

INGRESS PROTECTION (IP) RATING

There is a wide range of applications that require special treatment to the motor and the various degrees of protection that are available are detailed below.:-

Designation	First Numeral Protection against contact and ingress of foreign bodies	Second Numeral Protection against water
IP 44	Protection against contact with live or moving parts inside the enclosure by tools, wires, or such objects of thickness greater than 1mm. Protection against ingress of small solid foreign bodies (diameter greater than 1mm) excluding the ventilation openings (intake and discharge of external fans) and the drain hole of enclosed machine, which may have degree 2 protection.	Water splashed against the enclosure from any direction shall have no harmful effect.
IP 54	Complete protection against contact with live or moving parts inside the enclosure. Protection against harmful deposits of dust. The ingress of dust is not totally prevented, but cannot enter in an amount sufficient to interfere with satisfactory operation of the machine.	Water splashed against the machine from any direction shall have no harmful effect.
IP 55		Water projected by a nozzle against the enclosure from any direction shall have no harmful effect.
IP 56		Water from heavy seas or water projected from jets shall not enter the machine in any harmful quantity.
IP 65	Complete protection against contact with live or moving parts inside the enclosure and against the ingress of dust.	Water projected by a nozzle against the machine from any direction shall have no harmful effect.
IP 66	Complete protection against contact with live or moving parts inside the enclosure and against the ingress of dust.	Water from heavy seas or water projected from jets shall not enter the machine in any harmful quantity.