (Inmetro) certified.
- IP66 & IP67.
- Certified temperature: −20°C to +125°C (Exd)*.

    −20°C to +55°C (Exem/UL).

    −55°C to +55°C (Exia).
- Stainless steel probe.
- Detector temperature settings: 60°C to 385°C, (140°F to 725°F).
- Marine grade alloy or GRP enclosure.
- Optional guard.

Model dependent.

Introduction

The Cooper MEDC-Hawco heat detector has been designed for use in hazardous environments. These units are suitable for fire alarm and/or suppression systems in offshore and onshore applications including paint spray booths, flammable material stores, turbine rooms, extract ductwork and other hazardous areas throughout the oil & gas, petrochemical and process industries.

Comprising a Fenwal rate-compensated detector with all-stainless steel external construction, mounted to either a type SM87 marine grade alloy enclosure (Exd version) or JB10 corrosion-free GRP enclosure (Exia, Exem/UL versions). The contact in the detector CLOSES at alarm temperature.

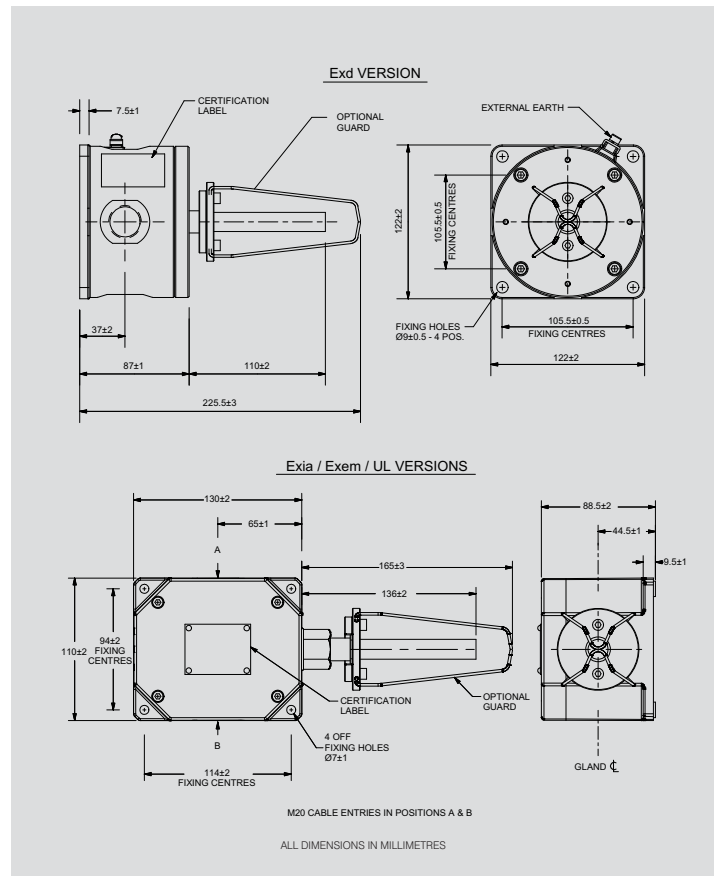To select appropriate temperature setting see specification on reverse.

〈Ex〉 ATEX c(UL)us GOST Ⓝ INMETRO (Ex) CQST NAN YANG

MEDC

Specification

Certification:	Certified to CENELEC EN50014, EN50019, EN50028
	ATEX EExd IIB Cert. No. Baseefa03ATEX0447
	Ex II 2 GD EExd IIB T6 (T3 at +125**°**C)
	Certified to EN60079-0, EN60079-1, EN61241-0, EN61241-1
	ATEX Exd IIC Cert. No. Baseefa08ATEX0320
	Ex II 2 GD Exd IIC ExtD A21 T85**°**C (-20**°**C to +55**°**C)
	Certified to CENELEC EN50014, EN50019, EN50028
	ATEX EExem Cert. No. Baseefa03ATEX0428
	Ex II 2 G EExem II T6 (-20**°**C to +55**°**C) (T4 with diodes/resistors)
	Certified to CENELEC EN50014, EN50020, EN50284
	ATEX EExia Cert. No. Baseefa03ATEX0427
	Ex II 1 G EExia IIC T6 (-55**°**C to +55**°**C) (T4 with diodes/resistors)
	UL listed for USA and Canada
	– Class I, Div 2, Groups A, B, C & D.
	UL Listing no. E252920 - versions up to 450˚F
	UL Listing no. E254077- versions 600˚F to +725˚F
	GOST 'R' & 'K' Certification: Exd, Exi & Exem versions.
	Russian Fire Alarm approved.
	Chinese Certification: CQST – Exd, Exi & Exem versions.
	Brazilian (Inmetro) Certification: BR-Ex d IIB T6 or T3
	BR-Ex em IIB T6 or BR-Ex ia IIC T6
	American Bureau of Shipping Type Approval HD1BD and HD1BI only.
Material:	Detector: 316 stainless steel
	Enclosures: Exd – LM25 marine grade alloy.
	Exia/Exem/UL – GRP (anti-static).
	Stainless steel cover screws.
	Optional Guard: 316 stainless steel.
Finish:	Detector: Sand blasted.
	Enclosures: Exia/Exem/UL - Natural black or painted to customer's specification
Certified Temp:	−20°C to +125°C Exd (T3) ATEX & GOST 'R' only.
	−20°C to +55°C Exd (T6)/Exem/UL, −55°C to +55°C EExia.
Weight:	Exd, 2kg.
	Exia/Exem/UL, 1.1kg.
Ingress Protection:	IP66 & IP67.
Operation:	The detector contact is normally open and CLOSES at alarm temperature.
Contact Rating:	125V a.c – 5A, 125V d.c – 0.5A, 48V d.c – 1A, 30V – 300mA.
Entries:	2 x M20 ISO (ATEX/Exd/Exe/Exi versions)
	2 x ½" NPT via adaptors (UL version).
Terminals:	6 x 4mm^2 (BK6).
Resistor:	Series & EOL resistor (maximum total 2) minimum value (each) 470Ω
Diodes:	Up to 2 off available in Exd & Exi versions – contact sales office.
Labels:	Optional stainless steel tag and duty labels.

Exd VERSION

CERTIFICATION LABEL
OPTIONAL GUARD
EXTERNAL EARTH
FIXING HOLES Ø9±0.5 - 4 POS.
105.5±0.5 FIXING CENTRES
105.5±0.5 FIXING CENTRES
7.5±1
122±2
37±2
87±1
110±2
225.5±3
122±2

Exia / Exem / UL VERSIONS

130±2
65±1
165±3
136±2
A
94±2 FIXING CENTRES
110±2 FIXING CENTRES
B
114±2 FIXING CENTRES
4 OFF FIXING HOLES Ø7±1
CERTIFICATION LABEL
OPTIONAL GUARD
88.5±2
44.5±1
9.5±1
GLAND ₵

M20 CABLE ENTRIES IN POSITIONS A & B

ALL DIMENSIONS IN MILLIMETRES

Listed Temperature Settings:

To select appropriate temperature settings, choose detector at 100°F (38°C) above maximum ambient temperature.

Temperature Setting		Tolerance		Colour Code Detector Tip
(°F)	(°C)	(°F)	(°C)	
140	60	+7/-8	±4	Black
160	71	+7/-8	±4	Black
190	88	+7/-8	±4	White
225	107	+7/-8	±4	White
275	135	±10	±6	Blue
325	163	±10	±6	Red
360	182	±10	±6	Red
450	232	±15	±8	Green
600	316	±20	±11	Orange
725	385	±25	±14	Orange

Ordering Requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

Model	Certification	Type	Temp Settings	Options	Finish
HD1					

Certification	Code
ATEX IIB	BB
ATEX IIC	BC
UL listed	UL
ATEX/UL dual listed	AU
GOST 'R'	G*
GOST 'K'	K
Chinese (CQST)	Q
Inmetro	M

Note: ATEX Exd version dual marked for T3 at +125°C and T6 at +55C.
* Russian Fire Approved as standard.
† ATEX IIC only available in Exd

Type	Code
Exd	D*
Exe	E†
Exi	I
UL	U‡

* Not available UL or ATEX/UL dual listed.
† ATEX/UL dual listed E version available only

Temp°F	Code
140	140
160	160
190	190
225	225
275	275
325	325
360	360
450	450
600	600
725	725

Option	Code
Duty Label	D
Tag Label	T
Guard	G
Resistor EOL	E
Resistor series	S
Diode(s)	I*
Blanking Plug	P
None	N

* Only available in ATEX /Exd/ Exia versions (specify No.)

Finish	Code
Natural Black	N
(Exe/Exi/UL only)	
Grey	G
Red	R
Blue	B
Yellow	Y
Special	S*

* Please specify.

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