

Neptronic is pleased to introduce the first BACnet/Modbus Electric Duct Heater. Designed with today's energy efficiency expectations, it enables you to view real-time power consumption, to perform automatic/dynamic load shedding, limit consumption based on multiple variables, create energy optimization strategies as well as monitor trends and alarms.



BMS
Integration



BACnet & Modbus



Energy
Management



Monitor
Alarms



Monitor
Alarms



Auto
Load Shedding

Unique Benefits Features

- Integrate with BMS and intelligent buildings via BACnet MS/TP or Modbus
- Patented EAS Electronic Air Flow Sensors (US 7,012,223)
No mechanical air flow switch required. Shuts off heater if air flow too low.
- Real-time feedback output signal of heater capacity
- Built-in Current Transducers (1 per phase)
Provides power consumption data (KW in real-time)
- Calculate ΔT by using the provided supply and discharge temperature sensors
This allows the possibility to read the air temperature before and after the heater elements from your BMS
- Optional wall-mount room thermostat with LCD (TRL24)
Enables the user to remotely view the status of the heater and change the setpoint
- Built-in PID algorithm
Maximizes the heater's efficiency when there is a sudden change of velocity or temperature within the system
- Remote monitoring (status, alarms, diagnostics, and trending)
- Multiple BACnet/Modbus points to propel you towards the Internet of Things
- Configurable BACnet scheduler

Overview

- Modulating, on/off and/or up to 10 stages
- Standard from 0.5 to 1000kW (larger loads available)
- Up to 40kW per sq.ft.
- Zero voltage crossing SSR
- Built-in intelligent controller
- Accepts any industry standard input signal
- Selectable enclosure type: NEMA Type 1 (IP10), NEMA Type 12 (IP52), NEMA Type 4 (IP56), or NEMA Type 4X (IP65)
- Selectable heating elements: open coil, tubular, finned tubular

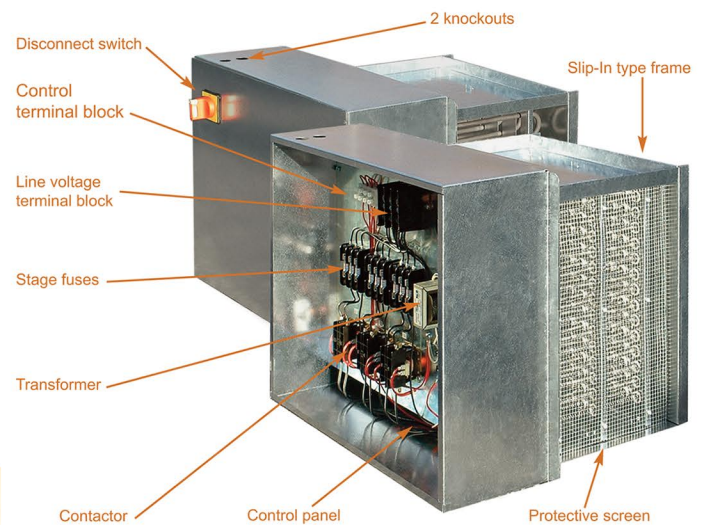
OPEN COIL



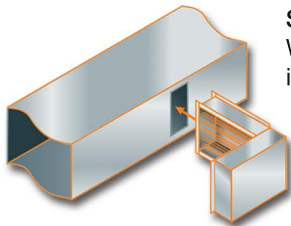
TUBULAR



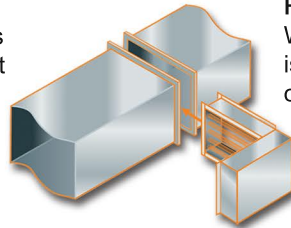
FINNED TUBULAR



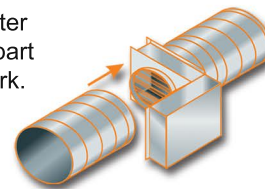
Installation Options



Slip-In
When entire frame is inserted into the duct



Flanged
When the heater is an integral part of the duct work.

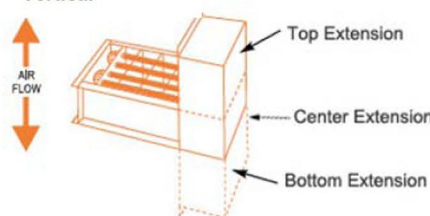


Round Collar
For round duct work of 6" to 24" (152mm to 609mm)

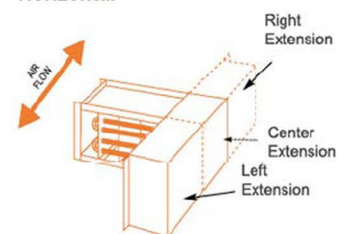
Mounting

- Designed for vertical or horizontal mounting
- No need to define air flow orientation
- Approved by UL, CSA and ETL for zero clearance for combustible material

Vertical



Horizontal



Heater Selection Software

