



Ruffneck™

Heaters for the Harshest Environments

Product Guide



- Explosion-Proof Electric Unit Heaters

- Explosion-Proof Convection Heaters

- Heat Exchanger Unit Heaters



- Washdown Unit Heaters

- Forced Air Unit Heaters

- Duct Heaters

- Explosion-Proof Exhaust Fans



- Accessories



CCI Thermal
Technologies Inc.
Heating and Filtration Solutions



Heat Exchanger Unit Heaters



FR Heat Exchanger Unit Heaters

- Designed for steam applications that may be subject to freezing conditions and are of particular value for outdoor applications.
- Rectangular top and bottom headers distort to a circular shape during accidental freeze-up without serious damage.
- Heat exchanger cores are of steel construction with tension wound, close fitting aluminum fins and are highly resistant to corrosive agents, including hydrogen sulphide.
- Pressure ratings based on a nominal 5:1 safety factor; designed for pressures up to 100 psi.
- 40 models, ranging from 115 - 575V, with the option of TEFC or explosion-proof.
- All models are Canadian CRN and GOST approved.
- UL-listed/CSA-approved motors available.

HP Heat Exchanger Unit Heaters

- Designed for rugged industrial applications including space heating and liquid cooling applications.
- These extra heavy duty heaters (including heavy gauge steel construction) are suitable for a wide range of heating fluids including steam, glycol, oil, etc.
- Pressure ratings based on a nominal 5:1 safety factor; designed for pressures up to 400 psi.
- 40 models ranging from 115 - 575V, with the option of TEFC or explosion-proof.
- All models are Canadian CRN and GOST approved.
- UL-listed and/or CSA-approved motors available.



AH/AV Unit Heaters

- Designed for rugged industrial applications and can be used with a variety of heat transfer fluids such as steam, circulating hot water, and glycol heating systems, or in liquid cooling applications.
- Maximum operating pressure of 450 psi and maximum operating temperature of 650°F.
- 37 models, from 6,000 - 1,200,000 BTU/hr.
- Explosion-proof models suitable for hazardous locations are also available on custom order.
- Motors ranging from 115 - 440V, with the option of TEFC or explosion-proof.
- All models are Canadian CRN approved.
- UL-listed and/or CSA-approved motors.



Explosion-Proof Electric Unit Heaters



FX5 Explosion-Proof Electric Air Heaters

- Designed for the harshest environments such as dry indoor industrial applications, oil refineries, petrochemical plants, etc., where specific explosive gases or dusts may be present.
- The heater core assembly is contained in a sturdy, epoxy-coated, 14-gauge steel cabinet (optional Heresite® coating and stainless steel construction for corrosive environments available).
- 33 models offered in 3 - 35kW, ranging from 208 - 600V.
- UL certified and approved for the following Hazardous Locations: Classifications: Class I, Divisions 1 & 2, Groups C & D; Class II, Divisions 1 & 2, Groups E, F & G; Class I, Zones 1 & 2, Groups IIA & IIB; Temperature code T3B 165°C (329°F).

FE1 Explosion-Proof Electric Air Heaters

- Designed and manufactured for use in dry indoor industrial applications such as oil refineries, petrochemical plants, pulp and paper mills, etc., where specific explosive gases or dusts may be present.
- The heater core assembly is contained in a sturdy, epoxy-coated, 14-gauge steel cabinet, which also houses the motor and fan assembly.
- Utilizes the VacuCore® liquid-to-air heat exchanger, which provides greater efficiency, faster warm-up and even heat distribution across the face of the exchanger.
- 37 models offered in 2.5 - 22.4kW, ranging from 220 - 415V.
- CE/ATEX II2 G, EEX d IIA & IIB T3 Zones 1 & 2 and GOST approved for global markets.



Explosion-Proof Convection Heaters



CX1 Provector® Explosion-Proof Heaters

- Designed and manufactured specifically for demanding requirements and harsh operating conditions, such as those in the oil and gas industry.
- Sloped-top cabinet prevents objects that restrict airflow from being set on top.
- No exposed copper or brass, limiting corrosion and making the unit suitable for H₂S environments.
- 29 models offered in 0.75 - 7.6kW, ranging from 120 - 600V.
- UL C/US listed approvals for groups B,C,D, IIA, IIB and IIC. IP55 moisture ingress protection available.

CF1 Provector® Explosion-Proof Heaters

- Designed and manufactured specifically for demanding requirements and harsh operating conditions such as those in the oil and gas industry.
- Sloped-top cabinet prevents objects that restrict airflow from being set on top.
- No exposed copper or brass, limiting corrosion and making the unit suitable for H₂S environments.
- 32 models offered in 0.75 - 7.6kW, ranging from 220 - 415V.
- CE, ATEX, GOST approvals for groups IIA, IIB and IIC. IP55 moisture ingress protection available.



Washdown Unit Heaters



CR1 Triton™ Corrosion-Resistant Washdown Heaters

- Designed for non-hazardous locations and applications using water pressure of less than 70 psi.
- NEMA Type 4X construction for increased safety and protection against water penetration.
- Epoxy-coated fan blade and 16-gauge stainless steel cabinet for increased corrosion resistance.
- 37 models offered in 13 - 39kW, ranging from 208 - 600V.
- UL listed Type 4X for Coast Guard and Marine applications.

CRE1 Triton™ Corrosion-Resistant Washdown Heaters

- Designed for washdown applications in non-hazardous locations using water pressure of less than 482 kPa.
- IP55 enclosure for increased safety and protection against water penetration.
- Epoxy-coated fan blade and 16-gauge stainless steel cabinet for increased corrosion resistance.
- Custom configured stainless steel spiral-finned heating elements for improved heat distribution and corrosion protection.
- 41 models offered in 2.5 - 40kW, ranging from 220 - 690V.
- UL listed, CE and GOST approved for global markets.



Forced Air Unit Heaters



RGE Regular Duty Air Heaters*

- Designed for use in regular duty industrial and commercial space heating applications such as factories, parking garages, stores, etc.
- Phosphate coated, epoxy painted 18-gauge steel cabinet.
- Numerous optional factory installed features to meet specific customer requirements, including optional thermostats and controls, and optional wall bracket.
- 35 models offered in 2 - 40kW, ranging from 208 - 600V.
- CSA C/US approved.

* Please note that in Canada, these units are marketed under the Caloritech™ brand name.

RGX Heavy Duty Air Heaters*

- Designed for heavy duty use in industrial environments such as pulp & paper mills, mine shafts, welding shops, etc.
- Heavy duty construction reduces the downtime and maintenance costs associated with standard design heaters.
- 18 models offered in 10 - 50kW, ranging from 208 - 600V.
- 40kW and 50kW units incorporate split loads (50%) for remotely controlled energy management systems.
- CSA C/US approved.

* Please note that in Canada, these units are marketed under the Caloritech™ brand name.



Duct Heaters



RXDF Explosion-Proof Duct Heaters*

- Designed for heating air or gases in hazardous environments such as oil refineries, coal mines, petrochemical plants, etc., where potentially explosive substances are present.
- Heavy walled carbon steel finned tubular (Calrod® Type) elements with nickel plated finish to provide safe, efficient, low temperature heat transfer.
- 3 duct heater sizes offered in 2.5 - 50kW, ranging from 208 - 600V.
- Available with T2D, T3A or T3B hazardous area temperature codes.

*Please note that in Canada, these units are marketed under the Caloritech™ brand name.

Types RDFF, RDIF, RDFT & RDIT Air Duct Heaters*

- Designed for use in comfort heating applications such as make-up air heating, air pre-heating, air handling equipment, etc.
- RDFF is a Flanged Duct Heater with finned tubular (Calrod® type) elements.
- RDFT is a Flanged Duct Heater with non-finned tubular (Calrod® type) elements.
- RDIF is an Insert Duct Heater with finned tubular (Calrod® type) elements.
- RDIT is an Insert Duct Heater with non-finned tubular (Calrod® type) elements.
- Primary linear cutout, 160°F (71°C), 277/600 VAC, 25/10 AMP non-inductive.
- Secondary linear cutout, manual reset with backup magnetic contactor on units under 300V, 30kW and less, 225°F (107°C), 277/600 VAC, 25/10 AMP non-inductive.
- CSA C/US approved.



*Please note that in Canada, these units are marketed under the Caloritech™ brand name.

Explosion-Proof Exhaust Fans



EFX Explosion-Proof Exhaust Fan

- Designed for both hazardous and general purpose industrial applications.
- A number of optional features are available for customization including Heresite® coating on all non-motor components, backdraft dampers and rain hoods.
- Spark resistant aluminum fan blades for hazardous locations.
- Epoxy-coated steel construction.
- Fan guards conform to OSHA specifications.
- 50 models ranging from 115 - 440V.
- Motors are CSA approved and/or UL listed.

Accessories

Thermostats

- XT Thermostat (Defender® Explosion-Proof)
- XTW Thermostat (Explosion-Proof, Air Sensing)
- XTB Thermostat (Explosion-Proof, Remote Sensing)
- XTD8 Thermostat (Explosion-Proof, Room)
- ET5 Thermostat (Heavy-Duty Line Voltage)
- TF Thermostat (NEMA 4X, Water-Resistant)

Mounting Kits

- BMK Mounting Kit (Basic)
- HMK Mounting Kit (Hanging)
- PMK Mounting Kit (Pipe)
- WMK Mounting Kit (Wall)
- SHMK Mounting Kit (Swivel Hanging)
- VHMK Mounting Kit (Vertical Hanging)





CCI Thermal
Technologies Inc.
Heating and Filtration Solutions



As a leader in advanced heating and filtration solutions with facilities across North America, CCI Thermal Technologies Inc. manufactures five of the top brands in industrial heating in addition to a comprehensive line of engineered industrial filtration products including:

 **Cata-Dyne™**

Explosion-Proof Gas Catalytic Heaters

Cata-Dyne™ is the industry standard in infrared gas catalytic heaters, enclosures, pipeline systems and accessories. Customers across a wide range of industries rely on Cata-Dyne™ to supply them with safe, reliable, efficient and versatile infrared catalytic heating equipment for a variety of applications in both hazardous and non-hazardous environments.

 **Ruffneck™**

Heaters for the Harshest Environments

Ruffneck™ is renowned for its rugged, reliable and versatile heavy-duty explosion-proof heaters, heating systems and heating accessories. Ruffneck™ has a long and proud history of supplying quality heating products for the harshest industrial environments to a worldwide customer base for over 30 years. Ruffneck™ is well-known in the industry for its "ship the heat in a week" policy, where 95% of all standard orders are shipped within one week of order placement.

 **Caloritech™**

Engineered Electric Heat

Caloritech™ electric heaters, heating elements and heating accessories are well-known in the industry for their quality, reliability, performance and versatility. In addition to standard "off the shelf" industrial heaters and heating systems components, Caloritech™ also offers engineered heating solutions custom designed, manufactured and tested to satisfy customer specifications. No matter what your application or environment, Caloritech™ has a solution to fit your heating needs.

 **Norseman™**

Electric Explosion-Proof Heaters

Norseman™ is the most technologically advanced line of explosion-proof electric air heaters and heating accessories, including both forced air heaters and natural convection heaters, as well as unit heaters, panel heaters and thermostats. Norseman™ offers innovative, low maintenance solutions for a wide range of applications in a variety of industrial and commercial environments. Custom engineered heaters or heating systems are available for specialized applications.

 **DriQuik™**

Infrared Ovens

DriQuik™ is the market leader in infrared drying ovens and automated pre-finishing systems. DriQuik™ pioneered radiant oven technology in the 1930s and has since been setting the industry standard in infrared radiant heating systems and components for over 75 years.

 **3L Filters™**

Engineered Filtration Systems

3L Filters™ has satisfied the most demanding industrial filtration requirements for over 40 years. A broad range of standard and custom products includes liquid filters, strainers, separators, pressure vessels, and engineered products and systems. 3L Filters has special expertise for nuclear, petrochemical, water treatment and environmental applications.

Visit www.ccithermal.com for detailed product information.

Edmonton Head Office

1-800-661-8529
(780) 466-3178
F 780-468-5904

Oakville

1-800-410-3131
(905) 829-4422
F 905-829-4430

Orillia

1-877-325-3473
(705) 325-3473
F 705-325-2106

Greensburg

1-800-473-2402
(812) 663-4141
F 812-663-4202