

NEMA

Enclosure Descriptions

Type 1 Enclosures

Type 1 enclosures are intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment in locations where unusual service conditions do not exist. The enclosures shall meet the rod entry and rust-resistance design tests.

Type 3 Enclosures

Type 3 enclosures are intended for outdoor use primarily to provide a degree of protection against windblown dust, rain, and sleet; and to be undamaged by the formation of ice on the enclosure. They shall meet rain, external icing, dust, and rust-resistance design tests. They are not intended to provide protection against conditions such as internal condensation or internal icing.

Type 3R Enclosures

Type 3R enclosures are intended for outdoor use primarily to provide a degree of protection against falling rain; and to be undamaged by the formation of ice on the enclosure. They shall meet rod entry, rain, external icing, and rust-resistance design tests. They are not intended to provide protection against conditions such as dust, internal condensation or internal icing.

Type 4 Enclosures

Type 4 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, and hose-directed water; and to be undamaged by the formation of ice on the enclosure. They shall meet the hosedown and external icing design tests. They are not intended to provide protection against conditions such as internal condensation or internal icing.

Type 4X Enclosures

Type 4X enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, and hose-directed water; and to be undamaged by the formation of ice on the enclosure. They shall meet the hosedown, external icing, and corrosion-resistance design tests. They are not intended to provide protection against conditions such as internal condensation or internal icing.

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Enclosures capable of withstanding the pressures resulting from an internal explosion of specified gas, and contain such an explosion sufficiently that an explosive gas-air mixture existing in the atmosphere surrounding the enclosure will not be ignited. Enclosed heat-generating devices will not cause external surfaces to reach temperatures capable of igniting explosive gas-air mixtures in the surrounding atmosphere.

Type 12 Enclosures

Type 12 enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping noncorrosive liquids. They shall meet drip, dust, and rust-resistance design tests. They are not intended to provide protection against conditions such as internal condensation. Ventilating a Nema 12 panel alters the rating to Nema 1.

For more detailed NEMA descriptions, refer to the Technical section of this catalog.