

HEAT DETECTOR EExd, EExem & Intrinsically Safe (EExia) HD1 Range



EExd version (optional guard)



Introduction

This 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 (EExd version) or JB10 corrosion-free GRP enclosure (EExia, EExem/UL versions). The contact in the detector CLOSES at alarm temperature.

To select appropriate temperature setting see specification on reverse.

EExia/EExem/UL versions (optional guard)

- ★ Zone 0, Zone 1 and Zone 2 use.
- ★ EExia IIC T4/T6, EExd IIB T3/T6 or EExem II T6.
- ★ ATEX approved – Ex II 1G (EExia)
– Ex II 2G (EExd/EExem).
- ★ BASEEFA certified.
- ★ UL listed for USA and Canada
– Class I, Div 2, Groups A-D.
- ★ GOST 'R' & 'K' certified.
- ★ Chinese (CQST) certified.
- ★ IP66 & IP67.
- ★ Certified temperature:
 - 20°C to +125°C (EExd)*.
 - 20°C to +55°C (EExem/UL).
 - 55°C to +55°C (EExia).
- ★ Stainless steel probe.
- ★ Detector temperature settings:
60°C to 385°C, (140°F to 725°F)*.
- ★ Marine grade alloy or GRP enclosure.
- ★ Optional guard.

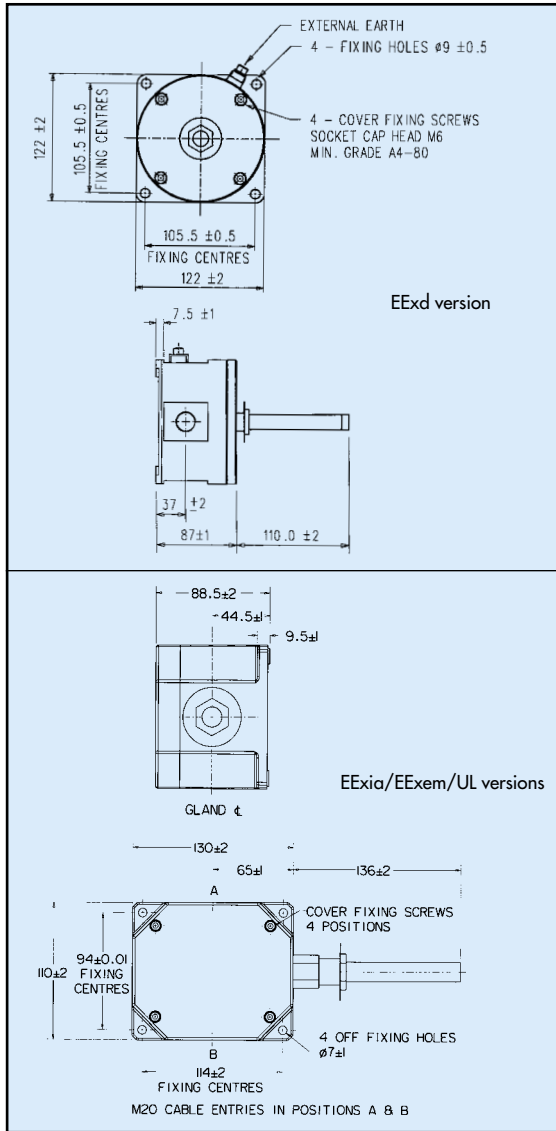
*Model dependent.

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Specification

Certification:	CENELEC EN50014, 19 & 28. EExd IIB T6 (T3 at +125°C), Cert.No. Baseefa 03ATEX0447. EExia IIC T6 (T4 with diodes/resistors), Cert. No. Baseefa 03ATEX0427. EExem II T6, Cert. No. Baseefa 03ATEX0428. UL listed for USA and Canada – Class I, Div 2, Groups A, B, C & D. UL Listing no. E252920. GOST 'R' & 'K' Certification: Exd, Exi & Exem versions. Chinese Certification: CQST – Exd, Exi & Exem versions. CCCF – Pending Sept. 04				
Material:	Detector:	316 stainless steel			
	Enclosures:	EExd – LM25 marine grade alloy. EExia/EExem/UL – GRP (anti-static). Stainless steel cover screws. Optional Guard: 316 stainless steel.			
Finish:	Detector:	Sand blasted.			
	Enclosures:	EExd – Epoxy painted grey as standard or to customer's specification. EExia/EExem/UL – Self coloured black or epoxy painted to customer's specification.			
Weight:	EExd,	2kg.			
	EExia/EExem/UL,	1.1kg.			
Certified:	–20°C to +125°C EExd (T3) ATEX only.				
Temperature:	–20°C to +55°C EExd (T6)/EExem/UL, –55°C to +55°C EExia.				
Ingress Protection:	IP66 & IP67.				
Operation:	The detector contact is normally open and CLOSES at alarm temperature.				
Listed Temperature Settings:	To select appropriate temperature settings, choose detector at 56°C (100°F) above maximum ambient temperature.				
	Temperature Setting (°F)	Temperature Setting (°C)	Tolerance (°F)	Tolerance (°C)	Colour Code Detector Tip
	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
Not available UL listed.	600	316	±20	±11	Orange
	725*	385	±25	±14	Orange
Contact Rating:	EExd/EExem/UL: 125V a.c.–5A, 125V d.c.–0.5A, 48V d.c.–1A. EExia: 30V–300mA.				
Terminals:	6 x 4mm ² (BK6).				
Labels:	Optional stainless steel tag and duty labels.				
Cable Entries:	2 x M20 ISO (ATEX/Exd/Exe/Exi versions) 2 x 1/2" NPT via adaptors (UL version).				
Resistor:	Series & EOL resistor (maximum total 2) minimum value (each) 470Ω – only available Exd & Exi versions.				
Diodes:	Up to 2 off available in Exd, Exi & UL versions – contact sales office.				

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

Standard products, available on 2 week delivery, order as follows:

Product	Description
HD1BDXXXNG	ATEX approved Ex II 2G, certified EExd IIB T6, specify temperature setting, 2 x M20 entries, marine grade alloy enclosure, painted grey.
HD1BIXXXXNN	ATEX approved Ex II 1G, certified EExia IIC T6, specify temperature setting, 2 x M20 entries, GRP enclosure, natural black.
HD1BEXXXXNN	ATEX approved Ex II 2G, certified EExem II T6, specify temperature setting, 2 x M20 entries, GRP enclosure, natural black.

Model	Certification	Type	Temp. Settings	Options	Enclosure Finish																																																																														
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All the above specifications, dimensions, weights and tolerances are nominal (typical) and LICO reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

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