### HNC-310 non-addressable heat detector

Heat detector for 2-wire and 4-wire system applications

# UL 521, EN 54-5, **( (**

#### **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<sup>1</sup>.

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 applications<sup>2</sup> where smoke or multi-sensor detectors may not 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
- 4-wire models available with a N/O alarm relay output
- 4-wire models available with auto-reset function
- 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 <sup>b</sup>	CE
HNC-310-H2	✓	✓	✓
HNC-310-HL	✓	✓	✓
HNC-310-HR	_	_	✓
HNC-310-HA	_	_	✓

<sup>&</sup>lt;sup>a</sup> UL 521 Heat detectors for fire protective signaling systems

## **Accessories**

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

Description	Part number	Datasheet
5-terminal102 mm low profile base	CN3023	31-0035
5-terminal102 mm low profile base <sup>a</sup>	CN3021	31-0035
9-terminal102 mm low profile base	CN3043	31-0037
9-terminal102 mm low profile base <sup>a</sup>	CN3041	31-0037
Detector monitor module	620-001	31-0027
Remote indicator <sup>b</sup>	681-001	31-0034

<sup>&</sup>lt;sup>a</sup>UL-approved.



HNC-310non-addressable heat detector

<sup>&</sup>lt;sup>b</sup> EN 54-5 Fire detection and fire alarm systems. Heat detectors. Point detectors

<sup>&</sup>lt;sup>b</sup>Requires 9-terminal base.

<sup>&</sup>lt;sup>1</sup>May be used with the 620-001detector monitor module.

<sup>&</sup>lt;sup>2</sup>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.

# **Specifications**

	HNC-310-H2 HNC-310-H2-U	HNC-310-HL 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 μΑ				
Sampling time	(3 ~ 5) s				
Alarm response threshold	59 °C static, and rate-of-rise <sup>a</sup>				
Alarm current (max)	50 mA		30 mA		
Alarm condition indicator	Dual red LEDs				
Remote LED output current (max)	_	15 mA	_		
Alarm relay	_		SPST. N/O. 1.0 A @ DC 30 V / 0.5 A @ AC 125 V		
Reset voltage	≤1V				
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)	Ф 99 mm × 45 mm				
Ingress protection rating	IP-42				

<sup>&</sup>lt;sup>a</sup>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 <sup>a</sup> Relay Output Author   HNC-310-H2 <sup>b</sup> ✓ — — —   HNC-310-HL <sup>b</sup> ✓ — ✓ —   HNC-310-H2-U ° ✓ — — —   HNC-310-HL-U ° ✓ — ✓ —   HNC-310-HR — ✓ — ✓   HNC-310-HA — ✓ — —						
HNC-310-HL <sup>b</sup>		2-Wire	4-Wire	Remote Indicator <sup>a</sup>	Relay Output	Auto Reset
HNC-310-H2-U °	HNC-310-H2 <sup>b</sup>	✓	_	_	_	_
HNC-310-HL-U °	HNC-310-HL <sup>b</sup>	✓	_	✓	_	_
HNC-310-HR — ✓ — ✓	HNC-310-H2-U °	✓	_	_	_	_
	HNC-310-HL-U <sup>c</sup>	✓	_	✓	_	_
HNC-310-HA	HNC-310-HR	_	✓	_	✓	_
	HNC-310-HA	_	✓	_	_	✓

<sup>&</sup>lt;sup>a</sup> Requires 9-terminal base if remote indicator is installed.

View the complete range of products at <a href="www.numens.net">www.numens.net</a>



<sup>&</sup>lt;sup>b</sup>EN type.

<sup>&</sup>lt;sup>c</sup>UL type.