

# D1xH1 Heat Detector

ATEX and IECEx flameproof heat detector for hazardous

**Explosion-proof heat detector for hazardous areas**

**IP66/67 protection rating**

**ATEX, IECEx, UKEx, CE and UKCA certified**



## Technical specifications

**Product type :** Industrial heat detector certified for hazardous areas  
**Manufacturer :** E2S Warning Signals  
**Enclosure :** Copper free LM6 marine grade aluminium alloy  
**Housing colour :** Red or grey  
**Finish :** Chromate and powder coating  
**Corrosion resistance:** ISO 12944-6 CX, C5VH and C5H  
**Protection rating:** IP66/67 according to EN/IEC 60529  
**Enclosure rating:** Type 4/4X according to UL 50E  
**Cable entries:** 3/4" NPT and/or M20 x 1.5  
**Stopping plugs:** Included depending on configuration  
**Cable cross-section, solid core:** 0.5 to 4 mm<sup>2</sup>, AWG 20 to 12  
**Cable cross-section, stranded core:** 0.5 to 2.5 mm<sup>2</sup>, AWG 24 to 14  
**Grounding:** M5 stud  
**Installation temperature:** -55 °C to +80 °C or +125 °C depending on version  
**Weight:** 2.5 kg  
**Detection element:** D-A-F rate compensated heat detector  
**Sensitive element housing:** Stainless steel  
**Internal contacts:** Hermetically sealed  
**Temperature setting:** Factory-set  
**Available thresholds:** 60, 71, 88, 99, 107, 135, 163, 182, 232, 260, 316, 385 °C  
**Max. power, version A:** 10 W  
**Max. power, version H:** 1.25 W  
**Max. input, version E:** 32 Vdc 1 A, 24 Vdc 2 A, 32 Vac 50/60 Hz 5 A  
**Stopping plug/adaptor materials:** Brass, nickel-plated or stainless steel  
**Main certifications:** IECEx, ATEX, UKCA, UL, cUL, ULC  
**Fire compliance:** UL521, CAN/ULC-S530, EN54-5  
**Functional safety:** SIL 2 according to IEC 61508:2010  
**Recommended maintenance:** Annual test according to NFPA or local fire codes  
**Recommended service life:** Replacement after 10 years of continuous service

## Product description

The **D1xH1 Heat Detector** from E2S Warning Signals is a certified industrial heat detector designed for fire alarm systems in harsh and hazardous environments. It triggers an alarm in the event of an abnormal temperature rise, particularly in explosive atmospheres containing gas or dust.

Designed for critical industrial applications, the D1xH1 is available in flameproof Ex db and increased safety Ex db eb versions. It is suitable for installations in Zone 1/21 and Class I/II Div. 1 and 2 environments, with a high temperature version suitable for use up to +125 °C.

### ► Robust enclosure for extreme conditions

The **D1xH1** Heat Detector is equipped with a copper free LM6 marine grade aluminium enclosure, providing excellent resistance to corrosion. Its chromate and powder coated finish meets ISO 12944,6 CX, C5VH and C5H requirements, making it suitable for aggressive industrial environments.

With its IP66/67 ingress protection rating and Type 4/4X enclosure classification, the detector is protected against dust, water jets, weather exposure and demanding outdoor conditions.

### ► Reliable and long lasting thermal detection

Le détecteur intègre des éléments thermiques D-A-F rate compensated, avec enveloppe en acier inoxydable et contacts internes hermétiquement scellés. Cette conception assure une détection stable, même lorsque l'environnement est soumis à des variations de température.

The alarm temperature is factory set. Several temperature ratings are available, from 60 °C to 385 °C, allowing the detector to be adapted to the specific constraints of each site.

### ► Simplified installation and cost optimisation

The flameproof threaded design simplifies installation and inspection. Multiple cable entries allow flexible integration on site, while stopping plugs are supplied depending on the selected configuration.

Thanks to its extended installation spacing, which varies according to the selected temperature rating, the D1xH1 Heat Detector can help reduce the number of detectors required on certain installations.

