

Enclosure Selection

IP Rating Chart

Protection provided by enclosures for electrical equipment is indicated by the IP Code, basically by the two characteristic numerals.

First Numeral

Protection against the ingress of solid particles

IP

Second Numeral

Protection against harmful ingress of water

IP	Requirements	Example	Protection of persons against access to hazardous parts with:
0	No protection		Non-protected
1	Full penetration of 50 mm diameter sphere not allowed. Contact with hazardous parts not permitted.		Back of hand
2	Full penetration of 12.5 mm diameter sphere not allowed. The jointed test finger shall have adequate clearance from hazardous parts.		Finger
3	The access probe of 2.5 mm diameter shall not penetrate.		Tool
4	The access probe of 1.0 mm diameter shall not penetrate.		Wire
5	Limited ingress of dust permitted (no harmful deposit).		Wire
6	Totally protected against the ingress of dust.		Wire

IP	Requirements	Example	Protection from water
0	No protection		Non-protected
1	Protected against vertically falling drops of water. Limited ingress permitted.		Vertically dripping
2	Protected against vertically falling drops of water with the enclosure tilted 15° from the vertical. Limited ingress permitted.		Dripping up to 15° from the vertical
3	Protected against sprays to 60° from the vertical. Limited ingress permitted.		Limited spraying
4	Protected against water splashed from all directions. Limited ingress permitted.		Splashing from all directions
5	Protected against jets of water. Limited ingress permitted.		Hosing jets from all directions
6	Protected against strong jets of water. Limited ingress permitted.		Strong hosing jets from all directions
7	Protected against the effects of immersion between 15 cm and 1 m.		Temporary immersion
8	Protected against long periods of immersion under pressure		Continuous immersion

This Chart is intended to be read in conjunction with AS60529. Degrees of protection provided by enclosures for electrical equipment (IP Code).

The symbols shown on this chart are for explanatory purposes only. They are not part of the IP Code and must not be used instead of the Code.