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■ HVAC Controls ■ Electric Actuators ■ Actuated Valves
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Use the protection you need: Enclosure types (Control Panels)

Certain applications require specific types of control panels or enclosures for heaters. This article talks about the different types of enclosures available to suit the environment.

Nema 1 (IP 10) PROTECTS AGAINST ACCESS

These control panels are made for indoor use only. They are constructed of galvanized steel and provide a degree of protection to personnel against incidental contact with enclosed equipment and falling dirt. The panel is made with knockouts for cable entry and rivets and screws are used for assembly. The Nema 1 is standard on Neptronic heaters.

Nema 12 (IP 52) DUST-PROTECTED

These are also constructed for indoor use only. Provides a degree of protection to personnel against incidental contact with enclosed equipment, falling dirt, circulating dust, lint, fibres as well as water spray and light splashing of liquids, water infiltration and oil or non-corrosive liquid refrigerant. A gasket is used around the panel door to provide sealed dust-tight protection. Nema 12 enclosures are made with no knockouts.

Nema 4 (IP 56) PROTECTED AGAINST SPLASHING WATER

Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with enclosed equipment, falling dirt, rain, sleet, snow, windblown dust, splashing water and hose directed water. This type of enclosure will not be damaged by external ice formation. Nema 4 panels are made of stainless steel 304. Upon request, stainless steel 316 can be provided. No rivets or screws are used on these panels - all metal parts are welded to provide a completely sealed construction. For this reason Nema 4 enclosures are made with no knockouts. Special vents are used on these panels for ventilation purposes.

Nema 4X (IP 65) PROTECTED AGAINST CORROSION

Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with enclosed equipment, falling dirt, rain, sleet, snow, windblown dust, splashing water, hose directed water and corrosion. This type of enclosure will also be undamaged by the external formation of ice. Nema 4 panels are made of stainless steel 304. Upon request stainless steel 316 can be provided. No rivets or screws are used on these panels. All metal parts are welded to provide a sealed construction. For this reason Nema 4X enclosures are made with no knockouts. Special vents are used on these panels for ventilation

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purposes.

Knockouts must be made by installer for nema 12, 4 and 4X. Also a hole must be drilled on these enclosures by the installer to install the pitot tube for the airflow switch.

It is important to know the location and environment of where heaters are going to be installed as it is not possible to modify the control panel in the field.

We have the options for all your applications.

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