

HNC-310 Heat Detector

HNC-310 non-addressable heat detector.
UL 521, EN 54-5, CE.
Heat detector for 2-wire system applications.

Description

The HNC-310 non-addressable heat detectors are suitable for connection to 2-wire and 4-wire non-addressable fire detection control and indicating equipment, or to addressable fire detection control and indicating equipment that can accept non-addressable type detectors.¹

An electronic thermistor sensor provides sensitive rate-of-rise alarm operation, or fixed-temperature operation when the response threshold value is exceeded.

The HNC-310 range of non-addressable detectors provide fire detection and alarm system designers with a Standards-compliant, economical heat detector for property protection applications² where smoke or multi-sensor detectors may not be suitable due to environmental conditions.

Features

- Advanced algorithms provide excellent detection discrimination
- Durable sensor. No adjustment or replacement required
- Surface-mount device (SMD) circuit board design for stable and reliable operation
- Dual LEDs for 360° visibility
- 2-wire models for DC 12 V and DC 24 V operation
- Remote LED output option available
- Connects to zone monitor for use with addressable control and indicating equipment
- Easy installation. No programming required
- Sleek low-profile housing design
- Low maintenance

Compliance

HNC-310 heat detectors have the following compliance:

	UL 521 ^a	EN 54-5 ^b	CE
HNC-310-H2	✓	✓	✓
HNC-310-HL	✓	✓	✓
HNC-310-HR	-	-	✓
HNC-310-HA	-	-	✓

a. UL 521 Heat detectors for fire protective signaling systems

b. EN 54-5 Fire detection and fire alarm systems. Heat detectors. Point detectors



Accessories

The following accessories are compatible with HNC-310 heat detectors.

Description	Part number	Datasheet
5-terminal 102mm low profile base	CN3023	31-0035
5-terminal 102mm low profile base ^a	CN3021	31-0035
9-terminal 102mm low profile base	CN3043	31-0037
9-terminal 102mm low profile base ^a	CN3041	31-0037
Detector monitor module	620-001	31-0027
Remote indicator ^b	681-001	31-0034

a. UL - approved

b. Required 9-terminal base

1. May be used with the 620-001 detector monitor module.

2. **WARNING - Hazardous levels of smoke and toxic gas can build up before a heat detector might operate. Where life safety and building evacuation is necessary in the event of a fire, smoke, gas or combination detectors usually provide earlier warning than heat detectors alone.**

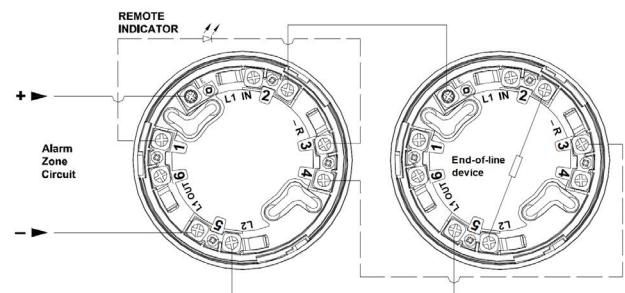


Fig. 1: 2-wire base wiring connections



Specifications

	HNC-310-H2 HNC-310-H2-U	HNC-310-HI HNC-310-HL-U	HNC-310-HR	HNC-310-HA
Operating voltage	DC (10.8 ~ 33) V		DC (10.8 ~ 26.4) V	
Start-up current	≤ 100 µA			
Start-up time	≤ 30 s			
Quiescent current	40 µA			
Sampling time	(3 ~ 5) s			
Alarm response threshold	59°C static, and rate-of-rise ^a			
Alarm current (max)	50 mA		30 mA	
Alarm condition indicator	Dual red LEDs			
Remote LED output current (max)	-	15mA	-	
Alarm relay	-		SPST. N/O. 1.0.A @ DC 30V / 0.5A @ AC 125V	
Reset voltage	≤ 1A			
Reset time	≤ 5s			
Auto reset time	-		(4 ~ 6) s	
Operating temperature	(-10 ~ +55) °C			
Operating humidity	(0 ~ 95) % RH, non-condensing			
Storage temperature	(-25 ~ +80) °C			
Storage humidity	(0 ~ 98) % RH, non-condensing			
Dimensions (excluding contacts)	Ø 99 mm x 45 mm			
Ingress protection rating	IP-42			

a. Detectors are factory-configured for 30 k/min and comply with EN 54-5 class A1 and class A2.

Ordering information

	2-Wire	4-Wire	Remote indicator ^a	Relay output	Auto reset
HNC-310-H2 ^b	✓	-	-	-	-
HNC-310-HL ^b	✓	-	✓	-	-
HNC-310-H2-U ^c	✓	-	-	-	-
HNC-310-HL-U ^c	✓	-	✓	-	-
HNC-310-HR	-	✓	-	✓	-
HNC-310-HA	-	✓	-	-	✓

a. Requires 9-terminal base if remote indicator is installed.

b. EN type.

c. UL type.

