



Technical Data

Enclosure Types for Non-Hazardous Locations

	NEMA Standards Publication No. 250 Enclosures for Electrical Equipment (1000 Volts maximum)	UL50 Standard for Enclosures for Electrical Equipment	CAN/CSA C22.2 No. 94 Special Purpose Enclosures
Designation	Intended Use and Description	Intended Use and Description	Intended Use and Description
Definition	An enclosure is a surrounding case constructed to provide a degree of protection to personnel against incidental contact with the enclosed equipment and to provide a degree of protection to the enclosed equipment against specified environmental conditions.	Enclosure - A surrounding case constructed to provide a degree of protection against incidental contact with the enclosed equipment and to provide a degree of protection to the enclosed equipment against specified environmental conditions.	Enclosures...provide a degree of protection against accidental contact with the enclosed equipment, and to the enclosed equipment, against specified environmental conditions.
Type 1	Enclosures constructed for indoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment and to provide a degree of protection against falling dirt.	Indoor use primarily to provide a degree of protection against limited amounts of falling dirt.	No CSA equivalent.
Type 2	Enclosures constructed for indoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment, to provide a degree of protection against falling dirt, and to provide a degree of protection against dripping and light splashing of liquids.	Indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt.	An enclosure for indoor use, constructed so as to provide a degree of protection against dripping and light splashing of non-corrosive liquids, and falling dirt.
Type 3	Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, rain, sleet, snow, and windblown dust; and that will be undamaged by the external formation of ice on the enclosure.	Outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust and damage from external ice formation.	An enclosure for either indoor or outdoor use, constructed so as to provide a degree of protection against rain, snow, and wind blown dust; undamaged by the external formation of ice on the enclosure.
Type 3R	Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, rain, sleet, and snow, and that will be undamaged by the external formation of ice on the enclosure.	Outdoor use primarily to provide a degree of protection against rain, sleet, and damage from external ice formation.	An enclosure for either indoor or outdoor use, constructed so as to provide a degree of protection against rain and snow, undamaged by the external formation of ice on the enclosure.
Type 3S	Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, rain, sleet, snow, and windblown dust; and in which the external mechanism(s) remain operable when ice laden.	Outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust, and to provide for operation of external mechanisms when ice laden.	An enclosure for either indoor or outdoor use, constructed so as to provide a degree of protection against rain, snow, and windblown dust, the external mechanism(s) remain operable while ice covered.
Type 4	Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, rain, sleet, snow, windblown dust, splashing water, and hose-directed water, and that will be undamaged by the external formation of ice on the enclosure.	Indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water, and damage from external ice formation.	An enclosure for either indoor or outdoor use, constructed so as to provide a degree of protection against rain, snow, windblown dust, splashing and hose-directed water; undamaged by the external formation of ice on the enclosure.
Type 4X	Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, rain, sleet, snow, windblown dust, splashing water, hose-directed water, and corrosion; and that will be undamaged by the external formation of ice on the enclosure.	Indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water and damage from external ice formation.	An enclosure for either indoor or outdoor use, constructed so as to provide a degree of protection against rain, snow, windblown dust, splashing and hose-directed water, undamaged by the external formation of ice on the enclosure; resists corrosion.