

> Table 9

IP (INGRESS PROTECTION) & NEMA PROTECTION RATING INFORMATION	
An IP number contains two numbers (i.e. IP65) in most instances which relate to level of protection provided by an enclosure or housing.	
The first number relates to protection from solids as follows:	The second number relates to protection from liquids as follows:
0: No special protection	0: No special protection
1: Protection against solid objects up to 50 mm in diameter	1: Protected against dripping water
2: Protected against solid objects up to 12 mm in diameter	2: Protected against dripping water when tilted up to 15° from normal position
3: Protected against solid objects up to 2.5 mm in diameter	3: Protected against spraying water
4: Protected against solid objects up to 1 mm in diameter	4: Protected against splashing water
5: Dust protected	5: Protected against water jet spray
6: Dust tight	6: Protected against heavy jet spray
	7: Protected against the effects of immersion
	8: Protected against submersion.
Example: IP66 = Dust tight and protected against heavy water jet spray.	
NEMA ratings can be approximately compared to those of the IP other factors such as corrosion protection are also involved in the NEMA systems, please refer to official documents.	
NEMA 1 = IP10	NEMA 4X = IP66
NEMA 2 = IP11	NEMA 6 = IP67
NEMA 3 = IP54	NEMA 12 = IP52
NEMA 4 = IP56	NEMA 13 = IP54
System for classifying non-hazardous area devices	