

Nonhazardous Location NEMA Ratings Comparison



Indoor	Type of Enclosure										
	1*	2*	4	4X	5	6	6P	12	12K	13	
Provides a Degree of Protection Against the Following Conditions											
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 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	...	...	...	...	...	...
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.

Outdoor	Type of Enclosure										
	3	3X	3R*	3RX*	3S	3SX	4	4X	6	6P	
Provides a Degree of Protection Against the Following Conditions											
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.

Taken from: http://www.nema.org/prod/be/enclosures/upload/NEMA_Enclosure_Types.pdf