

INGRESS PROTECTION RATINGS (IP RATINGS)

Extract from IEC:60529 (IP Code)

IEC:60529 describes a system for classifying the degrees of protection provided by the enclosures of electrical equipment. The system uses a 2 number code, the combination of which indicates the degree of protection.

Ist Code	Level of protection against	2nd Code	Level of protection against water	
Number	the ingress of solid foreign bodies	Number		
0	No protection	0	No protection	
I	≥ 50mm diameter	I	Vertical dripping	
2	≥ 12.5mm diameter	2	Angled (15°) dripping	
3	≥ 2.5mm diameter	3	Spraying (light water splashes)	
4	≥ 1.0 mm diameter	4	Splashing (water splashes)	
5	Dust protected	5	Jetting (water squirts)	
6	Dust tight	6	Powerful jetting (AVS Note: <u>NOT</u> pressure washing)	
		7	Temporary immersion	
		8	Continuous immersion	

Further test details for most common codes:

2nd Code Number	Test means	Water flow Litres/min	Duration of test
5	Water jet hose nozzle. Nozzle 6.3mm Ø Distance 2.5 to 3 m	12.5 ±5%	I minute per m2 for at least 3 minutes
6	Water jet hose nozzle. Nozzle 12.5mm Ø Distance 2.5 to 3 m	100 ±5%	I minute per m2 for at least 3 minutes
7	Immersion tank. Water level on enclosure: 0.15m above the top, 1 m above the bottom	N/A	30 minutes
8	Immersion tank. Water level by agreement	N/A	By agreement

NEMA (USA) COMPATABILITY: Please note there are no direct comparisons with the NEMA 4, 4X and 7 USA standards, the test criteria are completely different. Refer to NEMA standards for details.