TYPE 1 – General Purpose - Enclosures constructed for indoor use to provide a degree of protection to personnel against access to hazardous parts and to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt).

TYPE 2 – Drip Tight - Enclosures constructed for indoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt); and to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (dripping and light splashing).

TYPE 3 – Weather Resistant - Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust); to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (rain, sleet, snow); and that will be undamaged by the external formation of ice on the enclosure.

TYPE 3R - As 3, but omits protection against windblown dust.

TYPE 3S - As 3, but also operable when laden with ice.

3X, 3RX, 3SX - X indicates additional corrosion protection; commonly used near salt water.

TYPE 4 – Watertight - Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust); to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (rain, sleet, snow, splashing water, and hose directed water); and that will be undamaged by the external formation of ice on the enclosure.

TYPE 4X – Watertight - Same as Type 4 but provides an additional level of protection against corrosion

TYPE 5 – Dust Tight - Enclosures constructed for indoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and settling airborne dust, lint, fibers, and flyings); and to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (dripping and light splashing).

TYPE 6 & 6P – Submersible - Design depends on specified conditions of pressure and time; submersible in water or oil; used in quarries, mines, and manholes. 6 is temporarily submersible, 6P withstands occasional prolonged submersion. Neither are intended for continuous submersion.

TYPE 7 - Certified and labelled for use in areas with specific hazardous conditions: for indoor use in Class I, Groups A, B, C, and D environments as defined in NFPA standards such as the NEC.

TYPE 8 - Certified and labeled for use in areas with specific hazardous conditions: for indoor and outdoor use in locations classified as Class I, Groups A, B, C, and D as defined in NFPA standards such as the NFPA 70.

TYPE 9 - Certified and labelled for use in areas with specific hazardous conditions: for indoor and outdoor use in locations classified as Class II, Groups E, F, or G as defined in NFPA standards such as the NEC.

TYPE 10 – MSHA - Meets the requirements of the Mine Safety and Health Administration, 30 CFR Part 18 (1978).

TYPE 11 – General Purpose - Protects against the corrosive effects of liquids and gases. Meets drip and corrosion-resistance tests.

TYPE 12 & 12K – General Purpose - Intended for indoor use, provides some protection against dust, falling dirt, and dripping non-corrosive liquids. Meets drip, dust, and rust resistance tests.

TYPE 13 – General Purpose - Primarily used to provide protection against dust, spraying of water and non-corrosive coolants. Meets oil exclusion and rust resistance design tests.

Table 1

Comparison of Specific Applications of Enclosures for Indoor Nonhazardous Locations

Provides a Degree of Protection Against the Following Conditions	Type of Enclosure									
	1 *	2 *	4	4X	5	6	6P	12	12K	13
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (falling dirt)	X	X	X	X	X	X	X	X	X	X
Ingress of water (Dripping and light splashing)	—	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (Circulating dust, lint, fibers, and flyings **)	—	—	X	X	—	X	X	X	X	X
Ingress of solid foreign objects (Settling airborne dust, lint, fibers, and flyings **)	—	—	X	X	X	X	X	X	X	X
Ingress of water (Hosedown and splashing water)	—	—	X	X	—	X	X	—	—	—
Oil and coolant seepage	—	—	—	—	—	—	—	X	X	X
Oil or coolant spraying and splashing	—	—	—	—	—	—	—	—	—	X
Corrosive agents	—	—	—	X	—	—	X	—	—	—
Ingress of water (Occasional temporary submersion)	—	—	—	—	—	X	X	—	—	—
Ingress of water (Occasional prolonged submersion)	—	—	—	—	—	X	—	—	—	—

* These enclosures may be ventilated.

** These fibers and flyings are nonhazardous materials and are not considered Class III type ignitable fibers or combustible flyings. For Class III type ignitable fibers or combustible flyings see the National Electrical Code, Article 500.

Table 2

Comparison of Specific Applications of Enclosures for Outdoor Nonhazardous Locations

Provides a Degree of Protection Against the Following Conditions	Type of Enclosure									
	3	3X	3R*	3RX*	3S	3SX	4	4X	6	6P
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of water (Rain, snow, and sleet **)	X	X	X	X	X	X	X	X	X	X
Sleet ***	—	—	—	—	X	X	—	—	—	—
Ingress of solid foreign objects (Windblown dust, lint, fibers, and flyings)	X	X	—	—	X	X	X	X	X	X
Ingress of water (Hosedown)	—	—	—	—	—	—	X	X	X	X
Corrosive agents	—	X	—	X	—	X	—	X	—	X
Ingress of water (Occasional temporary submersion)	—	—	—	—	—	—	—	—	X	X
Ingress of water (Occasional prolonged submersion)	—	—	—	—	—	—	—	—	—	X

* These enclosures may be ventilated.

** External operating mechanisms are not required to be operable when the enclosure is ice covered.

*** External operating mechanisms are operable when the enclosure is ice covered.