

## For BIS Use Only

## **BUREAU OF INDIAN STANDARDS**

## **AGENDA**

Name of the Committee	No. of Meeting	Day	Date	Time	Venue
Low Voltage					Virtual Meeting
Switchgear and Controlgear Sectional Committee, ETD 07	31 <sup>st</sup>	Thursday	27-June- 2024	11:00 AM	Join Meeting

CHAIRMAN: Shri B R Vasudevamurthy

MEMBER SECRETARY: Shri Ashok Kumar

#### Item 0 GENERAL

## 0.1 WELCOME & OPENING REMARKS BY THE CHAIRMAN

#### Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The minutes of the 30<sup>th</sup> meeting of Low Voltage Switchgear and Controlgear Sectional Committee, ETD 07, held on 20 December 2023 virtually, were circulated through BIS-Connect portal ref. no. ETD 07/A-2.30 dated 08 Jan 2024.

The Committee may formally confirm the minutes.

# Item 2 COMPOSITION OF LOW VOLTAGE SWITCHGEAR AND CONTROLGEAR SECTIONAL COMMITTEE, ETD 07

- **2.1** The present composition of Low Voltage Switchgear and Controlgear Sectional Committee, ETD 07 including the WGs under the Technical committee is given at **Annex 1**. The status of participation is also mentioned in the composition.
- 2.2 The following Co-option has been received via Standardization portal.

SI. No	Name	Organization	Designation
1	Mr. Shelesh Kumar Tiwari	C & S Electric	AGM R&D

**The Committee may consider** the participation status of the member organizations and review the composition. The Committee is also requested to give suggestions for improvement in participation status of the members.

**2.3** During the last meeting of ETD 07, ERDA agreed to recommend representation for the convenership of WG 4, tasked with the review of IEC SC 121B ballot documents. However, no communication has been received from ERDA regarding this convenership. Members from ERDA are kindly requested to update the committee on the Subject.



#### Item 3 ACTIONS ARISING OUT OF PREVIOUS MEETING

S. No.	Item of previous minutes	Decision Taken	Action
1.	-	-	-

### **Item 4 PRESENT POSITION OF WORK**

The present position of work under the scope of **ETD 07** is given at **Annex 2**.

The IEC standards against which no Indian Standards exist have been identified for consideration of the committee for harmonization. The list is given at **Annex 3.** 

The committee further reviewed the list of IEC standards given at **Annex 3** of the agenda against which no Indian Standards exist and decided to allocate the task of initial review of all other standards to

- WG 3 (For review of standards under IEC TC 121 and SC 121A),
- WG 4 (For review of standards under IEC SC 121B) and
- WG 5 (For review of under IEC SC 23E)

These working groups were advised to carry out the assessment of the list of respective IEC committee standards given at **Annex 3** of the agenda to:

- a) Assess the suitability of implementation of these IEC standards in India after identical adoption
- b) Testing infra/Feasibility of test
- c) Feedback for making infrastructure changes as per new requirements by manufacturers.

The working groups are requested to kindly update committee regarding the progress of work.

#### 4.1 DRAFTS FINALIZED FOR PRINTING

Sl	IS/IEC no.	Status
No.		
	Doc ETD 07 (23677)	
1.	Third revision of IS 12640 (Part 1) Residual current operated circuit Breakers without integral overcurrent protection for household and similar uses Rccbs: Part 1 general rules (Third Revision)	The document is under advanced stage of printing.
2.	<b>Doc ETD 07 (24761)</b> Adoption of IEC 60947-7-1: 2009	The document finalized for printing



	Low-voltage switchgear and controlgear - Part 7-1: Ancillary equipment - Terminal blocks for copper conductors	
3.	Doc ETD 07 (24762)  Adoption of IEC 60947-7-2: 2009  Low-voltage switchgear and controlgear - Part 7-2: Ancillary equipment - Protective conductor terminal blocks for copper conductors	The document finalized for printing

The committee may note.

## **4.2 DRAFTS FOR FINALIZATION**

SI No.	Draft IS No. & Title	Eqv. IEC (with degree of equivalence)			Action taken
-	-	-	-	-	-

# **4.3 DRAFTS FOR APPROVAL FOR WIDE CIRCULATION**

Sl	IS No.	Decision Taken in the	Action taken
No.		last meeting	
1	Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electric vehicles	The copy of IEC 62955: 2018	review of the comments received from Ather Energy. As no response has been received from WG-5, the widely circulated document has been dropped due to the timeline for standard formulation.
		WG-5 is requested to kindly review the comments received from Ather Energy and IEC 62955 once again and provide the final recommendation within 2 weeks from the date of the meeting, so that decision can be taken on the	



	adoption of IEC 62955.	

The committee may consider.

# **4.4 P-DRAFTS UNDER PREPARATION**

Sl	IS No.	Decision Taken in last	Action taken
No.	15 110.	meeting	Tietion taken
2.	Adoption of IEC 62423: 2009  Type F and type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses	WG-5 was requested to send the consolidated recommendations assessing the suitability of implementation of IEC 62423: 2009 for adoption within 1 month from the date of the meeting.	<ul> <li>WG 5 conducted the meeting on 16<sup>th</sup> May 2024 and submitted below recommendations:</li> <li>Test facility at Labs to be looked in for the standard requirments.</li> <li>Before Going for any regulations on the above standard after adaption, review of test facility at Labs is required as per standard requirments.</li> <li>Mr Madhusudan BK informed that UL India Private Limited has limited test facility for IEC 62423: 2009 requirements.</li> <li>Members from CPRI and ERDA to kindly confirm the testing facility for IEC 62423: 2009</li> </ul>
1.	IS 13032: 1991 'A.c. miniature circuit - Breaker boards for voltages not exceeding 1000 V - Specification'	Mr. Parmod K Jain M/s Small Scale MCB Mfrs Welfare Association submitted following recommendations:  'Almost all of our members are referring it for MCB Distribution Boards. Moreover Govt procurement for MCB Distribution Boards is also done mainly referring to this Standard IS: 13032 is specifically made for MCB Distribution Board which is sold as an individual product whereas IS 61439 is mainly	WG 6 to confirm whether all the requirements of IS 13032 are addressed under IS/IEC 61439-3.



referred for tailor made items like Panels or Sub assemblies with or without Switchgears. Actually IS: 61439 have replaced/superseded IS: 8623 and not IS: 13032. Hence in our opinion IS:13032 should continue as separate Standard for MCB Distribution Boards.'  After deliberate discussion, the Committee decided that IS 13032 will not be withdrawn as the Govt. procurement for MCB Distribution Boards is done mainly referring to this Standard.  WG 6 is requested to kindly review and confirm whether all the requirements of IS 13032 are addressed under IS/IEC	
61439-3.	
WG 6 composition	
1.Shri S.Saravanan, M/s Schnieder Electric – Convener 2. Shri Anil Kumar Pandit, In personal capacity (Member), 3. Shri Robin Virani, /s Elmex Controls Private Limited (Member) 4. Shri Anilesh K, Schneider Electric India Pvt. Ltd. (Member)	

## Item 5 Review of Published Standards for Revision/Reaffirmation

**5.1** As per the guidelines, published Indian Standards should be reviewed after every five years. If no revision is called for, the standard(s) may be re-affirmed. Reaffirmation of the standard(s), however, does not prevent from these standard(s) being taken up for revision.

SI. No	Indian Standard	Base IEC	Latest IEC
1.	IS 16463 (Part 12): 2017 Low - Voltage surge protective devices: Part 12 surge		IEC 61643-12:2020



	protective devices connected to low -		
	Voltage power distribution systems -		
	Selection and application principles		
	IS 17120 : 2019 In - Cable control and		
2.	protection device for mode 2 charging of	IEC 62752 : 2016	IEC 62752:2024
_,	electric road vehicles (Ic - Cpd)		
	IS/IEC 60947-4-1 : 2012 Low - Voltage		
	switchgear and controlgear: Part 4	TTG 600 15 1 1	
3.	contactors and motor - Starters: Sec 1	IEC 60947-4-1:	IEC 60947-4-1:2023
	electromechanical contactors and motor -	2012	
	Starters (First Revision)		
	<b>IS/IEC 60947-5-1 : 2016</b> Low-Voltage		
	Switchgear And Control Gear: Part 5-1	IEC 60947-5-1 :	
4.	Control Circuit Devices And Switching	2016	IEC 60947-5-1:2024
	Elements Electromechanical Control	2010	
	Circuit Devices		
_	IS/IEC 61439-0 : 2014 Low-Voltage	TEG (1420 0 2014	HEG HD (1420 0 2022
5.	Switchgear and Controlgear Assemblies	IEC 61439-0 : 2014	IEC TR 61439-0:2022
	Part 0 Guidance to Specifying Assemblies  IS/IEC 61439-3: 2012 Low - Voltage		
	switchgear and controlgear assemblies: Part		
6.	3 distribution boards intended to be	IEC 61439-3 : 2012	IEC61439-3:2024
	operated by ordinary persons (Dbo)		
	<b>IS/IEC 61439-4 : 2012</b> , Low - Voltage		
7	switchgear and controlgear assemblies: Part	IEC (1420 4 2012	HEG (1.420, 4.2022
7.	4 particular requirements for assemblies for	IEC 61439-4 : 2012	IEC 61439-4:2023
	construction sites (Acs)		
	<b>IS/IEC 61439-5 : 2014</b> Low-Voltage		
8.	Switchgear and Controlgear Assemblies	IEC 61439-5 : 2014	IEC 61439-5:2023
0.	Part 5 Assemblies for Power Distribution in	1110 01737-3 . 2014	1120 01737-3.2023
	Public Networks		
	IS 12640 (Part 2): 2016 Residual current		
	operated circuit - Breakers with integral	IEC 61009	IEC (1000
	overcurrent protection for household and	1:2010+AMD1:2012	IEC 61009 -
9.	similar uses (RCBOs): Part 2 General rules	CSV	1:2010+AMD1:2012 +AMD2: 2013 CSV
	Equivalent IEC: Identical to IEC 61009 1:2010+AMD1:2012		+AIVID2: 2013 CS V
	CSV 1:2010+AMD1:2012		
	CDY		

# **5.2 Action Research Projects (ARP) for Pre-2000 standards**

Sl no.	IS no. & Title	<b>Decision taken in the last meeting</b>	Action Taken			
1.	IS 8588 (Part 1):	IEEMA to share the report to BIS on	Reply awaited from <b>IEEMA</b> on			
	1977 Specification	the following points:	the Applicability of IS 8588 (Part			
	for thermostatic	1) Applicability of IS 8588 (Part 1):	1): 1977 and DIN standard			
	bimetals: Part 1	1977	referred by industries for			
	General requirements and	2) DIN standard referred by industries for thermostatic bimetal	thermostatic bimetal in place of IS 8588 (Part 1): 1977.			
	methods of tests	in place of IS 8588 (Part 1): 1977 The committee discussed the proposal received from <b>Metallurgical</b>	Detailed report from MTD awaited on superseding the IS			



Engineering	Depai	rtment.	The	5478: 1969	by IS	8588 (Part 1)
committee m	nembers	informed	that	covering	the	comparison
ETD 07 comm	nittee lack	ks the nece	ssary	analysis	of	overlapping
metallurgical expertise to review and				between these 2 standards.		
provide the inp	e clauses re	lated				
to metallurgy	within IS	8 8588 (Pa	rt 1).			
The proposal r	received f	rom MTD	lacks			
sufficient dat	ta and	a compar	ative			
analysis of the	e overlap	between	these			
standards. The	erefore, it	was decid	ed to			
seek detailed	report	from MTI	on (			
superseding th	he IS 547	78: 1969 t	y IS			
8588 (Part 1)	covering	the compa	rison			
analysis of ove	erlapping	between th	ese 2			
standards.						

**5.3** Mr Anilesh Kaduthanum M/s Schneider Electric offered to give presentation on the re-structuring of IEC 61009 and 61008 series.

Shri Anilesh Kaduthanum may kindly update the committee on the revision of IEC 61008 and IEC 61009 (RCCB and RCBO) standards.

Item 6 Proposal received from Ministries and stakeholders for adoption of IEC standard

SI No	IEC standard	IEC TC/SC	Responses received from WG-5 members
1	Portable residual current devices (PRCDs) without integral overcurrent protection for household and similar use	IEC SC 23E	Recommendations submitted by WG-5:  1. IEC 61540: 2023
3	Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBO's) - Part 2-1: Applicability of the general rules to RCBO's functionally independent of line voltage  IEC 61009-2-2:1991 Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBO's) - Part 2-2: Applicability of the general rules to RCBO's functionally dependent on line voltage	IEC SC 23E	<ul> <li>Test facility at Labs to be looked in for the standard requirments.</li> <li>Before Going for any regulations on the above standard after adaption, review of test facility at Labs is required as per standard requirments.</li> <li>2. IEC 61009-2-1:1991 and IEC 61009-2-2:1991 Standards are presently under Revisions, It is expected to have new revision's available by end of 2024. Members have concluded to wait till the new revisions are available for the adaptions. This topic need discussion during next ETD07 Committee meeting.</li> </ul>

## **Item 7 INTERNATIONAL ACTIVITIES**

## 7.1 Programme of Work and List of Published Standards



The details of published standards of IEC/TC 121 and its subcommittees SC 121A, SC 121B, and IEC SC 23 E where no Indian Standards exist is given at **Annex 3.** 

The Committee may consider.

## **Item 8 FUTURE PLANS AND STRATEGIES**

The new Standards National Action Plan (SNAP) has listed developing Indian Standard on the below subject:

DC Switchgear

The committee members are requested to kindly discuss the subject for preparation of new standard.

## Item 9 DATE AND PLACE OF NEXT MEETING

**Item 10 ANY OTHER BUSINESS**