



उत्पाद मैनुअल
स्थिर संस्थापन के लिए इंटरलॉक रहित स्विच सॉकेट-आउटलेट
आईएस 15787: 2025 के अनुसार

PRODUCT MANUAL
Switched Socket-Outlets without Interlock for Fixed Installations
according to IS 15787: 2025

यह उत्पाद नियमावली सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसधारियों द्वारा विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना-1 के अंतर्गत प्रमाणन के संचालन में एकरूपता और पारदर्शिता सुनिश्चित करने के लिए संदर्भ सामग्री के रूप में उपयोग की जाएगी। बीआईएस प्रमाणन प्राप्त करने के इच्छुक भावी आवेदक भी इस दस्तावेज़ का उपयोग कर सकते हैं।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification.

1.	मानक संख्या / IS No.	:	IS 15787: 2025
	शीर्षक / Title	:	Switched Socket-Outlets without Interlock for Fixed Installations - Particular Requirements
	संशोधनों की संख्या No. of amendments	:	1
2.	नमूनाकरण दिशानिर्देश / Sampling Guidelines		
	a) कच्चा माल Raw material	:	NA. <i>Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/Factory Surveillance.</i>
	b) समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer ANNEX – A
	c) नमूने का परिमाण / Sample Quantity	:	15 pieces
	d) परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	:	Parameters as given in scope of licence <i>Note: Apart from the above, any other requirements/ parameters may also be declared as per the standard, as applicable.</i>
3.	परीक्षण उपकरण की सूची List of Test Equipment	:	Please refer ANNEX – B

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9, BAHADUR SHAH ZAFAR MARG, NEW DELHI-110002
www.bis.gov.in

4.	निरीक्षण एवं परीक्षण योजना Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	एक दिन में संभावित परीक्षण Possible tests in a day	:	a) Marking – Cl. 8 b) Checking of dimensions – Cl. 9 c) Protection Against Electric Shock - Cl. 10 d) Temperature Rise – Cl. 19 e) Force necessary to withdraw the plug – Cl. 22 f) Creepage distance and clearances – Cl. 27 g) Resistance to fire (Glow-wire test) – Cl. 28 <i>Note: This section is for the guidance of BIS Certification Officers/ Technical Auditors of BIS Authorized Outside Surveillance Agencies(OSAs) during factory inspection to provide ready reference regarding the tests which can be witnessed during the inspection in the factory by the officer/ auditor.</i>
6.	लाइसेंस का दायरा /Scope of the Licence:		
“License is granted to use Standard Mark as per IS 15787: 2025 with the following scope:			
Name of the Product		Switched Socket-Outlets without Interlock for Fixed Installations	
Rated Current			
Rated Voltage			
Nature of supply			
Ingress Protection (IP)			
Provision for earthing		With/ without earthing contact	
Method of connecting cable		Rewirable / non-rewirable	
Type of Terminals		Screw-type terminals/ Screwless terminals for rigid conductors only/ Screwless terminals for rigid and flexible conductors only	
Degree of protection against Electric Shock		Socket outlet with Normal/ Increased protection	
Method of Mounting		Surface-type/ Flush-type/ Semi flush type/ Panel type/ Architrave-type	
Existence of shutters		With/ without shutters	
Intended use (if any)			
Method of actuating the switch		Rotary/ Tumbler/ Rocker/ Push-Button/ Cord-operated	
Switching of the neutral		Switched/ Unswitched	
7.	अन्य दिशानिर्देश / Any other guidelines	Please refer ANNEX-D for guidelines for outsourcing of moulded bodies	

ANNEX -A

Grouping Guidelines

1. The following aspects of a Switched Socket-Outlets without Interlock for Fixed Installations shall be taken into consideration for grouping of different varieties for the purpose of GoL/ CSoL:
 - a. Current rating (as per CI 6)
 - b. Voltage rating (as per CI 6)
 - c. Degree of protection against access to hazardous parts and against harmful ingress of solid foreign objects (as per CI 7.1.1 of IS 1293)
 - d. Degree of protection against harmful ingress of water (as per CI 7.1.2 of IS 1293)
 - e. Degree of protection against electric shock (as per CI 7.2.1 of IS 1293)
 - f. Existence of shutters (as per CI 7.2.3 of IS 1293)
 - g. Provision for earthing (as per CI 7.1.3 of IS 1293)
 - h. Method of connecting the cable (as per CI 7.1.4 of IS 1293)
 - i. Type of terminals (as per CI 7.1.5 of IS 1293)
 - j. Method of application/ mounting of the socket-outlet (as per CI 7.2.2 of IS 1293)
 - k. Intended use, if any (as per CI 7.2.4 of IS 1293)
 - l. Method of actuating the switch (Rotary / Tumbler / Rocker / Push – button) (as per CI 7.2.101 of IS 15787)
 - m. Switching of the neutral (Switched / Un-switched) (as per CI 7.2.101 of IS 15787)
2. At least one variety of Switched Socket-Outlets without Interlock for Fixed Installations of each current rating and combination thereof shall be tested to cover the entire range.
3. The following relaxation may be given when a variety is tested for all the requirements:
 - a. If a particular voltage rating is tested, lower ratings may also be covered.
 - b. If accessory with a particular IP is tested, lower IPs may also be covered.
 - c. If Switched Socket-Outlets (without Interlock) with increased protection are tested, Switched Socket-Outlets (without Interlock) with normal protection may also be covered.
 - d. If socket-outlets in Switched Socket-Outlets (without Interlock) with shutters are tested, socket-outlets without shutters in Switched Socket-Outlets (without Interlock) may also be covered.
 - e. For all other aspects mentioned at 1.1(g) to 1.1(k) above, at least one product with each aspect shall be tested to cover the entire range.
4. The Firm shall declare the varieties of Switched Socket-Outlets (without Interlock) intended to be covered in the Licence. The Scope of Licence may be restricted based on the manufacturing and testing capabilities of the manufacturer.
5. During operation of licence, samples of each variety covered in the scope of licence, shall be tested in rotation, to the extent possible.

ANNEX- B
List of Test Equipments
(Indicative List, For Guidance Only)

Sl. No.	Test Equipment	Clause Reference of tests used for	
1.	Vernier caliper, micrometer, gauges	9	Dimensions
2.	Un-jointed test finger, Standard test finger, Voltmeter, Voltage Source with indicator, Gauges for checking non-accessibility of live parts, through shutters, and of live parts of socket-outlets with increased protection, Test plug	10	Protection against electric shock
3.	Low voltage AC source with Voltmeter and Ammeter (ECR tester)	11	Provision for Earthing
4.	Arrangement for checking damage to conductors, AC source, measuring instruments, Deflection test apparatus, Push-pull force applicator, Test setup for mechanical stress, electrical and thermal stress, and Deflection test on Screwless terminals, Test setup for checking conductor damage with rotational speed controller and weights	12	Terminals
5.	Device for checking the resistance to lateral strain, Heating cabinet, Test probe 11 of IS 1401, Freezer, Testing arrangement for knob of rotary switches, HV tester, Stopwatch	13	Construction of fixed socket - outlets
6.	Device for testing of non-solid pins, Push-pull force applicator, micrometer, Apparatus for the torque test, AC source, Measuring instruments, Temperature measuring device	14	Construction of plugs and portable fixed socket - outlets
7.	Heating cabinet with timer, humidity chamber with timer, Splash proof / Jet proof test setup (for IPX4/IPX5), Weighing Balance, Weights	16	Resistance to ageing, to harmful ingress of water and to humidity
8.	Insulation test equipment (Megger), High voltage test equipment	17	Insulation Resistances and Electric Strength
9.	AC source, measuring instruments, temperature measuring device (thermocouples), test block for flush mounted accessories, wooden block for surface-type socket-outlets, test plug, clamping unit for the temperature rise test	19	Temperature Rise
10.	Apparatus for breaking capacity (Fig 101), test plug, fixed socket-outlet, AC source, adjustable load (resistors and inductors), measuring instruments, counter, timer, Gauge for checking non-accessibility of live parts, through shutters, after normal operation test, Gauge for checking non-accessibility of live parts, through shutters, and of live parts of socket - outlets with increased protection	20	Breaking Capacity
11.	High Voltage tester, Apparatus for breaking capacity (Fig 101), test plug, fixed socket-outlet, AC source, adjustable load (resistors and inductors), measuring instruments, counter, timer, Gauge for checking non-accessibility of live parts, through shutters, after normal operation test, Gauge for checking non-accessibility of live parts, through shutters, and of live parts of socket - outlets with increased protection, AC source, measuring instruments, temperature measuring device (thermocouples), test block for flush mounted accessories, wooden block for surface-type socket-outlets, test plug, clamping unit for the temperature rise test	21	Normal Operation

12.	Apparatus for checking the withdrawal force, test-plug, chemical degreaser, Test pin gauge, Gauge for the verification of the minimum withdrawal force,	22	Force necessary to withdraw the plug
13.	Pendulum hammer test apparatus, mounting arrangement, Mechanical strength test apparatus, Tumbling barrel, Cylinder of rigid steel sheet, Flat steel sheet, Apparatus for impact test at low temperature, sponge rubber, freezer, Arrangement for compression test, Cylindrical metal rods Test-spanner with torque meter, Apparatus for abrasion test on insulating sleeves of plug pins, Test-pin, electrical indicator, Arrangement for mechanical strength test on multiple portable socket-outlets, Arrangement to verify the fixation of pins in the body of the plug, heating cabinet, Cylindrical steel rod, Round head screw, Arrangement for test on covers or cover plates, Gauge for the verification of the outline of covers or cover plates, Gauge for verification of grooves, holes and reverse tapers, Apparatus for compression	24	Mechanical Strength
14.	Ball Pressure Apparatus, Magnifying glass, Heating cabinet	25	Resistance to Heat
15.	Screw-driver and spanner with torque meter	26	Screws, Current-carrying parts and connections
16.	Calipers, Tolerances gauges	27	Creepage distance, Clearances and distances through sealing compound
17.	Test apparatus according to IS 2824, Apparatus for testing resistance to abnormal heat of insulating sleeves of plug pins, Glow wire test apparatus	28	Resistance of Insulating material to Abnormal heat, to fire and to tracking

The above list is indicative only and may not be treated as exhaustive.

ANNEX C

Scheme of Inspection and Testing

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or sub-contracting/ sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

1.3 Recommended Levels of Control/ Control Unit:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: *All Switched Socket-Outlets (without Interlock) of same type and rating manufactured in a day shall constitute a control unit.*

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in Table 1. Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING

The manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred:

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/ empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 Test Records- The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. PACKING AND MARKING

The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on **each Switched Socket Outlet** and also on its packaging provided always that the material so marked conforms to each requirement of the specification.

3.1 Marking on the product shall be done as per Cl. 8 of IS 15787: 2025.

3.2 **Additional Marking requirements:** The product shall also be marked with the following additional requirement on each packing:

a) "For BIS certification details please visit www.bis.gov.in"

4. REJECTION

The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE-1

(Recommended Levels of Control by BIS- for Guidance Only)

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods		No. of Sample	Frequency	Remarks
		Clause	Reference			
8	Marking	8	IS 15787	Each unit		
9	Checking of Dimensions	9	IS 1293	3	Each control unit	
10	Protection against electric shock	10	IS 15787	3	Each control unit	
11	Provision for earthing	11	IS 1293	3	Every 3 months for each type and rating	
12	Terminals	12	-do-	3	-do-	
13	Construction of Switched socket-outlet	13	IS 15787	3	Every month for each type and rating	
16	Resistance to ageing, harmful ingress of water and to humidity	16	IS 1293	3	Every 3 months for each type and rating	
17	Insulation resistance & electric strength	17	IS 15787	3	Every 3 months for each type and rating	
17.3	Electric Strength (Flash Test)	17.3	IS 1293	Each unit	-	
18	Operation of earthing contacts	18	IS 1293	3	Every 3 months for each type and rating	
19	Temperature rise	19	-do-	3	Each control unit	
20	Breaking capacity	20	IS 15787	3	Every 3 months for each type and rating	
21	Normal operation	21	-do-	3	Every 3 months for each type and rating	
22	Force necessary to withdraw the plug	22	IS 1293	3	Each control unit	
24	Mechanical strength	24	-do-	3	Every 3 months for each type and rating	
25	Resistance to heat	25	-do-	3	Every month for each type and rating	
26	Screws, current carrying parts and connections	26	-do-	3	Every month for each type and rating	
27	Creepage distance & clearances & distance through sealing compound	27	IS 15787	3	Each control unit	
28	Resistance of Insulating material to abnormal heat, fire and tracking	28	IS 1293	3	Each control unit	
29	Resistance to rusting	29	-do-	3	Every month for each type and rating	

Note: The number of additional specimens for testing shall be selected as per clause 5 of IS 1293. In case of any failure, the provisions given in clause 5.5 of IS 1293 shall be followed.

ANNEX – D
Guidelines for Outsourcing of Moulded Bodies

- a. The Indian Standard does not impose any restriction on the manner/ method of Marking so long as the durability clause is complied with. As such, the product may be marked with the Standard Mark, CM/L Number, Manufacturer's Brand and other markings during the process of moulding itself, in such case the following conditions as stated shall apply:

For Domestic Manufacturers

- i. Any dedicated moulding unit in the conforming/ authorized industrial area and located under the jurisdiction of the same Branch Office.
- ii. Any other unit of the Licensee/ Applicant or their sister concern, which is having a valid BIS licence for the same product under the jurisdiction of the same Branch Office.

For Foreign Manufacturers

- i. Any dedicated moulding unit in the conforming/ authorized industrial area and located in the same city where the applicant/ licensee is located.
- b. The dedicated moulder shall not carry out moulding for units other than the particular Applicant/ Licensee.
- c. The Manufacturer shall take the following actions:
- i. Enter into an agreement with the moulder which shall comprise, inter alia, the terms and conditions for moulding including the condition of dedicated moulding, period of agreement etc.
 - ii. Declare the Items and Brands for which he intends to outsource moulding.
 - iii. Declare the name, ownership details, address, details of the responsible person, phone number, etc. of the moulder.
- d. It shall be the responsibility of the licensee (the firm which is outsourcing the moulding activity) to ensure that no finished material is produced or assembled at any place other than the licensed premises and he shall be responsible for any misuse of ISI mark at the moulder's premises. An Undertaking to this effect shall be furnished to BIS.
- e. Records of raw material issued date-wise, moulded material received back date-wise and item-wise shall be maintained by the licensee. Similar records shall also be maintained by the moulder.
- f. The moulder shall ensure that there is a separate dedicated space for keeping moulded components as well as the raw materials received from the licensee. Colour coding of bins/ separate storage location etc. may be used to ensure easy and quick traceability. Appropriate records are to be maintained at both the units.
- g. The licensee shall ensure that there are adequate means of ensuring the quality of incoming outsourced moulded bodies.
- h. For applications received with request for outsourcing of moulding facilities, a special inspection of the moulder's premises shall be carried out to adjudge the capability of the moulder in addition to the preliminary inspection at the applicant's premises. Special Inspection Charges and any other charges, as applicable, for this visit shall be collected from the applicant in advance. The process flow chart submitted by the applicant shall clearly indicate the

outsourcing of moulded bodies. The recommendations for Grant of Licence (GoL) shall include details on outsourcing of moulding operation by the firm. The details of outsourcing may also be included in the GoL intimation letter.

- i. For existing licensees who intend to outsource the moulding facility, the licensee shall submit a fresh process flow chart indicating the outsourcing of moulded bodies. The permission for outsourcing may be given to the licensee after complying with all the procedures including verification visit to the moulder's premises.
- j. Whenever there is a change in the moulder, the licensee has to enter into a fresh agreement with the new moulding unit. The permission for outsourcing may be given to the licensee after complying with all the procedures including verification visit to the moulder's premises.
- k. During the operation of the licence, records required to be maintained at the licensee end with respect to outsourced moulding shall be verified during surveillance visit at the licensee's premises by BIS Certification Officer.
- l. BIS Officer(s) shall have access to the moulder's premises and if at any time the same is denied, permission for outsourcing shall be withdrawn. An undertaking in this respect shall be obtained.
- m. For Domestic manufacturers, the visit to moulder's premises may be taken up as a special visit as and when needed. Special Inspection Charges for this visit shall be collected from the licensee after the visit. An undertaking from the licensee regarding payment of such charges shall be obtained.
- n. For Foreign manufacturers, BIS shall maintain surveillance over the moulder's premises in addition to the manufacturer's premises. Special inspection charges and all other applicable charges for this visit shall be payable by the licensee.

Note:

- However, if the Marking on the moulded bodies is done at the Licensee's own premises by other means such as pad printing/ laser marking etc., the moulded component may be treated as any other bought out component/ raw material as these are not marked with the ISI Mark or CM/L Number during the outsourced moulding process. Notwithstanding this, the Applicant/ Licensee shall ensure that there are adequate means of ensuring the quality of the incoming components