



उत्पाद मैनुअल
आई एस/आई इ सी 60947 (भाग 5 / अनुभाग 5) : 2016 के अनुसार
निम्न - वोल्टेज स्विचगियर और नियंत्रण
भाग 5 परिपथ नियंत्रण उपकरण और स्विचिंग घटक
अनुभाग 5 यांत्रिक लैचिंग कार्य सहित विद्युतिय आपातकालीन रोधक यूक्तियाँ

PRODUCT MANUAL
FOR LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR
PART 5 CONTROL CIRCUIT DEVICES
AND SWITCHING ELEMENTS
SECTION 5 ELECTRICAL EMERGENCY STOP DEVICES
WITH MECHANICAL LATCHING FUNCTION
ACCORDING TO IS/IEC 60947 (PART 5 / SEC 5): 2016

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

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/IEC 60947 (Part 5 / Sec 5): 2016
	शीर्षक Title	:	Low-Voltage Switchgear and Controlgear: Part 5 Control Circuit Devices and Switching Elements, Section 5 Electrical emergency stop device with mechanical latching function
	संशोधनों की संख्या No. of amendments	:	0
2.	मानकीकरण / मनकीकरण में बदलाव के लिये अतिरिक्त दिशा निर्देश Additional Guidelines for GoL / CSoL	:	Please refer <u>Annex - A</u>

3.	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer <u>Annex – B</u>
4.	तकनीकी फाइल Technical File	:	Please refer <u>Annex – C</u>
5.	लेबलिंग और चिह्नांकन आवश्यकताएँ Labelling and Marking Requirements	:	Please refer <u>Annex – D</u>
6.	लाइसेंस का दायरा Scope of the Licence		As per table below:
Licence is granted to use Standard Mark as per IS/IEC 60947 (Part 5 / Sec 5): 2016 with the following scope:"			
Name of the product:		Low- Voltage Switchgear and Controlgear: Part 5 Control Circuit Devices and Switching Elements, Section 5 Electrical emergency stop device with mechanical latching function	
Model(s)			
Kind of electrical control circuit devices and/or switching elements		Electrical emergency stop device with mechanical latching function with mechanical latching function	
Type of actuator		– button type – trip wire type – rope pull type - bar type - foot pedal type - others,	
Method of actuation		– hand operated – foot operated	
Method of latching		– push type – pull type	
Method of resetting		– push type – pull type – turn type – key type	
Mounting hole diameter (only for button actuators)		- D16 - D22 - D30	
Utilization category: (Cl. 5.4)	AC	AC – 12 / AC – 13 / AC – 14 / AC - 15	
	DC	DC-12 / DC-13 / DC -14	

Degree of protection provided: (Cl. 4.4)	According to clause 7.1.12 and Annex C of IS/IEC 60947-1
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ANNEX - A

Additional Guidelines for GoL / CSoL

1. To ensure uniform operation of certification process, the following guidelines in addition to CMD Guidelines on GoL / CSoL as per the conformity assessment Scheme – X of Schedule – II of the BIS (Conformity Assessment) Regulations, 2018 placed below shall be followed:

For **GoL / CSoL**:

- i. The manufacturer shall submit the technical file for the model(s) for which the manufacturer intends to get the GoL / CSoL as specified in Annex C, covering all aspects, including compliance report of product having complete test report issued by BIS Approved third party laboratory(ies). However, it shall be ensured that all the requirements of the standard and all applicable tests as declared by the manufacturer have been reported in the test report.
- ii. The licence document shall contain the following technical data for each of the model as per Annex – AA.

ANNEX – AA
Scope of Licence document

Name of the product:		Low- Voltage Switchgear and Controlgear Part 5 Control Circuit Devices and Switching Elements Section 5 Electrical emergency stop device with mechanical latching function
Model(s)		
Kind of electrical control circuit devices and/or switching elements		Electrical emergency stop device with mechanical latching function with mechanical latching function
Type of actuator		– button type – trip wire type – rope pull type - bar type - foot pedal type - others,
Method of actuation		– hand operated – foot operated
Method of latching		– push type – pull type
Method of resetting		– push type – pull type – turn type – key type
Mounting hole diameter (only for button)		- D16 - D22 - D30
Utilization category: (Cl. 5.4)	AC	AC – 12 / AC – 13 / AC – 14 / AC - 15
	DC	DC-12 / DC-13 / DC -14
Degree of protection provided: (Cl. 4.4)		According to clause 7.1.12 and Annex C of IS/IEC 60947-1

ANNEX – B
Grouping Guidelines

1. For considering Grant of licence / Change in scope of licence the manufacturer shall submit the technical file including the test reports(s) / certificates(s) etc. for each of the variety of particular type designation(s) or model(s) as specified in the Scope of Licence (as given in Sl. 6 above) based on product grouping as per Gazette Notification **F. No. 8(1)/2018-HEI-Part (1)** dated **10 March 2025** given below:

2. Product Grouping

2.1 Product series of equipment(s): A group of Electrical Emergency Stop Devices with mechanical latching function, as defined in 3.2 and 3.7 of IS/IEC 60947-5-5: 2016; referred to a particular type designation with a unique combination of feature(s) under classification mentioned in Table A at Annexure -I.

3. Sampling and Testing

3.1 Sampling and Testing: : The type test for each product series shall be as below::

3.1.1. For each product series, type test report an Electrical Emergency Stop Device with mechanical latching function with maximum features and configurations satisfying all operational performance criteria shall be tested. The tests and sample(s) must be in accordance with the clause 7 of IS/IEC 60947-5-5: 2016.

Note- Spares, accessories and sub-assemblies are integral part of product series. They shall be tested as far as possible with the equipment. (Spares and sub-assemblies being the integral part of the device, separate testing is not envisaged; Accessories may please be used while testing.)

In case, the accessories are complying to the requirement of any other standard (IS/IEC 60947 series) then accessories shall meet the requirements of the respective Indian Standards.

3.1.2. Each Product rating(s) / varieties may not be subjected to testing. Product samples as mentioned in para 4.1.4 will cover all the product rating(s) / varieties having ratings lower or equal under the scope of Licence is by virtue of this grouping guidelines.

3.1.3 Three identical samples of emergency stop device shall be selected, and each sample shall be subjected successfully to the sequence of tests, in the order given in clause 7 of IS/IEC 60947-5-5: 2016. When more than one type of emergency stop device is manufactured to the same basic design, less than three identical samples may be tested, providing that more than three products of the same family are tested. Such an acceptance shall be fully documented

3.1.4 Electrical requirements for associated contact elements as per clause 5 of IS/IEC 60947-5-5: 2016, only needs to be tested as per IS/IEC 60947-5-1; and need not to be repeated with Emergency Stop Devices. Testing procedure and sample selection etc. is separately defined in “Product Specific Guidelines for IS/IEC 60947-5-1” along with test mentioned in respective Annex of IS/IEC 60947-5-1

Table A - Classification of Electrical Emergency Stop Devices

Sr. No.	Classification based on	Type of Equipment
	<i>Classification as per Clause 3 of IS/IEC 60947-5-5: 2016</i>	
1.	Kind of electrical control circuit devices and/or switching elements	Electrical control circuit devices and/or switching elements with mechanical latching function.
2.	Type of actuator	– button type – trip wire type – rope pull type - bar type - foot pedal type - others,
3.	Method of actuation	– hand operated – foot operated
4.	Method of latching	– push type – pull type
5.	Method of resetting	– push type – pull type – turn type – key type
6.	Mounting hole diameter (only for button)	- D16 - D22 - D30
7.	Degree of protection provided (IP Code)	According to Annex C of IS/IEC 60947-1

For Example

Product series 1: Electrical Emergency Stop Button – XXXX (Type Designation), Hand Operated, Push actuated, Turn Reset, D22, IP42

Product series 2: Electrical Emergency Stop Trip Wire Switch – XXXX (Type Designation), Hand Operated, Pull actuated, Push Reset, IP42.

ANNEX – C
Technical File

1. TECHNICAL FILE - Manufacturer shall maintain a Technical File for each model(s) manufactured by them as per BIS circular Ref: CMD-I/2:17:1 dated 02 June 2023 with subject ‘Guidelines for Grant of Licence (GoL) as per the conformity assessment Scheme – X of Schedule – II of BIS (Conformity Assessment) Regulations, 2018’.
2. In addition to the documents indicated in above circular, following documents are also to be submitted in the Technical File:
 - a) Declaration for model(s) applied for BIS licence. The declaration shall be in line with scope of licence specified in this Product Manual;
3. The technical File shall be maintained by the manufacturer till the End of Life of the model(s).

ANNEX – D

Labelling and Marking Requirements

1. **Labelling and Marking Requirements-** Labelling and Marking of Electrical emergency stop device with mechanical latching function shall be as per Cl. 4 of IS/IEC 60947-5-5: 2016.
 - a) Each Electrical emergency stop device with mechanical latching function and its packaging shall be marked with the Standard Mark, as specified in Scheme –X in Schedule –II of the BIS (Conformity Assessment) Regulations, 2018. The Standard Mark shall carry the licence number in a visible manner as specified in the licence document (as per Sl. No. 2 below).
 - b) In addition, details of BIS website shall be marked on the package as follows:
'For details of BIS certification, please visit www.bis.gov.in.'
2. Electrical emergency stop device with mechanical latching function shall be clearly marked with the Standard Mark on the product as below:

