



neptronic[®]
www.neptronic.com

- HVAC Controls
- Electric Actuators
- Actuated Valves
- Humidifiers
- Electric Heaters

Head Office
Neptronic[®]
400 Lebeau Blvd.
Montreal, Quebec, Canada H4N 1R6
Tel.: (514) 333-1433
Fax: (514) 333-3163
Toll Free: 1-800-361-2308

Yes, You Have Options! Electric Duct Heater Options

Neptronic electric heaters are custom made to suit your specifications. Our proprietary web based software allows you to select from many options to make this custom heater most suitable for your application.

- **Installation Types**

Need flanged heater frames? Besides “insert” (slip-in), we have two different flange types: **1” and 1.5”**.

- **VAV Application?**

A transformer with 25 **extra VA** can be provided to power the VAV.

- **High Temperature Application?**

For applications such as baking and drying, ask for “**Process Heater**”. These heaters are available up to 1000KW and can have a discharge temperature as high as 1,200°F (648°C). For more details, please see this article

http://www.neptronic.com/TechTime/20160328/Articles/Heaters_Article/include.aspx

- **Low Duct Velocity?**

Heaters come with either a mechanical airflow switch or electronic airflow sensor. At times, airflow in the duct could be too low to energize the airflow switch (below 250 fpm). For these applications

USA
NEP Inc.
P.O. Box 1151
Medford Oregon,
USA 97501
Tel.: (541) 531-5746

Middle East & Asia
NEP International FZE
P.O. Box 125687,
Dubai, UAE
Tel.: +97155 8825487
Fax: +9714 3426772

Singapore
Neptronic Pte Ltd
Office D6, #03-38,
Mountbatten Square
229, Mountbatten Road,
Singapore – 398 007
Mobile: +65 8118 4184
Tel: +65 6650 6212
Fax: +65 6491 6423

select the electronic sensor option which will keep the heater energized down to 100 fpm. For more details, please see this article http://www.neptronic.com/TechTime/20150513/Where_is_the_Airflow_Switch.aspx

- **Cold Spots?**

Neptronic provides an option to build heaters to accommodate ***cold spots***. This is done at the design stage where blanking plates are added to the heater frame making the coil area smaller in order to increase velocity. This option is also used to avoid hot spots around thermal cut outs in case the duct or air handling unit has a large wall thickness. For more details, please see article

<http://neptronic.com/TechTime/20151124/Website/Heaters%20Article/HeatersArticle.aspx>

- **Application that requires stainless steel A to Z.**

Based on locations and environmental conditions, some heaters are required to have frames, control panels and even heating elements all in stainless steel. Tubular and finned tubular elements are available in stainless steel. We also have ***Stainless Steel Terminals*** as an option where the element terminals and hardware are in stainless steel.

- **Safety?**

Optional ***protective screens*** are available to prevent accidental contact with the elements. They can be installed on one side or both sides.

- **Control remotely?**

An ***auxiliary switch*** can be provided as an option to remotely control another electrical device.

www.neptronic.com

- **Turn The Fan ON**

A ***fan relay*** can be added on the heater to send a signal to the fan starter, which will energize the fan.

- **Modulating Signal**

Neptronic's universal HEC controller accepts any input signal available in the HVAC industry. Modulating heaters will be set with a 0-10Vdc signal by default. But 0-5Vdc, 2-10Vdc, 4-20mA or pulsed DC and AC signals can be set on site by moving ***jumpers***. Simple as that! For more details on the HEC please visit

<http://www.neptronic.com/TechTime/20160203/Articles/Heaters%20Article/include.aspx>

- **Indicate The Problem**

Pilot lights can be added to our heaters. These are color-coded lights for Power ON, Heating, Overheat, No airflow and Stages. Pilot lights are installed on the surface of the control panel.

- **Control Panel Exposed Outdoors?**

Standard Nema1 control panel with galvanized steel is used for most indoor applications. For outdoor installations, ***Nema4 and Nema4X*** are suitable options. These come with stainless steel control panels, which provide protection from rain, snow, splashing water or hose directed water.

www.neptronic.com

- **Control Panel Location**

The control panel can be built with Left, right or center **panel extensions** (top, bottom and center for vertical heaters). The whole panel can also be mounted either on **top or bottom** of the frame. If absolutely no space is available on site, a **remote panel** option is available.

- **Too Cold, Too Hot?**

When the control panel is exposed outdoors to extreme cold temperatures, it can create condensation inside the panel. **Box insulation** can be added between the panel and hot area to prevent any possible **condensation** on electrical components.

With so many different options available, we at Neptronic can better satisfy your needs. Contact your nearest agent for more details or visit our website at www.neptronic.com

www.neptronic.com