

(PREVIEW)

Indian Standard

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

PART 1 GENERAL REQUIREMENTS

1 SCOPE

1.1 This standard deals with the safety of electrical appliances for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 415 V for other appliances.

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

NOTE - Examples of such appliances are catering equipment, cleaning appliances for industrial and commercial use, and appliances for hairdressers.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account:

- a) the use of appliances by young children or infirm persons without supervision; and
- b) playing with the appliance by young children.

NOTES

1 Attention is drawn to the fact that for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;

2 This standard does not apply to:

- a) appliances intended exclusively for industrial purposes;
- b) appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);
- c) audio, video and similar electronic apparatus;
- d) appliances for medical purposes;
- e) hand-held motor-operated electric tools;

f) personal computers and similar equipment: and

g) transportable motor-operated electric tools.

2 REFERENCES

The standards listed below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below:

<i>IS No.</i>	<i>Title</i>
IS/IEC 60127 (all parts)	Miniature fuses
325 : 1996	Three phase ac induction motors
616 : 2003	Audio, video and similar electronic apparatus - Safety requirements (<i>third revision</i>)
694 : 1988	PVC insulated cables for working voltages up to and including 1 100 V (<i>third revision</i>)
996 : 1979	Single phase electric motors
1271 : 1985	Thermal evaluation and classification of electrical insulation (<i>first revision</i>)
1293: 2005	Plugs and socket-outlets for household and similar purposes of rated voltage up to and including 250 V and rated current up to and including 16A (<i>third revision</i>)
1401 : 2007	Protection of persons and equipment by enclosures - Probes for verification (<i>second revision</i>)
1709 : 1984	a.c. Motor capacitors (<i>second revision</i>)
2071 (Part I) : 1993	High-voltage test techniques: Part I General definitions and test (<i>second revision</i>)
2071 (Part 2) : 1974	Methods of high voltage testing: Part 2 Test procedures (<i>first revision</i>)
2102 (Part I) : 1993	General tolerances: Part 1 Tolerances for linear and angular dimensions without individual tolerance indications (<i>third revision</i>)
2824 : 2007	Method for the determination of the proof and the comparative tracking indices of solid insulating materials (<i>second revision</i>)
5921 (Part 6) : 1987	Specification of metal-clad base materials for printed circuits for use in electronic and telecommunication equipment: Part 6 Epoxide woven glass fabric copper-clad laminated sheet, general purpose grade
5921 (Part 7) : 1987	Specification for metal-clad base materials for printed circuits for use in electronic and telecommunication equipment: Part 7 Epoxide woven glass fabric copper-clad laminated sheet of defined flammability (vertical burning test)
9000 (Part 3/Sec 1) : 1977	Basic environmental testing procedures for electronic and electrical items: Part 3 Dry heat test, Section 1 General
9000 (Part 7/Sec 1 to 5) : 1979	Basic environmental testing procedures for electronic and electrical items: Part 7 Impact test
9000 (Part 7/Sec 7) : 2006	Basic environmental testing procedures for electronic and electrical items: Part 7 Impact Test, Section 7 Test E h : Hammer tests
9206 : 1979	Dimensions of caps for tungsten filament general service electric lamps
9968 (Part 1) : 1988	Elastomer insulated cables: Part 1 For working voltages up to and including 1 100 V (<i>first revision</i>)
10276 (Part 1) : 1982	Edison screw lamp-holders: Part 1 Requirements
10322 (Part 1) : 1982	Luminaires: Part 1 General requirements and tests
11000 (Part 2/Sec 1) : 1984	Fire hazard testing: Part 2 Test methods Section 1 Glow-wire test and guidance

11000 (Part 2/Sec 2) : 1984	Fire hazard testing:Part2 Test methods, Section 2 Needle-flame test
11239 (Part 12) : 1988	Method of test for rigid cellular thermal insulation materials: Part 12 Horizontal burning characteristics
12063 : 1987	Classification of degree of protection provided by enclosures of electrical equipment
14700 (Part 4/Sec 2) : 1999	Electromagnetic compatibility (EMC): Part 4 Testing and measurement techniques, Section 2 Electrostatic discharge immunity test-Basic EMC publication
IS 14700 (Part 4/Sec 3) : 2005	Electromagnetic compatibility(EMC) : Part 4 Testing and measurement techniques, Section 3 Radiated, radio frequency, electromagnetic field immunity test
14700 (Part 4/Sec 4) : 1999	Electromagnetic compatibility(EMC): Part 4 Testing and measurement techniques, Section 4 Electrical fast transient/burst immunity test
IS 14700 (Part 4/Sec 11) : 2007	Electromagnetic compatibility(EMC) : Part 4 Testing and measurement techniques, Section 11 Voltage dips, short interruptions and voltage variations immunity test
15382 (Part 1) : 2003	Insulation coordination for equipment within low-voltage systems: Part 1 Principles, requirements and tests
15382 (Part 3) : 2006	Insulation coordination for equipment within low-voltage systems: Part 3 Use of coatings to achieve insulation coordination of printed board assemblies
ISQC302400 : 1994	Fixed capacitors for use in electronic equipment - Sectional specification for fixed capacitors for electromagnetic interference suppression and connection to the supply mains
IS/IEC60730-1 : 1990	Automatic electric controls for house- hold and similar use - Part 1: General requirements
IS/IEC60320-1 : 2001	Appliances couplers for household and similar general purposes - Part 1: General requirements
IS/IEC60320-2-2 : 1998	Appliances couplers for household and similar general purposes: Part 2-2: Interconnection couplers for household and similar equipment
IS/IEC60320-2-3 : 1998	Appliances couplers for household and similar general purposes - Part 2-3: Appliance couplers with a degree of protection higher than IPXO
IS/IEC61058-1 : 2001	Switches for appliances: Part 1 General requirements
IS/IEC61558-1 : 1997	Safety of power transformers, power supply units and similar - Part 1: General requirements and tests
IS/IEC61558-2-6 : 1997	Safety of power transformers, power supply units and similar - Part 2: Particular requirements - Section 6: Safety isolating transformers for general use