

# NEMA CONTROL PANEL ENCLOSURES

Enclosure Rating	Explanation
NEMA 1 General Purpose	To prevent accidental contact with enclosed apparatus. Suitable for application indoors where not exposed to unusual service conditions.
NEMA 2 Driptight	To prevent accidental contact, and in addition, to exclude falling moisture or dirt.
NEMA 3 Weatherproof (Weatherproof Resistant)	Protection against specified weather hazards. Suitable for use outdoors.
NEMA 3R Raintight	Protects against entrance of water from a beating rain. Suitable for general outdoor application not requiring sleetproof.
NEMA 4 Watertight	Designed to exclude water applied in form of hose stream. To protect against stream of water during cleaning operations, etc.
NEMA 4X Watertight & Corrosion Resistant	Designed to exclude water applied in form of hose stream. To protect against stream of water during cleaning operations, etc. Corrosion Resistant.
NEMA 5 Dust Tight	Constructed so that dust will not enter enclosed case. Being replaced in some equipment by NEMA 12.
NEMA 6 Submersible	Intended to permit enclosed apparatus to be operated successfully when submerged in water under specified pressure and time.
NEMA 7 Hazardous Locations Class I – Air Break	Designed to meet application requirements of National Electrical Code for Class 1, Hazardous Locations (explosive atmospheres). Circuit interruption occurs in air.
NEMA 8 Hazardous Locations A, B, C or D Class II – Oil Immersed	Identical to NEMA 7 above, except the apparatus is immersed in oil.
NEMA 9 Hazardous Locations E, F or G Class II	Designed to meet application requirements of National Electrical Code for Class II Hazardous Locations (combustible dusts, etc.)
NEMA 10 Bureau of Mines Permissible	Meets requirements of U.S. Bureau of Mines. Suitable for use in coal mines.
NEMA 11 and Fume Resistant Oil Immersed	Provides oil immersion of apparatus such that it is suitable for application where equipment is subject to acid or other corrosive fumes.
NEMA 12 Industrial Use	For use in those industries where it is desired to exclude dust, lint, fibers and flyings, or oil or coolant seepage.

