



IP PROTECTION RATINGS (IEC 529, EN 60529-4, CEI 70-1 ed. 11/92)

The table below indicates protection ratings according to CEI-70-1 ed. 11/92 standards. The ratings are identified by the code IP followed by two digits to which two letters may be added indicating the protection rating against persons or other characteristics. There is a variation in application of rating 7 and 8 referring to penetration of liquids. These ratings do not always imply suitability also for lower ratings (which occurs from rating IP x 4 towards lower levels).

PROTECTION RATINGS AGAINST IMPACTS (EH TEST)

These ratings indicate the acceptable strength level according to the security evaluation of a product and are applied in particular to tests performed on electromechanical products.

1 st DIGIT PENETRATION OF SOLIDS	2 nd DIGIT PENETRATION OF LIQUIDS	PROTECTION AGAINST IMPACTS*
0 Not protected	0 Not protected	IK00 Not protected
1 Protected against solid bodies with a diameter of more than 50 mm Ø	1 Protected against vertically falling drops	IK01 Protected against impact energy 0,15 J 0,25 Kg 5,6 cm
2 Protected against solid bodies with a diameter of more than 12mm Ø	2 Protected against drops at an angle of up to 15° from the vertical	IK03 Protected against impact energy 0,35 J 0,25 Kg 14 cm
Protected against solid bodies with a diameter of more than 2,5mm Ø	Protected against rain at an angle of up to 60° from the vertical	IK05 Protected against impact energy 0,7 J 0,25 Kg 28 cm
4 Protected against solid bodies with a diameter of more than 1mm Ø	4 Protected against splashes of water	IK06 Protected against impact energy 1 J 0,25 Kg 40 cm
5 Protected against dust	5 Protected against jets of water from any direction	IK07 Protected against impact energy 2 J 0,5 Kg 40 cm
6 Totally protected against dust	6 Protected against waves	IK08 Protected against impact energy 5 J 1,7 Kg 30 cm
ADDITIONAL LETTER**	7 Protected against the effects of immersion	IK09 Protected against impact energy 10 J 5 Kg 20 cm
A Protected against access with the back of the hand	8 Protected against the effects of long term immersion	IK10 Protected against impact energy 20 J 5 Kg 40 cm
B Protected against access with finger		
C Protected against access with a tool		
D Protected against access with a wire		

* According to CEI EN 50102: edition 1996-05; CEI EN 60068-2-7-5: edition 1998-09 standards

** Optional letter indicating the protection rating against persons. To be used only if the protection against access to hazardous parts is above those indicated by the first digit or if only protection against access to hazardous parts is indicated and the first digit is replaced by an X.

