

SIMPLY INTELLIGENT



CM2201/CM2202 SINGLE AND DUAL POINT HEAT TRACE CONTROLLERS

AUTOMATE HEAT TRACE CONTROL THE EASY WAY.



Nelson Heat Trace's microprocessor based heat trace controls offer intuitive programming, reliable operation and unsurpassed safety. The digital control and monitoring system is specifically designed for stand-alone or networked electric heat tracing applications. It provides temperature control and heater cable monitoring while communicating additional information to operations personnel such as temperature alarms, voltage and current alarms, ground fault leakage, sensor failures and communications failures.

Our new CM2201 single point and CM2202 dual point models are ideal for harsh and hazardous industrial applications, including Class I, Division 2 and Class I, Zone 2 hazardous locations.

FULL FEATURED CONTROL IN A VERSATILE AND SELF-CONTAINED UNIT.



SAFE SWITCHING. Solid state relay (SSR) technology practically eliminates the risk of arcs or sparks.

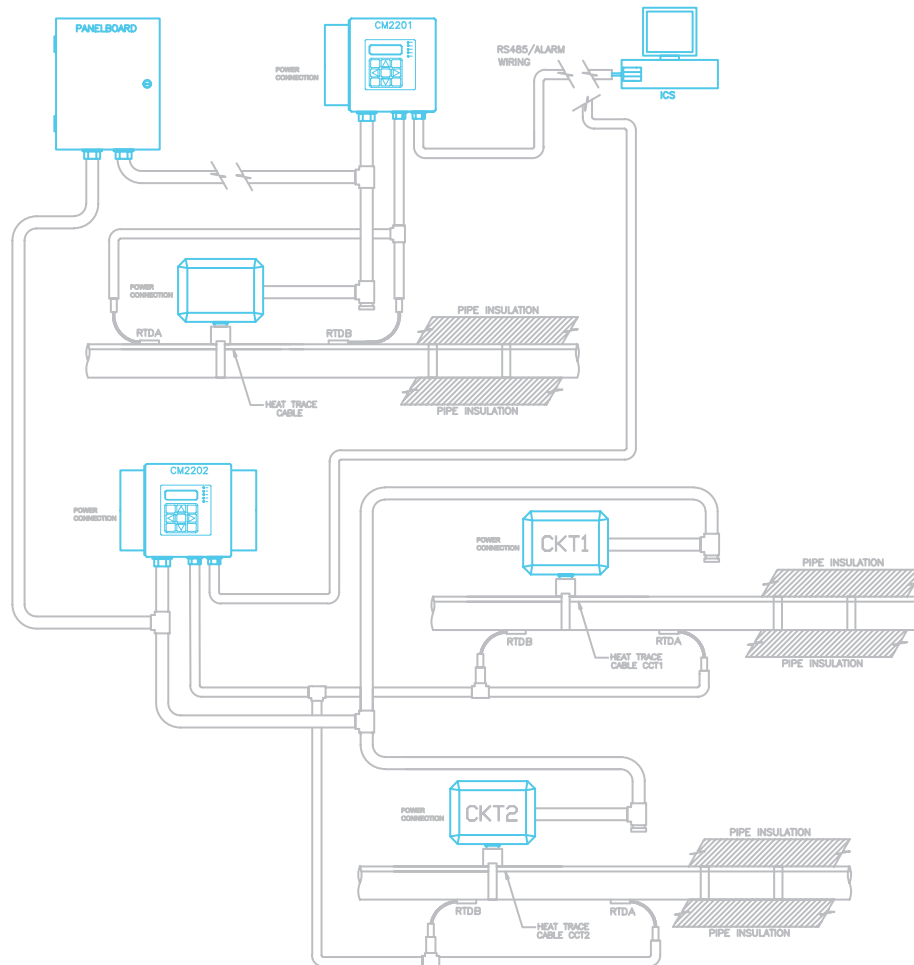
VERSATILE AND EFFICIENT. Proportional temperature control, power limiting and soft start capabilities provide consistent heating for a variety of cable types and lengths, with no need to oversize electrical components.

READY TO NETWORK. External communication over Modbus RTU provides simple connectivity to other controllers, remote locations and centralized monitoring and control systems.

EASY TO USE. With simplified installation and intuitive, password-protected programming and operation, these controllers provide reliable control and monitoring with minimal effort.

TOTAL HEAT TRACE MANAGEMENT, SIMPLIFIED.

Specify CM2201 and CM2202 controllers wherever you need full management and monitoring capabilities, including accurate and consistent temperature control, circuit monitoring, automatic testing and alarms. These single and dual point controllers are ideal for installations where a simple mechanical thermostat can't provide the required safety and control, and where a multi-point controller may be unnecessarily complex.



SIMPLE TO INSTALL

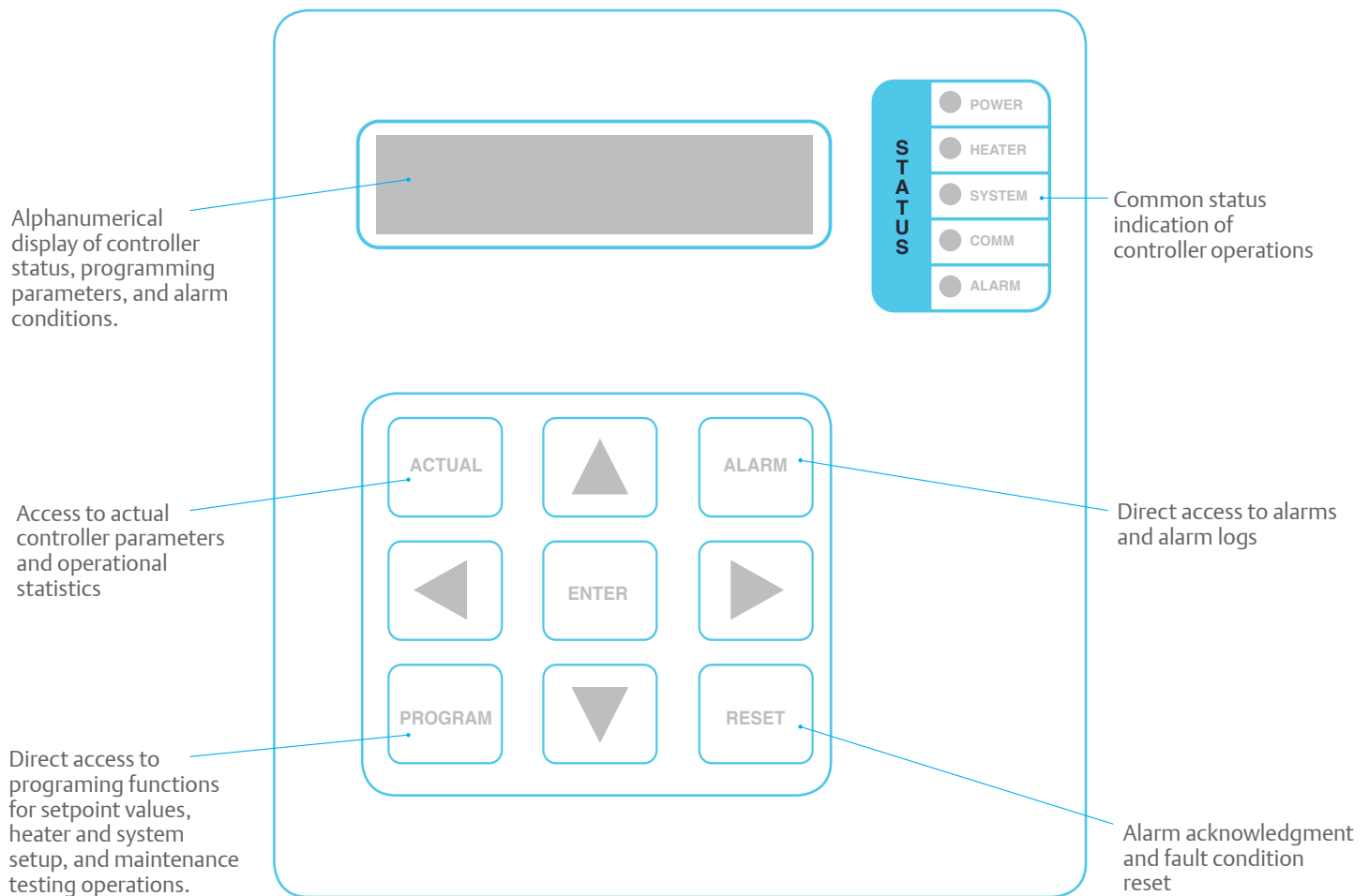
CM2201 and CM2202 controllers adhere to the latest agency approvals for specification in harsh and hazardous industrial environments. Compact and self-contained, they can be installed in any convenient location to provide stand-alone operation as well as remote control of heating cables from a protected location. The bottom of the enclosure offers generous room for drilling multiple conduit and cable entries. The hinged cover provides easy access to wiring terminals.

SIMPLE TO CONNECT

CM2201 and CM2202 controllers can be used as stand-alone units, or up to 32 controllers can be networked together. Rugged and resilient, they are ideal for remote installation near docks, tanks, pipe hubs or other harsh and hazardous industrial locations. Modbus RTU connectivity provides a simple, standardized way to control and monitor all your heat trace circuits from a central point.

SIMPLE PROGRAMMING, INTELLIGENT CONTROL.

Nelson Heat Trace controllers incorporate an intuitive user interface with a resistive touch keypad and LED message and status displays for simple programming and operation. Programming software is embedded in the controller, so there's no need to connect additional devices for setup.



SIMPLE TO PROGRAM

Embedded programming software eliminates the bother of loading software or connecting additional programming devices. Intuitive prompts guide you through setup of the system, heater characteristics, temperature setpoints and alarm conditions in a few keypresses. Programming is password-protected to prevent unauthorized changes. Values are stored in non-volatile memory, so there's no need to reprogram following a power outage.

SIMPLE TO USE

Choose your preferred default display to determine what messages and functions are displayed during normal operations. The control buttons display additional information as needed, including System Status (Alarms), Heater Status (On/Off) or Heater Temperature. You can set up advanced and normal users to allow them to access specific information and functions.

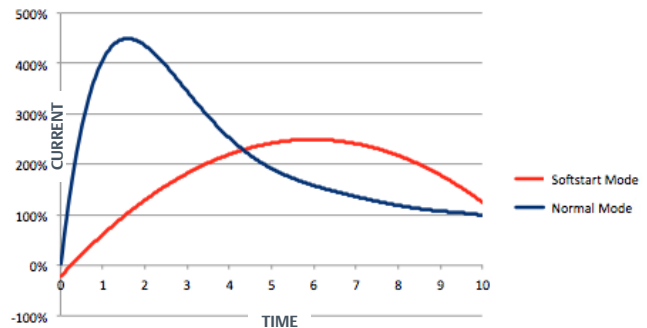
SAFER PROCESS MAINTENANCE.

- Solid state relay (SSR) eliminates the risk of sparks and arcs in hazardous locations
- Dual-element RTDs provide greater temperature maintenance accuracy, stability and repeatability – for example, by monitoring temperature on both sides of a valve
- Configurable alarms provide warning of high or low temperature conditions, high or low voltage and current, ground fault leakage, sensor failures and communications failures
- Auto-test at user specified intervals provides warning of developing fault conditions prior to breaking the circuit
- Power limiting allows for reduced cable inventories to be used in various applications
- Control power supplied by the heating cable voltage
- Input voltage: 100 to 277 Vac, 50/60 Hz
- Ambient temperature: -40°F to $+104^{\circ}\text{F}$ (-40°C to $+40^{\circ}\text{C}$)

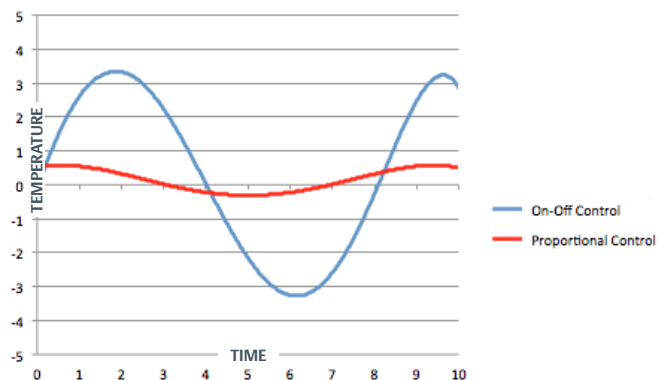
CERTIFICATIONS

- US, Canada CSA: Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, Ex/AEx nAIIIC (Class/Zone is North America/US only, Ex is Canada only)
- T-Code: T4 (135°C)
- NEMA 4X, IP66

SOFT START LIMITS INRUSH CURRENT TO PROTECT AGAINST BREAKER TRIPS – EVEN IN EXTREMELY COLD ENVIRONMENTS



PROPORTIONAL TEMPERATURE CONTROL PROVIDES SAFER, MORE RELIABLE PROCESS MAINTENANCE BY REDUCING TEMPERATURE SWINGS BETWEEN ON/OFF CYCLES FOR CONSTANT-WATTAGE CABLES





Get the control you need and the features you want from the same company that supplies the world's most dependable heat trace cables and connection kits for industrial applications. Nelson Heat Trace.

TAKE CONTROL

Contact your local Nelson Heat Trace representative or visit nelsonheaters.com to choose the right heat trace products for any industrial application.

Nelson Heat Trace provides a full line of products and expertise for the powering, controlling and monitoring of pipeline temperatures under Appleton Group, a business unit of Emerson. Our tailored, trouble-free, efficient and cost-effective systems are used around the globe, from frozen tundras to arid deserts.

Emerson brings integrated manufacturing solutions to diverse industries worldwide. Our comprehensive product line, extensive experience, world class engineering and global presence enable us to implement solutions that give our customers the competitive edge.

For over 150 years, our electrical product brands have been providing a rich tradition of long term, practical, high quality solutions with applications ranging from the construction and safe operation of petrochemical and process plants to providing quality power that precisely controls automotive robotic production.

Engineers, distributors, contractors, electricians and site maintenance professionals around the world trust Emerson brands to make electrical installations safer, more productive and more reliable.

Appleton Group is organized into three focused businesses that provide distributors and end users expert knowledge and excellent service.

ELECTRICAL CONSTRUCTION MATERIALS

This group is made up of the Appleton and O-Z/Gedney brands, offering a broad range of electrical products including conduit and cable fittings, plugs and receptacles, enclosures and controls, conduit bodies and industrial and hazardous lighting. Whether the application is hazardous location, industrial or commercial, the electrical construction materials group has the products to meet your needs.

POWER QUALITY SOLUTIONS

The SolaHD brand offers the broadest power quality line, including uninterruptible power supplies, power conditioners, voltage regulators, shielded transformers, surge protection devices and power supplies.

HEATING CABLE SYSTEMS

This group is made up of the EasyHeat and Nelson brands, offering a broad range of electrical heating cable products for residential, commercial and industrial applications.

Asia/Pacific
+ 65.6891.7600

Australia
+ 61.3.9721.0348

Canada
+ 1.888.765.2226

China
86.21.3338.7087

Europe
+ 33.3.22.54.27.54

Mexico/Latin America
+ 52.55.5809.5049

Middle East/Africa/India
+ 971.4.881.8100

Appleton Grp LLC
9377 W. Higgins Road
Rosemont, IL 60018
1.800.621.1506
nelsonheaters.com

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HEAT TRACE**

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