



FastraxTM

ENGINEERED SNOW CLEARING PRODUCTS
FOR RAIL APPLICATIONS

Track & Switch Heater
Hellfire
Switchblade Elements
Control Panels

FEB
HAC
ArcticSense



WORLD LEADER IN INDUSTRIAL PROCESS HEATING SOLUTIONS

a degree above | www.Thermon.com



Fastrax® is a leading manufacturer of complete engineered snow clearing packages for rail applications. We provide the most efficient snow clearing devices including electric element rail heaters, gas fired hot air blowers, cold air blowers, electric hot air blowers, platform heaters, crib heaters, control panels, and associated rail heating components.

These snow clearing products are designed for low maintenance and long life for rugged use even in the harshest conditions, and keep switches clear of ice and snow. We also custom design and manufacture energy saving automated control packages to provide our customers with complete heating solutions for rail industry applications.

Fastrax® and the HELLFIRE product line has been acquired by Thermon, a world leader in the development and production of advanced heating and filtration solutions for industrial and hazardous area applications, offering a full line of transit heating products. To find out more about Thermon and other brands and services visit www.thermon.com.

Track & Switch Heaters

HELLFIRE Gas Fired Forced Air Switch Heater

HELLFIRE Gas Fired Forced Air Switch Heater HELLFIRE 400, HELLFIRE 900 and 905 series gas fired forced air heaters melt and evaporate ice and snow from point to heel of railway switches



Features:

- Soft start option available for 5 hp Hellfire 905 240vac single phase
 - The air temperature is thermostatically regulated for safe operation and maximum snow clearing performance.
 - Heat output ranges 200,000 to 400,000, and 300,000 to 900,000 BTU/hr.
 - Factory set to operate on propane, simple regulator adjustment for natural gas.
 - Multiple standard duct system configurations. Custom duct systems available.
 - Electrically isolated duct work meets AREMA dielectric strength standard 3000-volts AC RMS
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- Intermittent or Continuous Fan operating modes.
 - Voltages range from 208 to 575.
 - 14 gauge galvanized steel blower, intake, and duct work. Ducts in contact with ballast are 11 gauge Hot Dipped Galvanized. Track ducts are 18 gauge electroplated zinc steel.
 - Stainless steel burner and combustion chamber transition duct.
 - Remote dispatch operation and indication, relay based.
 - Optional low or high profile air intakes.
 - ArcticSense option allows automatic operation, optimizing energy efficiency without compromising performance.
 - Remote control and monitoring possible via RS-485 port communications.



CRIB HEATERS

Crib heaters eliminate ice and snow in the crib area at the critical switch point allowing for easy maintenance of switch rods and smoother switch operation. Exclusive jack bolt technology ensures secure fit, eliminating movement and potential switch fouling.

Features:



- Heavy gauge aluminum construction resists corrosion and offers protection and durability in rugged railroad environments
- 26 ft premium grade marine power cable lead is resistant to chemicals and severe weather
- Model lengths range from 4' to 8'8"
- Standard wattages range from 600 W to 2700 W
- Available in AC or DC voltages, from 120V to 750V

Switchblade® Electric Element Rail Heaters

Switchblade electric element heaters clear ice and snow from point to heel of railway switches. Elements fasten to and directly heat the rail by conduction. The heated rails heat the tie plates and melt snow and ice allowing the points to move freely.

Features:

- Patented SwitchBlade® heaters design
- Flat profile design maximizes heat transfer and increases energy efficiency.
- Stainless steel heavy duty construction resists corrosion and offers protection and durability in rugged railroad environments.
- Available in any length up to 26 feet.
- Available in AC or DC voltages.
- Watt densities of 100 to 500W/ft.
- Utilizes Fastrax® patented spring clamp technology allowing for expansion and contraction of the heater without binding or losing contact with the rail. No drilling required.



Control Panels, Electric Element

The control panel forms an integral part of a railway switch heating system that safely controls the heating of multiple switches and provides automatic operation based on ArcticSense snow detection.



Features:

- Ground fault protection
- Individual heater circuit breaker protection
- Local controls and annunciation lights
- Adjustable or indefinite run time
- UL and ULC approved electrical components
- Mounted safety/service disconnect
- Terminal connections for field wiring
- Internal panel heater
- Tamper proof, safe “dead-front” design
- NEMA 4X stainless steel enclosure for AC
- Available from 120V to 600VAC, or up to 750VDC
- Custom designs and layouts available.
- Each panel provides dispatch control and indication.

DC Specific Features:

- NEMA 4 Fiberglass enclosure
- Hermetically sealed contactors
- 1000 V DC rated components
- Load breaking disconnect switch
- Isolated high voltage section
- GPO-3 nonconductive back pan



FEB - Electric Hot Air Switch Heater

The FEB series Electric Hot Air Blower switch heater prevents or removes ice and snow build up in the switch point area by delivering high velocity heated air distributed via point nozzles and track duct duct system over the entire switch.

Features:

- The air temperature is thermostatically regulated for safe operation and maximum snow clearing performance.
- Standard 20 kW, 40 kW and 60 kW units
- Custom configurations and wattages to suit any track heating application
- Fully enclosed all aluminum construction
- Electrically isolated duct work meets AREMA dielectric strength standard 3000-volts AC RMS
- Ground and aerial snow sensors for automatic operation
- Rugged industrial modular electric heater design



- Automated fan shutdown delay for overheat protection
- Multi-stage energy saving operation (independent hot/cold operation)
- NEMA 4 electric enclosure for moisture protection in outdoor applications
- Low or high profile air intakes

HAC - High Velocity Ambient Air Blower

Fastrax™ HAC Horizontal Air Curtain Series produce a high velocity curtain of ambient air to prevent the accumulation of ice and snow in railway switches. The HAC consist of a compact blower unit and ducting system that delivers airflow to the switch mechanism.

The blower unit is an electrically powered centrifugal fan equipped with a low velocity air intake. The blower output is ducted below the rails to nozzles mounted within the railway switch. From the two point nozzles, 120 - 140 mph high velocity air streams are directed towards the point of the switch.

Fastrax™ QHAC Series Quiet Horizontal Air Curtains are designed for use in residential areas, with reduced sound pressure levels below 60 dbA at 50 feet.

Features:

- Rotating nozzles and adjustable vane to direct air where needed
- Air volume output, 5 HP 2500 cfm, 7.5 HP 3000 cfm.
- Motor starting contactor with overload protection
- Electrically isolated duct work meets AREMA dielectric strength standard 3000-volts AC RMS
- Standard HAC series - 65 dbA at 50 feet
- Quiet (low noise) QHAC series - 60 dbA at 50 feet



ArcticSense

Thermon's ArcticSense is specifically designed to detect precipitation in the form of snow, sleet or rain from any angle of incidence, making it ideal for detecting both falling and drifting snow in high winds. Rigorous testing and field evaluations against competitive sensors was integral to the ArcticSense design and development process. The result is a proven design with class leading performance and reliability, ideally tailored for harsh environments. Versatile construction allows for multiple mounting options such as: aerial, ground, duct or custom applications.



Features:

- Increased sensitivity detects the slightest snowfall.
- Compact, solid construction makes it extremely rugged and suitable for the harsh railroad environment.
- 360° of vertical side sensing surface provides for snow detection from any direction.
- Designed for harsh EMI and surge environments. Tested to both IEC62236-4 and AREMA standards.
- Tunable controls: Snow/rain temperature set point and moisture sensitivity.
- Stainless steel side sensing electrodes.
- Custom Applications





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Thermon Industrial Solutions Made for You

Visit www.thermon.com to contact a Thermon representative near you.

HEAD OFFICE: 7171 SOUTHWEST PKWY | BUILDING 300 SUITE 200 | AUSTIN, TX | 78735 | UNITED STATES

FASTRAX: 1500 W CAMPUS DR | LITTLETON, CO | 80120 | UNITED STATES



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