

**For BIS Use Only**

**BUREAU OF INDIAN STANDARDS**

**AGENDA**

<b>Name of Committee</b>	<b>No. of Meeting</b>	<b>Day</b>	<b>Date</b>	<b>Time</b>	<b>Venue</b>
Rotating Machinery Sectional Committee ETD 15	36th	Friday	27th September 2024	14:30	Virtual

**CHAIRMAN** : Shri Mukesh Maravi

**MEMBER SECRETARY** : Mr. Jatin Tiwari

**Item 0 GENERAL**

**0.1 Welcome all members and chairman**

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

- 1.1 The minutes of the 35<sup>st</sup> meeting of the Rotating Machinery Sectional Committee, ETD 15 held on 22<sup>th</sup> March 2024 were circulated
- 1.2 No comments received.

**The Committee may note and formally confirm the minutes of the last meeting.**

**ITEM 2- COMPOSITION**

Composition with attendance in last two meetings is in Annexure-1

**ITEM 3- NEW ITEMS AND UPDATES**

1. Request for Inputs and contact numbers on Alternator standard revision IS 13364-1 and 2
2. Need for Standard on small PMSM motors - Elin Motors.

#### ITEM 4- ACTIONS ARISING OUT OF PREVIOUS MEETINGS

Sl. No.	IS No.	TITLE	Progress/Status	ACTION TO BE TAKEN
1	IS 12065 : 1987	Permissible limits of noise levels for rotating electrical machines	Standard Sent for printing	
2	IS 12075 : 2008	Mechanical vibration of rotating electrical machines with shaft heights 56 mm and higher - Measurement, evaluation and limits of vibration severity (First Revision)	Pending for gazette, Publication is complete	
3	IS 12615 : 2018	Line operated three phase AC motors (IE Code) "Efficiency classes and performance specification" (Third Revision)	Ammendment issued. Revision due , working group has to finalize draft incorporating more clarity in language , tables, referencing to IEC 60034- Shri Prasad Hardikar, Siemens- Convener Shri Dilip Bhave, In personal capacity Shri Praveen Vijayraghavan, Integrated Electric Shri Ravi Singh, ERDA V Krishnamoorthy, SITARC Shri Praveen Kumar, IEEMA Member secretary,ETD 15	
4	IS 13364 (Part 1) : 1992	Ac generators driven by reciprocating internal combustion engines - Specification: Part 1 alternators rated up to 20 kVa	P draft circulated , More inputs needed	Approve for Finalized WC when inputs have been added
5	IS 13364 (Part 2) : 1992	Ac generators driven by reciprocating internal combustion engines - Specification: Part 2 alternators rated above 20 kVa and up to 1250 kVa	P draft circulated , More inputs needed	Approve for Finalized WC when inputs have been added
6	IS 13466 : 1992	Brushes for electrical machines - Specification	P draft being drafted by Assam carbon	Approval for WC when draft is finalized
7	IS 13525 : 1992	Flexible conductors for carbon brushes - Specification	P draft being drafted by Assam carbon	Approval for WC when draft is finalized

8	IS 13584 : 1993	Brush materials for electrical machinery - Specification	P draft being drafted by Assam carbon	Approval for WC when draft is finalized
9	IS 14376 : 1996	Brush holders for electrical machines - Specification	P draft being drafted by Assam carbon	Approval for WC when draft is finalized
10	IS 9919 : 1999	Guide for selection and use of carbon brushes in electrical rotating machines (First Revision)	P draft being drafted by Assam carbon	Approval for WC when draft is finalized
11	IS 14377 : 1996	Specification for three - Phase induction motors for fans used in air - Conditioning and ventilation	P draft being floated	Approval for WC when draft is finalized
12	IS 14578 : 1999	Three - Phase induction motors for use in nuclear power plants - Specification	P draft done	Approve for WC
13	IS 14582 : 2021	Single-phase small ac electric motors for centrifugal pumps for agricultural applications	Mr. Anil Akole, and IPMA may update on this	
14	IS 14889 : 2000	Copper tamping powder for carbon brushes - Specification	P draft being drafted by Assam carbon	Archive
15	IS 15429 : 2004	Storage, installation and maintenance of DC motors - Code of practice	P draft being floated	Approval for WC when draft is finalized
16	IS 15880 : 2009	Three phase cage induction motors when fed from IGBT converters - Application guide	IEC TS 60034-25:2022 WC is complete	Approve for finalization
17	IS 2223 : 1983	Dimensions of flange mounted AC induction motors	ABB may provide update	Approval for WC when draft is finalized
18	IS 2253 : 1974	Designations for types of construction and mounting arrangements of rotating electrical machines (First Revision)	Standard published	
19	IS 2254 : 1985	Dimensions of vertical shaft motors for pumps (Second Revision)	IPMA may provide update	Approval for WC when draft is finalized
20	IS 2972 (Part 1) : 1979	Specification for textile motors: Part 1 loom motors (First Revision)	ATIRA was contacted , other textile associations were also contacted but either no response was met or Input was that motors used are following mostly IEC standards or come with the assembly integrated into it. Hence standards	Approve for withdrawal

			may be withdrawn	
21	IS 2972 (Part 2) : 1979	Specification for textile motors: Part 2 card motors (First Revision)	ATIRA was contacted , other textile associations were also contacted but either no response was met or Input was that motors used are following mostly IEC standards or come with the assembly integrated into it. Hence standards may be withdrawn	Approve for withdrawal
22	IS 4029 : 2010	Guide for testing three phase induction motors (First Revision)	P draft being prepared by Member secretary incorporating updates and corrections, will be floated	Approval for WC when draft is finalized
23	IS 7572 : 1974	Guide for testing single - Phase AC and universal motors	RAVI SINGH, ERDA may provide update	
24	IS 8151 : 1976	Specification for single - Speed three - Phase induction motors for driving lifts	Standard Published	
25	IS 9283 : 2013	Motors for submersible pumpsets - Specification (Second Revision)	Pending for gazette, Publication is complete	
26	IS 9320 : 1979	Guide for testing direct - Current (DC) machines	WC complete	Approved for finalization and publication
27	IS 996 : 2009	Single phase a.c. induction motors for general purpose (Third Revision)	WC comments incorporated as discussed in last meeting	Approved for finalization and publication
28	IS 15999 (Part 1) : 2021	Rotating electrical machines - Part 1 : Rating and performance	IEC 60034-1:2022 WC complete	Approve for finalization under single numbering
29	IS 15999 (Part 2/Sec 1) : 2023	Rotating Electrical Machines Part 2-1: Standard Methods for Determining Losses and Efficiency from Tests Excluding Machines for Traction Vehicles	IEC 60034-1:2022 WC complete	Approve for finalization under single numbering

## Item 6 INTERNATIONAL ACTIVITIES

6.1 The present position of work of the corresponding IEC Technical Committee IEC/ TC 2 on Rotating Machinery is given at [IEC TCs mapped onto ETD 15](#) or

[https://www.iec.ch/dyn/www/f?p=103:22:600961044507047::::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:1221,25](https://www.iec.ch/dyn/www/f?p=103:22:600961044507047::::FSP_ORG_ID,FSP_LANG_ID:1221,25)

### New Procedure for participation in IEC WGs

As has been observed, members have been participating individually. But the reformed procedure for participation in IEC WGs is

- 1) Circulate meeting notice and agenda with all members (through email or whatsapp group)
- 2) After all inputs have been gathered, one point of view/strategy may be formulated for meetings.
- 3) Points of view are put in meeting of working group
- 4) Circulate meeting minutes and agenda with all members (through email or whatsapp group).  
Take action on indigenous standards / new standards or update IEC adopted standards.
- 5) Voting and commenting on documents is also mandatory.

Documents for voting and comments:

S. NO.	Reference, Title	▲▼ Circulation Date	▼ Closing Date
1	<b>2/2209/CDV</b> IEC 60034-30-1 ED2: Rotating electrical machines - Part 30-1: Efficiency classes of line operated AC motors (IE code)	2024-08-30	2024-11-22
2	<b>2/2208/CDV</b> IEC 60072-2 ED2: Dimensions and output series for rotating electrical machines - Part 2: Frame numbers 355 to 1000 and flange numbers 1180 to 2360	2024-08-23	2024-11-15

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3	<b>2/2204/CDV</b> <b>IEC 60034-1 ED15: Rotating electrical machines - Part 1: Rating and performance</b>	2024-08-09	2024-11-01
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4	<b>2/2199/CDV</b> <b>IEC 60034-15 ED4: Rotating electrical machines - Part 15: Impulse voltage withstand levels of form-wound stator coils for rotating a.c. machines</b>	2024-07-26	2024-10-18
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5	<b>2/2213/CD</b> <b>IEC 60034-18-31 ED3: Rotating electrical machines - Part 18-31: Functional evaluation of insulation systems - Test procedures for form-wound windings - Thermal evaluation and classification of insulation systems used in rotating machines</b>	2024-08-09	2024-10-04
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### **Item 6 DATE AND PLACE OF NEXT MEETING**

As discussed in the last meeting ERDA or BHEL may propose a date for the next meeting - physical in next quarter.

**Item 7 ANY OTHER BUSINESS**

**ANNEX 1**  
**COMPOSITION**

Note - Attendance is counted organization wise. One organization's attendance is counted once only.

<u>S.No.</u>	<u>Organization</u>	<u>Member Name</u>	<u>Attendance</u>
<u>1</u>	<u>Bharat Heavy Electricals Limited, Bhopal</u>	<u>Shri Mukesh Kumar Maravi</u>	<u>2/2</u>
<u>2</u>	<u>Asea Brown Boveri Limited, Faridabad</u>	<u>Sumit Tyagi</u>	<u>2/2</u>
<u>3</u>	<u>Asea Brown Boveri Limited, Faridabad</u>	<u>Lokesh B M</u>	
<u>4</u>	<u>Bharat Bijlee Limited, Mumbai</u>	<u>Shri Salil Kumar</u>	<u>2/2</u>
<u>5</u>	<u>Bharat Bijlee Limited, Mumbai</u>	<u>Bhagyashree Sanjay Pawar</u>	
<u>6</u>	<u>Bharat Heavy Electrical Limited, New Delhi</u>	<u>Shri Krushna Chandra Panda</u>	<u>0/2</u>
<u>7</u>	<u>Bharat Heavy Electrical Limited, New Delhi</u>	<u>Shri P Dali Naidu</u>	
<u>8</u>	<u>Central Electricity Authority, New Delhi</u>	<u>Jitesh Shrivastava</u>	<u>2/2</u>
<u>9</u>	<u>Central Electricity Authority, New Delhi</u>	<u>Sh. Rishabh Gaur</u>	
<u>10</u>	<u>Central Power Research Institute, Bengaluru</u>	<u>Shri S Prashob</u>	<u>2/2</u>
<u>11</u>	<u>Electrical Research and Development Association, Vadodara</u>	<u>Ravi Singh</u>	<u>2/2</u>
<u>12</u>	<u>Electrical Research and Development Association, Vadodara</u>	<u>Jitendra Tahilwani</u>	



<u>13</u>	<u>Engineers India Limited, New Delhi</u>	<u>Shri Raman Sood</u>	<u>0/2</u>
<u>14</u>	<u>Engineers India Limited, New Delhi</u>	<u>Shree Ravish K. Raman</u>	
<u>15</u>	<u>Havells India Limited, Noida</u>	<u>ANIL SUKUMAR AKOLE</u>	<u>2/2</u>
<u>16</u>	<u>Havells India Limited, Noida</u>	<u>Vinayak Atre</u>	
<u>17</u>	<u>Hindustan Electric Motors, Mumbai</u>	<u>Shri Sanjay P. Jadia</u>	<u>2/2</u>
<u>18</u>	<u>Hindustan Electric Motors, Mumbai</u>	<u>Dilip Bhawe</u>	
<u>19</u>	<u>INTEGRATED ELECTRIC COMPANY PRIVATE LIMITED, Bengaluru</u>	<u>Shri Praveen Vijayraghavan</u>	<u>2/2</u>
<u>20</u>	<u>Indian Electrical and Electronics Manufacturers Association, New Delhi</u>	<u>Shri Seetharaman K.</u>	
<u>21</u>	<u>Indian Electrical and Electronics Manufacturers Association, New Delhi</u>	<u>Shri Praveen kumar</u>	<u>2/2</u>
<u>22</u>	<u>Indian Pump Manufacturers Association, Mumbai</u>	<u>Shri Utkarsh. A. Chhaya</u>	
<u>23</u>	<u>Indian Pump Manufacturers Association, Mumbai</u>	<u>Shri K.V. Karthik</u>	<u>2/2</u>
<u>24</u>	<u>Indian Pump Manufacturers Association, Mumbai</u>	<u>Shri ANOOP AGARWAL</u>	
<u>25</u>	<u>International Copper Association India, Mumbai</u>	<u>K N Hemanth Kumar</u>	
<u>26</u>	<u>International Copper Association India, Mumbai</u>	<u>Shri Jyotish Pande</u>	<u>2/2</u>

<u>27</u>	<u>International Copper Association India, Mumbai</u>	<u>Shri Mohit Gupta</u>	
<u>28</u>	<u>NTPC Limited, New Delhi</u>	<u>Shri S. N. Tripathi</u>	
<u>29</u>	<u>NTPC Limited, New Delhi</u>	<u>Shri BVVS Ganesh</u>	<u>2/2</u>
<u>30</u>	<u>Nuclear Power Corporation of India Limited, Mumbai</u>	<u>Shri Jayanth Kumar Boppa</u>	
<u>31</u>	<u>Nuclear Power Corporation of India Limited, Mumbai</u>	<u>Shri Ritesh M. Chovatia</u>	<u>2/2</u>
<u>32</u>	<u>PICL India Private Limited, Faridabad</u>	<u>Rabindra Sahoo</u>	<u>0/2</u>
<u>33</u>	<u>PICL India Private Limited, Faridabad</u>	<u>PANKAJ TANEJA</u>	
<u>34</u>	<u>Rotomag Motors and Controls Private Limited, Gujarat</u>	<u>SH UMESH BALANI</u>	<u>new</u>
<u>35</u>	<u>Scientific and Industrial Testing and Research Centre, Coimbatore</u>	<u>Dr. K ULAGANATHAN</u>	
<u>36</u>	<u>Scientific and Industrial Testing and Research Centre, Coimbatore</u>	<u>Krishnamoorthy V</u>	<u>2/2</u>
<u>37</u>	<u>Siemens Limited, Mumbai</u>	<u>Shri Ashish Shere</u>	
<u>38</u>	<u>Siemens Limited, Mumbai</u>	<u>Shri Prasad Hardikar</u>	<u>2/2</u>
<u>39</u>	<u>Southern India Engineering Manufacturers Association, Coimbatore</u>	<u>Dr. R. Subramanian</u>	
<u>40</u>	<u>Southern India Engineering Manufacturers Association, Coimbatore</u>	<u>Shri S. ARUNKUMAR</u>	<u>2/2</u>
<u>41</u>	<u>Thyssenkrupp Industrial Solutions (India) Private Limited, Mumbai</u>	<u>Shri Vaijnath G. Sangekar</u>	

<u>42</u>	<u>Thyssenkrupp Industrial Solutions (India) Private Limited, Mumbai</u>	<u>Charuta Vikram Mulay</u>	<u>2/2</u>
<u>43</u>	<u>Toshiba Mitsubishi-Electric Industrial Systems Corporation, Bengaluru</u>	<u>Mr. Sudheer Tapaskar</u>	
<u>44</u>	<u>Toshiba Mitsubishi-Electric Industrial Systems Corporation, Bengaluru</u>	<u>Manish Joshi</u>	<u>1/2</u>