

# Fast, easy installation of heat tracing systems



## Nelson™ AX and EX Heat Trace Connection Kits

A complete range of heat trace connection kits for the most demanding environments.



## Connect heat trace cables safely and securely in harsh and hazardous locations.



Nelson™ AX and EX Connection Kits by Emerson, provide robust, weatherproof, corrosion-resistant connections for heat trace cables in ordinary, rugged industrial environments and hazardous locations.

- Fiberglass reinforced polyester construction withstands rugged conditions.
- Nonmetallic enclosures are suitable for use in extreme weather and corrosive environments (IP66, NEMA 4X).
- Large, modular enclosures and DIN-rail mounted terminal blocks provide for easy installation and service.
- Spring-clamp terminals simplify wiring and ensure a dependable connection, with no need to tighten screws.



Nelson AX and EX Connection Kits are engineered to adhere and exceed industry standards.

## Specifications

- Minimum Installation Temperature:  $-40^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$ )
- Ambient Temperature Use Range:  $-50^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$  to  $+131^{\circ}\text{F}$ )
- Acceptable Conductor Size:  $1\text{mm}^2$  (18 AWG) to  $6\text{mm}^2$  (8 AWG)
- Operating Voltage Range: 108 Vac to 300 Vac
- Max Continuous Current: Up to 25A in standard configurations, 38A for -LLT options
- Enclosure Material: Fiberglass reinforced, carbon impregnated, UV resistant polymer, black
- Weight: Splice and Power Connection Kits 1 kg (2.2 lbs)
- Weight: Tee Connection Kit 2 kg (4.4 lbs) Ingress Protection: NEMA 4X, IP66
- Terminals: Spring-type terminals
- Lid Screws: Stainless steel captive screws

## Certifications

NEC® 2017; NFPA 70: National Electrical Code®, International : Electrical Code, IEEE Std 515TM - 2011 Standard for Testing, Design, Installation, and Maintenance of Electrical Resistance Heat Tracing for Industrial Applications



- Class I, Division 2, Groups B, C, D
- Class II, Groups E, F, G (Canada Only)
- Class III (Canada Only)
- Enclosure Type 4X, Temperature Code T6 – T3
- Class I, Zone 1; Ex e II; T6 – T3 ①



- Class I, Division 2, Groups B, C, D
- Class II, Groups E, F, G; Class III
- Enclosure Type 4X, IP66,
- Temperature Code T ①
- Class I Zone 1; AEx e IIC T
- $-40^{\circ}\text{C} \leq \text{Tamb} \leq 55^{\circ}\text{C}$



- II 2 G Ex e IIC T6-T3 ① Gb
- II 2 D Ex tb IIIC T80°-T195° C
- $-40^{\circ}\text{C} \leq \text{Tamb} \leq +55^{\circ}\text{C}$

① For temperature code, see heating cable or design information

## Delivering ultimate resilience and durability for rugged, harsh and hazardous locations.



AX and EX universal connection kits for industrial use – giving specifying engineers a complete selection of connection kits for any heat trace application.

- Tough, lightweight, corrosion-resistant polyester construction
- Specially treated to resist UV degradation
- Fiberglass reinforced for exceptional durability and impact resistance
- Carbon-impregnated to prevent buildup of static charge
- Reinforced standoffs to resist cracking in rugged environments

Our AX and EX series includes all the kits you need to connect heating cables in any configuration and verify operation of heating cable circuits. We also offer power, splice and tee splice connection kits without enclosures and terminals for maintaining your existing infrastructure.



## Versatile and Dependable

### Power Connection Kit



- Power connection kits are designed for terminating one heater cable to customer supplied power wiring.

### Splice Connection Kit



- Connection kits are used to connect two heater cables to each other in a splice configuration.
- It may be used to extend cable length, connect different wattage cables together or to provide access to service removable equipment.

### Tee Splice Connection Kit



- Tee splice connection kits are used to connect up to three heater cables.
- It may be used to connect multiple heater segments, connect different wattage cables together or to provide access to service removable equipment.

### Powered Splice Connection Kit



- Powered splice connection kits are used to connect up to three heater cables to customer supplied power wiring.

### End-of-Circuit Termination Kit



- Our end of circuit termination kit is designed for terminating one heater cable while allowing access for periodic maintenance and/or trouble-shooting.

### End of Circuit Light Termination Kit



- Our lighted end of circuit termination kit is designed for terminating one heater cable with a non-directional lens assembly and long life LED output.



## Connects in any environment.

Every AX and EX Connection Kit includes all the accessories you need to create safe, reliable, protected connections. These accessories vary by type of kit, and may include:

1. Junction box
2. Lid with captive screws
3. Terminal block
4. Standoff
5. 6" guide tubes
6. Enclosure adapter
7. End cap
8. Silicone adhesive
9. Locknut
10. Termination components
11. Pipe clamp
12. Ground wire tubing
13. Cable clamp
14. Cable grommet
15. Cable tie



# Select Kits and Options for Every Application

## Step 1: Choose Connection

	SKU	
	NEC	IEC
Power Connection Kit ①	AXPC100	EXPC100
Splice Connection Kit ①	AXSC100	EXSC100
Tee Splice Connection Kit	AXTC125	EXTC125
Powered Slice Connection Kit	AXPTC125	EXPTC125
End-of-Circuit Termination Kit	HEC100	
End of Circuit Light Termination Kit	HEL100	
Power Connection Kit Without Enclosure	HPC100	
Splice Connection Kit Without Enclosure	HSC100	
Tee Connection Kit Without Enclosure	HTC125	

① Use suffix **-LLT** for use with LLT Long Line Self-Regulating heaters

## Step 2: Select Clamp ②

	SUFFIX
Pipe Clamp for 3" or smaller pipe diameter	-3
Pipe Clamp for 3" to 12" pipe diameter	-12
Pipe Clamp for 12" to 20" pipe diameter	-20

② Each kit contains a clamp, but must be selected separately.

## Step 3: Select Optional Accessories

	SUFFIX
Pipe Adaptor for 1" or smaller pipe diameter	HC-SPA
Fiberglass Tape – ½" x 60 yards	GT-60
Fiberglass Tape – ½" x 20 yards	GT-6
Aluminum Tape – 2" x 50 yards	AT-50
Warning Sign	WS100

## Step 4: Place Your Order



Visit [nelsonheaters.com](http://nelsonheaters.com) or contact your local Nelson Heat Trace representative to learn more about our AX and EX connection kits.

# Innovative and reliable heat trace solutions for demanding environments.



Nelson is the cornerstone of Emerson's Electrical and Light business; providing worldwide heat trace solutions that ensure optimum control and cost-efficient operations.

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