

Ingress Protection Testing



Ingress Protection testing, or IP testing, determines a product's susceptibility to both water and solid particle ingress.

Ingress Protection tests are conducted in accordance with IEC 60529/EN60529.

The level of protection of a product is signified by a number (e.g. IP56) where the first number is the ingress protection against solid bodies, and the second number is protection against liquid.

Dust ingress testing is performed using a latest self-contained talc powder circulating chamber. The airflow circulates upward from the bottom, blowing the dust in a circular motion around the units under test.

Water ingress again uses high tech simulation equipment giving protection from dripping water (rain and spray) through to sprays and water jets to high pressure immersion testing.

Testing is verified in each case by our knowledgeable engineers, whose job it is to inspect the tested item immediately after completion and produce a report.

Dust ingress (First number)

IP 5X – Dust protected (Vacuum)

Ingress of dust is not totally prevented, but dust shall not penetrate in a sufficient quantity to interfere with satisfactory operation of the apparatus or to impair safety.

IP 6X – Dust Tight

No ingress of dust

Water ingress (second number)

IP x0 - No protection

IP x1 - Vertically dripping water

IPx2 - 75 to 90 degrees dripping water

IP x3 - Sprayed water

EMC Team

Kiwa Electrical Compliance (EMC)

uk.emc@kiwa.com

+44 (0)1495 229219



IP x4 - Splashed water

IP x5 - Water jets

IP x6 - Powerful water jets

IP x7 - Effects of immersion

IP x8 - Indefinite immersion

EMC Team

Kiwa Electrical Compliance (EMC)

uk.emc@kiwa.com

+44 (0)1495 229219

