

Table 1.

DEGREES OF PROTECTION INDICATED BY THE FIRST CHARACTERISTIC NUMERAL

First characteristic numeral	Brief description of degree of protection (see Note 1)	Definition of degree of protection
0	Not-protected machine	No special protection
1 (see Note 2)	Machine protected against solid objects greater than 50 mm (2.0 inches)	Accidental or inadvertent contact with or approach to live and moving parts inside the enclosure by a large surface of the human body, such as a hand (but no protection against deliberate access). Ingress of solid objects exceeding 50 mm (2.0 inches) in diameter.
2 (see Note 2)	Machine protected against solid objects greater than 12 mm (0.47 inch)	Contact with or approach to live or moving parts inside the enclosure by fingers or similar objects not exceeding 80 mm (3.1 inches) in length. Ingress of solid objects exceeding 12 mm (0.47 inch) in diameter.
3 (see Note 2)	Machine protected against solid objects greater than 2.5 mm (0.10 inch)	Contact with or approach to live or moving parts inside the enclosure by tools or wires exceeding 2.5 mm (0.10 inch) in diameter. Ingress of solid objects exceeding 2.5 mm (0.10 inch) in diameter.
4 (see Note 2)	Machine protected against solid objects greater than 1 mm (0.04 inch)	Contact with or approach to live or moving parts inside the enclosure by wires or strips of thickness greater than 1 mm (0.04 inch). Ingress of solid objects exceeding 1 mm (0.04 inch) in diameter.
5 (see Note 3)	Dust-protected machine	Contact with or approach to live or moving parts inside the enclosure. Ingress of dust is not totally prevented but dust does not enter in sufficient quantity.
6 (see Note 3)	Dust-tight machine	Contact with or approach to live or moving parts inside the enclosure. No ingress of dust.

Notes:

1. The brief description given in column 2 in this table should not be used to specify the type of protection.
2. Machines assigned a first characteristic numeral 1, 2, 3, or 4 will exclude both regularly or irregularly shaped solid objects provided that three normally perpendicular dimensions of the object exceed the appropriate figure in column 3.
3. The degree of protection against dust defined by this standard is a general one. When the nature of the dust (dimensions of particles, their nature; for instance, fibrous particles) is specified, test conditions should be determined by agreement between manufacturer and user.