

NEMA Enclosure Standards

The following information is derived from the NEMA Standard #250, dated May 1988. Altech is providing this information as a guideline. Please consult the NEMA Standards for your specific requirements.

NEMA REFERENCE NON-HAZARDOUS LOCATIONS	TESTS CONDUCTED
TYPE 1 enclosures are intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment.	Rust entry Rust resistance
TYPE 2 enclosures are intended for indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt.	Rod entry Drip Rust resistance
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.	Rain Dust External icing Rust resistance
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.	Rod entry Rain External icing Rust resistance
TYPE 3S enclosures are intended for outdoor use primarily to provide a degree of protection against windblown dust, rain, and sleet, and to provide for operation of external mechanisms when ice laden.	Rain Dust External icing Rust resistance
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.	Hosedown External icing Rust resistance
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.	Hosedown External icing Corrosion resistance
TYPE 6 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during temporary submersion at a limited depth.	Submersion External icing Rust resistance
TYPE 6P enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during prolonged submersion at a limited depth.	Air pressure External icing Corrosion resistance

TYPE 12 enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping non-corrosive liquids. Rust resistance	Drip Dust
TYPE 13 enclosures are intended for indoor use primarily to provide a degree of protection against dust, spraying water, oil, and non-corrosive coolant.	Oil exclusion Rust resistance
HAZARDOUS LOCATIONS	TESTS CONDUCTED
TYPE 7 enclosures are intended for indoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the National Electrical Code.	Explosion Hydrostatic Temperature
TYPE 9 enclosures are intended for indoor use in locations classified as Class II, Groups E, F or G, as defined in the National Electrical Code.	Dust Penetration Temperature