



COLD WEATHER SOLUTIONS: ELECTRIC HEAT AND CONTROL PRODUCTS

INDUSTRIAL AIR AND INFRARED RADIANT HEATERS

Portable Unit Heaters

Portable electric heaters are available in radiant-heat or fan-forced-air designs. Constructed for heavy-duty use, they are easily moved to virtually any location where instant heat is required. In forced-air applications, heater sizes range from 2 to 30 kW for use in building construction for warming workers, drying and curing, thawing frozen pipes and machinery, and where temporary localized heat is necessary. Radiant heaters are available in sizes from 1.5 to 13.5 kW and are ideal for heating large open areas like loading docks and warehouses.

Dragon Heaters

A rugged, industrial-grade, self-contained, highly mobile, electric fan-forced air heater, the all-electric Dragon heater can be left unattended without the threat of combustion by-products associated with fuel-fired heaters. Built-in safety features include an adjustable thermostat to control the outlet air temperature and auto-reset cutouts for the fan motor and heating elements. The thermostat provides settings for full-off, fan-only, and temperature control in the heating setting.

- 7.5 to 30 kW
- 208 to 600 V, single- and three-phase
- 25,590 to 102,360 Btu/hr
- Rugged construction
- No assembly required
- Portable
- cCSA_{US} listed
- All units have built-in high-limit cutouts; 480/600 V units feature safe 120 V control circuit

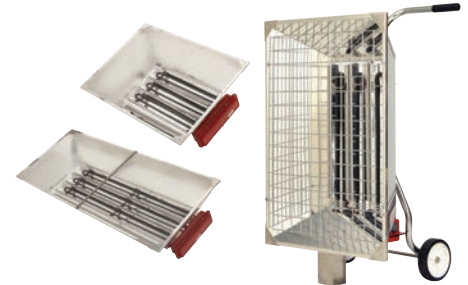


Fixed and Portable Infrared Radiant Heaters

Chromalox® ChromaStar™ infra-red heaters are designed to provide a rugged source of heat for use in areas where dependence on air movement is impractical. The heaters are versatile, designed to provide warmth directly where it is needed for primary or spot heating applications. Each unit is constructed for long life and requires minimal maintenance. There are no moving parts or motors to wear out, no air filters or lubrication required.

All Chromalox® ChromaStar™ radiant heaters feature the exclusive “Arctic End” patent-pending heating element terminal construction that lowers the terminal box temperatures for extended element and wiring life.

- 500 W to 13.5 kW
- 120 to 600 V, single- and three-phase
- 5,118 to 46,062 Btu/hr
- Fixed overhead models convertible to portable
- Portable models factory assembled
- Optional accessories include ground fault, disconnect, and tip-over shutdown
- UL listed



Industrial Unit Heaters

These self-contained heaters provide quiet, reliable, fan-forced heat for all types of commercial and industrial applications. The heavy-gauge steel blowers, trimmed in a polyester powder coat, come in horizontal or vertical configurations that can be ceiling- and wall-mounted. Adjustable louvers direct airflow. Chromalox® industrial unit heaters are UL and CSA listed, and meet NEC and OSHA requirements. Various built-in control options are available.

- 2.6 to 50 kW
- 208 to 600 V, single- and 3-phase
- 8,900 to 153,000 Btu/hr



Hazardous-Location Unit and Convection Heaters

Hazardous-location unit and convection heaters are designed for rugged industrial use in the presence of potentially flammable or explosive gases, vapors, powdered metals, or dusts in locations such as sewage treatment plants, petroleum refineries, and chemical processing plants. Numerous control options are available. Units are UL and CSA listed for wall or ceiling mounting. Most models are available with ATEX certification. Consult the National Electric Code for classification of your hazardous area before selecting your heater.

- 1.6 to 35 kW
- 120 to 600 V, single- or three-phase
- 5,459 to 119,420 Btu/hr



Washdown and Corrosion-Resistant Unit Heaters

Washdown and corrosion-resistant unit heaters feature rugged, corrosion-resistant construction for use in dirty, corrosive environments. Models are available with NEMA 4X control enclosures and stainless steel construction to resist dirt contamination and chemical attack, and can be washed down. These heaters are UL and CSA listed and meet NEC and OSHA requirements.

- 2 to 39 kW
- 120 to 600 V
- 6,820 to 133,000 Btu/hr



Industrial Convection Air Heaters

Industrial convection air heaters are designed to be wall-mounted in isolated areas, crane cabs, shop offices, and plants. These heavy-gauge steel units are coated with corrosion-resistant powder coat paint. Various models are available with thermostats and other control options. HCH-series heaters are UL listed.

- 250 W to 5 kW
- 120 to 600 V, single- and 3-phase
- 1,706 to 17,060 Btu/hr



Industrial Duct Heaters

Chromalox UL- and CSA-listed model DH duct heaters feature a rugged, galvanized steel frame and are available with either open coil or finned tubular heating elements. Models include integral or optional remote mount control panels. Configurations can be engineered for insert or flange mounting for new or retrofit applications.

- 500 W to 400 kW
- 120 to 600 V, single- and 3-phase
- 1,706 to 1,365,500 Btu/hr



HEAT TRACE CABLE AND CONTROLS

Self-Regulating Heat Trace Cable

Self-regulating cable for ordinary and hazardous locations prevents pipe freezing and maintains process temperatures. Constructed of a semi-conductive heater matrix extruded between parallel buss wires, the self-regulating cable adjusts its output to independently respond to temperatures along its length. This heat trace cable can be single-layer overlapped. It is flexible and can be cut to length in the field. Cable can be used in Division 2 hazardous areas.

- 3, 5, 8, 10, 15, and 20 W/ft (10, 16, 26, 32, 48, and 65 W/m)
- 120 and 208 to 277 V
- Circuit lengths to 750 ft (228 m)
- Process maintenance temperature up to 302°F (150°C)
- Exposure temperature up to 420°F (215°C)
- 8,900 to 153,000 Btu/hr



Self-Regulating Heat Trace Cable for Freeze Protection and Roof & Gutter De-Icing

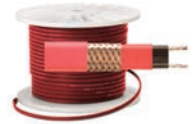
Chromalox SRF cable is ideal for keeping metal and plastic pipes warm in commercial construction, institutional buildings, and some industrial freeze protection applications, while Chromalox SRF-RG cable provides reliable freeze protection of roofs and gutters. The cable automatically adjusts to the appropriate heat output, eliminating hot spots and making it both energy efficient and cost effective. Parallel construction makes it easier to install than zone or series types of cable since it can be cut to length. It can be single overlapped without overheating the cable.

- 3, 5, and 8 W/ft (10, 16, and 26 W/m)
- 120 and 208 to 277 V from stock
- Self-regulating, energy efficient
- Circuit lengths up to 660 ft (200 m)
- Approximate size: 3/8 in. W x 1/8 in. H (9.5 mm W x 3.2 mm H)
- Minimum bend radius 11/8 in. (28.6 mm)
- UL listed, CSA certified



Self-Regulating Heat Trace Cable for Hazardous Locations

Chromalox offers self-regulating heat trace cable that is Factory Mutual (FM) approved for Class I, Division I, Group B, C, and D locations (hazardous gases and vapors) as well as Class II, Division I, Group E, F, and G (combustible dusts) and Class III, Division I locations. It can be cut to length and spliced in the field, and single-overlapped without burnout. Higher current capacity means longer circuit lengths—up to 750 feet (228 meters). Chromalox hazardous location heat trace cable is fully compatible with Chromalox® IntelliTrace™ modular process controls.



- 3, 5, 8, 10, 15, and 20 W/ft (10, 16, 26, 32, 48, and 65 W/m)
- 120 and 208-277 V
- Self-regulating, energy efficient
- Freeze protection of fire protection system piping
- 16 AWG buss wire
- Circuit lengths to 750 ft (228 m)
- Process temperature maintenance to 302°F (150°C)
- Maximum continuous exposure temperature, power off, to 420°F (215°C)



Constant-Wattage Heat Trace Cable

Constant-wattage heat trace cable provides uniform thermal output for process temperature maintenance and freeze protection. Rugged construction can withstand steam cleaning to 190 PSIG (13 bar) while de-energized. Optional tinned-copper braid permits use in some hazardous areas. Fluoropolymer jackets are available for corrosive applications. The cable is flexible for easy wrapping around piping and complex fittings and can be cut to length in the field. To ensure compatibility, consult the National Electrical Code for classification of your hazardous area before selecting heat trace cable.



- 4, 8, and 12 W/ft (13, 26, and 39 W/m)
- 120, 208 to 277, and 480 V
- Circuit lengths to 780 ft (238 m)

Mineral-Insulated Cable

Mineral-insulated heating cable is ideal for the most rugged pipe tracing applications requiring process temperature maintenance to 1,100°F (593°C). Its high-nickel-content Alloy 825 metal sheath material resists damage, is fire resistant, and provides for a good electrical ground. Select from custom configurations with a single- or dual-conductor cable.



- 5 to 50 W/ft (16 to 162 W/m)
- 120 to 600 V
- Circuit lengths up to 1,000 ft (305 m)
- Process maintenance temperature up to 1,100°F (593°C)
- Maximum exposure temperature, power off, to 1,200°F (648°C)

Heat Trace Controls

The Chromalox® IntelliTrace™ and WeatherTrace™ control systems are complete control solutions for heat trace applications, providing temperature control, monitoring, and power management in one package. The modular design of the control panel and components allows selection of only those features needed for a specific heat trace installation, minimizing cost and simplifying system configuration. The systems employ microprocessor-based controls and come pre-wired and assembled. Options include a choice of AC line voltages (120, 208, 240, 277, and 480), RS-485 communications interface, and Ground Fault Indicator alarms. Single-loop and multi-loop units are available.

Multi-loop IntelliTrace panels feature a simple color touchscreen operator panel. Both retrofit easily into existing systems. Complete circuit parameter value monitoring and management of multiple IntelliTrace systems is facilitated by our ISC Supervisory Controller.



The Chromalox DTS-HAZ is a programmable 30 A digital thermostat with soft start control and alarms. It facilitates all wiring, is designed for either pipe or vertical surface mounting, and, along with the IntelliTrace panels, is UL/cUL listed for both ordinary and hazardous locations.

Installation Kits and Accessories

Chromalox offers installation kits and accessories for all of the necessary components to perform straight or tee splices, power connections and water-resistant end seal terminations for final installation. Installation tape, pipe straps, and caution labels are also available from Chromalox.



The HL (hazardous location) series connection system for Chromalox heating cable is specifically designed to comply with the requirements of Division 1 hazardous areas and is Factory Mutual and CSA approved. The HL connection system includes power connection kits, end seal kits, splice kits, and tee kits as well as fiberglass tape cable attachments, aluminum tape cable attachments, metal pipe strap kit attachments, and caution labels.



ALSO AVAILABLE

Silicone Laminate Enclosure Heaters

Used for freeze protection and condensate protection in electrical enclosures. They are also installed in equipment to keep mechanical components functioning in applications such as ATM machines and automatic doors.

- 25, 50, 100, and 200 W
- 120 V
- Vulcanized to mounting plate for easy installation
- Custom design and thermostats available
- Air temperature sensing thermostats (40°F / 4°C close, 55°F / 13°C open) available



Ambient-Sensing Thermostats

Ambient-sensing thermostats are designed to provide heaters with simple on/off control and will accommodate heating and ventilating equipment within the voltage and current capability of the contacts. They can also be used to control valves, relays, auxiliary electric heaters, and fans associated with fan coil units. In most applications, they can switch loads directly without the use of external relays, but an external relay can be used for larger loads. The “dead front” construction means that all electrically live parts and wiring connections are contained behind the insulated thermostat base. Even with the cover removed, the user is protected.

- 10 A at 120 Vac, 5 A at 240 Vac, 4.2 A at 277 Vac
- Positive snap-action switch
- Positive OFF switch position
- Single phase, SPST
- Temperature range: 50° to 90°F (10° to 32°C)
- Mounts in standard 4 in. x 4 in. (100 mm x 100 mm) vertical duplex box



Industrial-Duty Thermostats

These thermostats are designed for harsh environments where a rugged design or special environment rating may be required. They are designed to directly control individual heaters or, by using an external contactor, can control several heaters. General-purpose, explosion-proof, and corrosion-resistant models are available, each providing a high level of accuracy and long, reliable service.

- Heavy duty: 25 A at 120 Vac, 22 A at 240 Vac, 18 A at 277 Vac
- Positive snap-action switch
- Temperature range: 40° to 100°F (4° to 38°C), depending on the model
- UL listed, CSA certified



Drum Heaters

Silicone Laminate drum heaters are constructed of silicone-rubber-reinforced fiberglass cloth, laminated around resistance wire to provide flexible moisture- and chemical-resistant heat. Drum heaters can withstand flexing without fear of premature failure.

- In stock, ready to install
- Fit 5, 15, 30, and 55 gallon (19, 57, 114, and 208 liter) metal and non-metal drums
- Adjustable thermostats
- Chemical and moisture resistant
- Rugged and flexible
- Easy to store
- Internally grounded, standard



Chromalox offers a variety of resources that are available for selecting and installing the right heat and control product for your cold weather application.

This CD contains complete product information for the full line of Chromalox comfort heaters, controls, and heat trace systems.

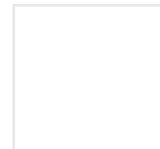
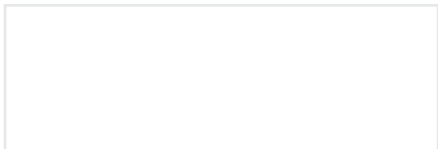
®This software helps you to design a complete heat trace system and automatically generates a bill of materials. Available on a CD or download at: www.Chromalox.com/resource-center/software.

This wall-mountable poster is a heat trace quick install guide with easy viewing of illustrations and calculation tables for specifying heat trace systems.

Log on and take advantage of a variety of features that are as close and convenient as your internet connection:

- Design wizards
- Design software
- Literature
- Application solutions







ARE YOU READY?

Call Chromalox for Your Freeze Protection
and Cold Weather Products at
1-800-443-2640.

Or visit us online at
www.chromalox.com

Your Local Chromalox Distributor is:



103 Gamma Drive
Pittsburgh, PA 15238
USA

Phone: (412) 967-3800
Fax: (412) 967-5148
Toll-Free: 1-800-443-2640

email: sales@chromalox.com
www.chromalox.com