

## BUREAU OF INDIAN STANDARDS

### Program of Work

#### ETD 15 : Rotating Machinery

**Scope:** To prepare standards on rotating electrical machines like induction, synchronous, motors, generators, dc machines and turbines including carbon brushes for electrical machines (with the exception of traction machines and rotating machinery coming under the purview of other Committees)

**Liaison:** **IEC TC-116 (O):** *Safety of motor-operated electric tools* **IEC TC-2 (P):** *Rotating machinery*

### Published Standards

| S.No | IS No.   | TITLE  | Reaffirm M-Y | No. of Amds | Eqv.                            |
|------|--|--|--------------|-------------|---------------------------------|
| 1    | IS 11537 : 1985<br><i>Reviewed In : 2017</i><br>Reaffirmed but not taken up for revision   | Specification for centrifugal switch for single - Phase induction motors   |              | -           | Indigenous                      |
| 2    | IS 12065 : 1987<br>IEC 60034-9<br><i>Reviewed In : 2019</i>  | Permissible limits of noise levels for rotating electrical machines  | March, 2019  | 1           | Modified/Technically Equivalent |
| 3    | IS 12075 : 2008<br><i>Reviewed In : 2018</i><br><i>60034-14: 2018</i>  | Mechanical vibration of rotating electrical machines with shaft heights 56 mm and higher - Measurement, evaluation and limits of vibration severity (First Revision)                             | July, 2018   | -           | Modified/Technically Equivalent |
| 4    | IS 12075 : 2024<br><i>60034-14: 2018</i>   | Mechanical Vibration of Rotating Electrical Machines with Shaft Heights 56 mm and Higher – Measurement, Evaluation and Limits of Vibration Severity (IEC 60034-14 : 2018, MOD) (Second Revision) |              | -           | Modified/Technically Equivalent |
| 5    | IS 1231 : 2019<br><i>Reviewed In : 2024</i><br><i>IEC 60072</i>  | Dimensions and Output Series of Foot Mounted Induction Motors — Frame Numbers 56 to 315 L ( Fourth Revision )  | June, 2024   | -           | Modified/Technically Equivalent |
| 6    | IS 12615 : 2018<br><i>IEC 60034-30-1 : 2014</i>  | Line Operated Three Phase a.c. Motors ( IE CODE ) “Efficiency Classes and Performance Specification” ( Third Revision )  | -            | 2           | Modified/Technically Equivalent |
| 7    | IS 12642 : 1989<br>IEC 60778<br><i>Reviewed In : 2019</i><br>Reaffirmed but not taken up for revision<br><i>IEC Report 778 (</i> | Brush - Holders for slip rings group R, type RA - Specification  | March, 2019  | -           | Modified/Technically Equivalent |

|    |  |   |                |   |                                 |
|----|--|---|----------------|---|---------------------------------|
|    | 198-I)   |   |                |   |                                 |
| 8  | IS 12998 : 2024<br>1680<br>1680  | Acoustics Test Code for the Measurement of Airborne Noise Emitted by Rotating Electrical Machines   |                | - | Identical under dual numbering  |
| 9  | IS 13364 (Part 1) :<br>1992<br>IEC 60034-1<br>Reviewed In : 2024   | Ac generators driven by reciprocating internal combustion engines - Specification: Part 1 alternators rated up to 20 kVa                    | August, 2024   | - | Modified/Technically Equivalent |
| 10 | IS 13364 (Part 2) :<br>1992<br>IEC 60341<br>Reviewed In : 2024<br>IEC : Pub 34-1- 1983<br>IS 4722 : 1968 BS<br>5000 Part 99-1974 ( 1981 ) ANSI C50.<br>IO- 1977. NEMA<br>MG 1.22-1 | Ac generators driven by reciprocating internal combustion engines - Specification: Part 2 alternators rated above 20 kVa and up to 1250 kVa | August, 2024   | 1 | Modified/Technically Equivalent |
| 11 | IS 13466 : 1992<br>IEC 60136, 467, 773<br>Reviewed In : 2019<br>Reaffirmed but not taken up for revision<br>iec Pub 136 ( 1986<br>Pub 467 ( 1974 )<br>IEC Pub 773 ( 1983 )         | Brushes for electrical machines - Specification   |                | - | Modified/Technically Equivalent |
| 12 | IS 13525 : 1992<br>Reviewed In : 2019<br>Reaffirmed but not taken up for revision<br>JIS C 2802 : 1970   | Flexible conductors for carbon brushes - Specification  |                | - | Modified/Technically Equivalent |
| 13 | IS 13529 : 2021<br>IEC 60034-26 : 2006<br>60034-26:2006  | ROTATING ELECTRICAL MACHINES PART 26 EFFECTS OF UNBALANCED VOLTAGES ON THE PERFORMANCE OF THREE-PHASE CAGE INDUCTION MOTORS                 |                | - | Modified/Technically Equivalent |
| 14 | IS 13555 : 1993<br>Reviewed In : 2019<br>Reaffirmed but not taken up for revision  | Guide for selection and appltction of 3 - Phase AC induction motors for different types of driven equipment                                 | March, 2019    | - | Indigenous                      |
| 15 | IS 13584 : 1993<br>IEC 413<br>Reviewed In : 2019<br>Reaffirmed but not taken up for revision<br>IEC -Pub 413 : 1972<br>, IEC Pub 773 : 1983  | Brush materials for electrical machinery - Specification  | March, 2019    | - | Modified/Technically Equivalent |
| 16 | IS 13586 : 2023<br>60276: 2018<br>60276: 2018  | Carbon Brushes Brush Holders Commutators and Slip-Rings Definitions and Nomenclature  |                | - | Identical under dual numbering  |
| 17 | IS 13937 (Part 1) :<br>1994<br>ISO 7574-1<br>Reviewed In : 2022  | Statistical methods of determining and verifying stated noise emission values of machinery and equipment: Part 1 general                    | November, 2022 | - | Identical under dual numbering  |

|    |   |  |                |   |                                 |
|----|---|--|----------------|---|---------------------------------|
|    | ISO 7574/1  | considerations and definitions   |                |   |                                 |
| 18 | IS 13937 (Part 2) :<br>1994<br>ISO 7574-2<br>Reviewed In : 2024<br>ISO 7574/2                                     | Statistical methods of determining and verifying stated noise emission values of machinery and equipment: Part 2 methods for stated values for individual machines                     | August, 2024   | - | Identical under dual numbering  |
| 19 | IS 13937 (Part 3) :<br>1994<br>ISO 7574-3<br>Reviewed In : 2022<br>ISO 7574/3                                     | Statistical methods for determining and verifying stated noise emission values of machinery and equipment: Part 3 simple (Transition) method for stated values for batches of machines | November, 2022 | - | Identical under dual numbering  |
| 20 | IS 13937 (Part 4) :<br>1994<br>ISO 7574-4<br>Reviewed In : 2022<br>ISO 7574/4                                     | Statistical methods of determining and verifying stated noise emission values of machinery and equipment: Part 4 methods for stated values for batches of machines                     | November, 2022 | - | Identical under dual numbering  |
| 21 | IS 14195 : 1994<br>IEC 61015<br>Reviewed In : 2024<br>IECPub 1015: 1990<br>z                                      | Brush - Holders for electrical machines - Guide to the measurement of the static thrust applied to brushes   | June, 2024     | - | Identical under dual numbering  |
| 22 | IS 14196 : 1994<br>IEC 560<br>Reviewed In : 2023<br>IEC Pub 560 : 1977  | Definitions and terminology of brush holders for electrical machines   | March, 2023    | - | Identical under dual numbering  |
| 23 | IS 14197 : 2023<br>60193: 2019<br>60193: 2019   | Hydraulic Turbines Storage Pumps and Pump-Turbines - Model Acceptance Tests  |                | - | Identical under dual numbering  |
| 24 | IS 14376 : 1996<br>IEC 136<br>Reviewed In : 2017<br>Reaffirmed but not taken up for revision<br>IEC Pub 136 (Y86) | Brush holders for electrical machines - Specification  |                | - | Modified/Technically Equivalent |
| 25 | IS 14377 : 1996<br>Reviewed In : 2017<br>IEEMA 8 : 1987   | Specification for three - Phase induction motors for fans used in air - Conditioning and ventilation   |                | - | Modified/Technically Equivalent |
| 26 | IS 14569 : 1999<br>Reviewed In : 2019<br>Reaffirmed but not taken up for revision                                 | Commutators for electrical machines - Specification  |                | - | Indigenous                      |
| 27 | IS 14578 : 1999<br>Reviewed In : 2019<br>Reaffirmed but not taken up for revision                                 | Three - Phase induction motors for use in nuclear power plants - Specification   | March, 2019    | 1 | Indigenous                      |
| 28 | IS 14582 : 2021   | Single-phase small ac electric motors for centrifugal pumps for agricultural applications  |                | - | Indigenous                      |
| 29 | IS 14889 : 2000<br>Reviewed In : 2015<br>Reaffirmed but not taken up for revision                                 | Copper tamping powder for carbon brushes - Specification   | December, 2015 | - | Indigenous                      |
| 30 | IS 15429 : 2004   | Storage, installation and  |                | - | Indigenous                      |

|    |   |  |            |   |                                |
|----|---|--|------------|---|--------------------------------|
|    | Reviewed In : 2019  | maintenance of DC motors - Code of practice  |            |   |                                |
| 31 | IS 15880 : 2009<br>Reviewed In : 2019<br>IEC 60034-17   | Three phase cage induction motors when fed from IGBT converters - Application guide  |            | - | Identical under dual numbering |
| 32 | IS 15881 : 2009<br>Reviewed In : 2019   | Three phase cage induction motors specifically designed for IGBT converter supply - Specification  | June, 2019 | - | Indigenous                     |
| 33 | IS 15999 (Part 7) : 2024<br>IEC 60034-7:2020<br>60034-7                                       | ROTATING ELECTRICAL MACHINES Part 7: Classification of types of construction mounting arrangements and terminal box position (IM Code) (Second Revision)   |            | - | Identical under dual numbering |
| 34 | IS 15999 (Part 1) : 2021<br>IEC 60034-1: 2017<br>IEC 60034-1: 2017                            | Rotating electrical machines - Part 1 : Rating and performance   |            | - | Identical under dual numbering |
| 35 | IS 15999 (Part 2/Sec 1) : 2023<br>60034-2-1<br>60034-2-1                                      | Rotating Electrical Machines Part 2-1: Standard Methods for Determining Losses and Efficiency from Tests Excluding Machines for Traction Vehicles  |            | - | Identical under dual numbering |
| 36 | IS 15999 (Part 3) : 2023<br>60034-3<br>60034-3  | ROTATING ELECTRICAL MACHINES Part 3: Specific requirements for synchronous generators driven by steam turbines or combustion gas turbines and for synchronous compensators first revision                              |            | - | Identical under dual numbering |
| 37 | IS 15999 (Part 4/Sec 1) : 2023<br>60034-4-1<br>60034-4-1                                      | ROTATING ELECTRICAL MACHINES Part 4 Electrically excited synchronous machine quantities Section 1 Test methods first revision  |            | - | Identical under dual numbering |
| 38 | IS 15999 (Part 15) : 2017<br>IEC 60034-15 : 2009<br>Reviewed In : 2024<br>IEC 60034-15 : 2009 | Rotating Electrical Machines Part 15 Impulse Voltage Withstand Levels of Form-Wound Stator Coils for Rotating ac Machines  | June, 2024 | - | Identical under dual numbering |
| 39 | IS 15999 (Part 18/Sec 41) : 2018<br>IEC 60034-18-41 : 2014<br>IEC 60034-18-41: 201            | Rotating electrical machines: Part 18 partial discharge free electrical insulation systems (Type I) used in rotating electrical machines fed from voltage converters Sec 41 qualification and quality control tests    |            | - | Identical under dual numbering |
| 40 | IS 15999 (Part 18/Sec 42) : 2018<br>IEC 60034-18-41 : 2014<br>IEC 60034-18-42 : 20            | Rotating Electrical Machines Part 18 Partial Discharge Free Electrical Insulation Systems (Type I) Used in Rotating Electrical Machines Fed From Voltage Converters Section 41 Qualification and quality control tests |            | - | Identical under dual numbering |
| 41 | IS 15999 (Part 20/Sec 1) : 2023<br>60034-20-1: 2002   | Rotating Electrical Machines Part 20-1: Control Motors Stepping Motors   |            | - | Identical under dual numbering |

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|----|---|--|-------------|---|---------------------------------|
|    | 60034-20-1: 2002  |  |             |   |                                 |
| 42 | IS 15999 (Part 26) : 2016<br>IEC 60034-26 : 2006<br>Reviewed In : 2024<br>IEC 60034-26 : 2006 | Rotating Electrical Machines Part 26 Effects of Unbalanced Voltages on the Performance of Three-Phase Cage Induction Motors        | June, 2024  | - | Identical under dual numbering  |
| 43 | IS 2223 : 1983<br>IEC 60072<br>Reviewed In : 2017<br>IEC Pub 72 (1971)                        | Dimensions of flange mounted AC induction motors   |             | 2 | Modified/Technically Equivalent |
| 44 | IS 2254 : 1985<br>Reviewed In : 2017  | Dimensions of vertical shaft motors for pumps (Second Revision)  |             | - | Identical under dual numbering  |
| 45 | IS 2972 (Part 1) : 1979<br>Reviewed In : 2017<br>Reaffirmed but not taken up for revision     | Specification for textile motors: Part 1 loom motors (First Revision)  |             | 2 | Indigenous                      |
| 46 | IS 2972 (Part 2) : 1979<br>Reviewed In : 2017<br>Reaffirmed but not taken up for revision     | Specification for textile motors: Part 2 card motors (First Revision)  |             | 1 | Indigenous                      |
| 47 | IS 4029 : 2010<br>Reviewed In : 2016  | Guide for testing three phase induction motors (First Revision)  | March, 2016 | - | Indigenous                      |
| 48 | IS 4665 (Part 1) : 2023<br>60745-1: 2006<br>60745-1: 2006                                     | Hand-Held Motor-Operated Electric Tools Safety Part 1: General requirements Second Revision  |             | - | Identical under dual numbering  |
| 49 | IS 4665 (Part 2/Sec 1) : 2023<br>60745-2-1<br>60745-2-1                                       | Hand-Held Motor-Operated Electric Tools Safety Part 2 Particular requirements Section 1 drills and impact drills                   |             | - | Identical under dual numbering  |
| 50 | IS 4665 (Part 2/Sec 2) : 2023<br>60745-2-2<br>60745-2-2                                       | Hand-held motor-operated electric tools - Safety - Part 2 Particular requirements Section 2 screwdrivers and impact wrenches       |             | - | Identical under dual numbering  |
| 51 | IS 4665 (Part 2/Sec 3) : 2023<br>60745-2-3<br>60745-2-3                                       | Hand-held motor-operated electric tools - Safety Part 2 Particular requirements Section 3 grinders polishers and disk-type sanders |             | - | Identical under dual numbering  |
| 52 | IS 4665 (Part 2/Sec 5) : 2023<br>60745-2-5<br>60745-2-5                                       | Hand-Held Motor-Operated Electric Tools Safety Part 2 Particular Requirements Section 5 Circular Saws                              |             | - | Identical under dual numbering  |
| 53 | IS 4665 (Part 2/Sec 6) : 2023<br>60745-2-6<br>60745-2-6                                       | Hand-Held Motor-Operated Electric Tools - Safety Part 2 Particular Requirements Section 6 Hammers                                  |             | - | Identical under dual numbering  |
| 54 | IS 4665 (Part 2/Sec 7) : 2023<br>60745-2-7<br>60745-2-7                                       | Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids    |             | - | Identical under dual numbering  |
| 55 | IS 4758 : 1968<br>ISO/R 495   | Methods of measurement of noise emitted by machines  |             | - | Modified/Technically Equivalent |

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|----|--|---|----------------|---|-------------------------------------|
|    | Reviewed In : 2017<br>ISO<br>Recommendation<br>495   |   |                |   |                                     |
| 56 | IS 5422 : 1996<br>IEC 60034-3<br>Reviewed In : 2017<br>IEC Pub 34-3 (1988)   | Turbine type generators -<br>Specification (First Revision)   |                | - | Modified/Technically<br>Equivalent  |
| 57 | IS/IEC 60034-5 :<br>2000<br>Reviewed In : 2018<br>IEC 60034 : PART 5   | Rotating electrical machines: Part 5<br>degrees of protection provided by<br>the integral design of rotating<br>electrical machines (IP Code) -<br>Classification         | May, 2018      | - | Identical under single<br>numbering |
| 58 | IS/IEC 60034-8 :<br>2014<br>IEC 60034-8 : 2014<br>Reviewed In : 2024<br>IEC 60034-8: 2014                                    | Rotating Electrical Machines Part 8<br>Terminal Markings and Direction<br>of Rotation ( Third Revision )  | June, 2024     | - | Identical under single<br>numbering |
| 59 | IS/IEC 60034-27-4 :<br>2018<br>IEC 60034-27-4 :<br>2018<br>Reviewed In : 2024<br>IEC 60034-27-4                              | Rotating Electrical Machines Part 27<br>Winding Insulation of Rotating<br>Electrical Machines Section 4<br>Measurement of insulation<br>resistance and polarization index | June, 2024     | - | Identical under single<br>numbering |
| 60 | IS 6362 : 1995<br>IEC 34-6<br>Reviewed In : 2022<br>IEC Pub 34-6 : 1991<br>zy  | Designation of methods of cooling<br>of rotating electrical machines<br>(First Revision)  | November, 2022 | - | Identical under dual<br>numbering   |
| 61 | IS 7538 : 1996<br>Reviewed In : 2017   | Three - Phase squirrel cage<br>induction motors for centrifugal<br>pumps for agricultural application -<br>Specification (First Revision)                                 |                | 3 | Indigenous                          |
| 62 | IS 7572 : 1974<br>Reviewed In : 2017<br>IS : 4029-1967 AIEE<br>Publication IEEE<br>No.. 114-19.58<br>NEMA Standard<br>M.G. 1 | Guide for testing single - Phase AC<br>and universal motors   |                | - | Modified/Technically<br>Equivalent  |
| 63 | IS 8151 : 1976<br>Reviewed In : 2017   | Specification for single - Speed<br>three - Phase induction motors for<br>driving lifts   |                | 2 | Indigenous                          |
| 64 | IS 8151 : 2024   | Single-Speed Three-Phase<br>Induction Motors for Driving Lifts<br>- Specification (First Revision)  |                | - | Indigenous                          |
| 65 | IS 8223 : 1999<br>IEC 60072 -2<br>Reviewed In : 2022<br>IEC 60072-2 (1990)   | Dimensions and output series for<br>rotating electrical machines (First<br>Revision)  | November, 2022 | - | Identical under dual<br>numbering   |
| 66 | IS 8789 : 2021   | Values of performance<br>characteristics for three-phase<br>induction motors with degree of<br>protection 2X  |                | - | Indigenous                          |
| 67 | IS 900 : 2019<br>Reviewed In : 2024  | Code of Practice for Storage,<br>Installation and Maintenance of<br>Induction Motors ( Third Revision<br>)  | June, 2024     | - | Indigenous                          |
| 68 | IS 9283 : 2024   | LINE OPERATED A.C.  |                | - | Indigenous                          |

|    |  | MOTORS FOR SUBMERSIBLE PUMPSETS - SPECIFICATION (THIRD REVISION)                               |                |   |                                 |
|----|--|--|----------------|---|---------------------------------|
| 69 | IS 9283 : 2013<br>Reviewed In : 2018   | Motors for submersible pumpsets - Specification (Second Revision)                              | May, 2018      | - | Indigenous                      |
| 70 | IS 9320 : 1979<br>Reviewed In : 2017<br>GOST : 183-1966<br>Electric machinery general technical requirements. Union of Soviet Socialist Republic | Guide for testing direct - Current (DC) machines   | March, 2017    | 1 | Modified/Technically Equivalent |
| 71 | IS 9919 : 1999<br>Reviewed In : 2018<br>Reaffirmed but not taken up for revision   | Guide for selection and use of carbon brushes in electrical rotating machines (First Revision) | February, 2018 | - | Indigenous                      |
| 72 | IS 996 : 2009<br>Reviewed In : 2019<br>IEC 34-1 (1969 BS 170: 1962 JIS 4203-1973 BS 1608 : 1966  | Single phase a.c. induction motors for general purpose (Third Revision)                        |                | 2 | Identical under dual numbering  |

### Standards under Development

#### Projects Approved

| SI. No.                 | Doc No. | Title |
|-------------------------|---------|-------|
| <i>No Records Found</i> |         |       |

#### Preliminary Draft Standards

| SI. No. | Doc No.  | Title  |
|---------|--|--|
| 1       | ETD 15 (26349) <span style="color: green;">Revision of: IS 13364:1992</span> | Ac generators driven by reciprocating internal combustion engines - Specification Part 1 alternators rated up to 20 kVa                    |
| 2       | ETD 15 (26350) <span style="color: green;">Revision of: IS 13364:1992</span> | Ac generators driven by reciprocating internal combustion engines - Specification Part 2 alternators rated above 20 kVa and up to 1250 kVa |
| 3       | ETD 15 (26786) <span style="color: green;">Revision of: IS 12615:2018</span> | Line Operated Three Phase ac Motors IE CODE Efficiency Classes and Performance Specification   |
| 4       | ETD 15 (26890) <span style="color: green;">Revision of: IS 7572:1974</span>  | Guide for testing single - Phase AC and universal motors   |
| 5       | ETD 15 (26913) <span style="color: green;">Revision of: IS 14377:1996</span> | SPECIFICATION FOR THREE-PHASE INDUCTION MOTORS FOR FANS USED IN AIR-CONDITIONING AND VENTILATION   |
| 6       | ETD 15 (26945) <span style="color: green;">Revision of: IS 4029:2010</span>  | Guide for testing three phase induction motors   |

#### Drafts Standards in WC Stage

| SI. No. | Doc No.  | Title  |
|---------|--|--|
| 1       | ETD 15 (26513) <span style="color: green;">Revision of: IS 14578:1999</span> | THREE PHASE INDUCTION MOTORS FOR USE IN NUCLEAR POWER PLANTS - SPECIFICATION |

#### Draft Standards Completed WC Stage

| SI. No. | Doc No.  | Title   |
|---------|--|---|
| 1       | ETD 15 (26271) <span style="color: green;">Revision</span> | Rotating electrical machines - Part 25 AC electrical machines used in power drive systems - |



**Finalized Draft Indian Standard**

| Sl. No. | Doc No.                                      | Title  |
|---------|--|--|
| 1       | ETD 15 (25631) Revision<br>of: IS 15999:2021 | Rotating electrical machines - Part 1 Rating and performance Third Revision  |
| 2       | ETD 15 (25633) Revision<br>of: IS 15999:2023 | Rotating Electrical Machines Part 2 for Determining Losses and Efficiency from Tests Section 1 Standard Methods Excluding Machines for Traction Vehicles |
| 3       | ETD 15 (26175) Revision<br>of: IS 9320:1979  | Guide for testing direct - Current DC machines   |

**Finalized Draft Indian Standards under Print**

| Sl. No. | Doc No.  | Title  |
|---------|--|--|
| 1       | ETD 15 (25587) Revision<br>of: IS 12065:1987     | Permissible limits of noise levels for rotating electrical machines  |
| 2       | ETD 15 (25598) Revision<br>of: IS 996:2009       | SINGLE PHASE ac INDUCTION MOTORS FOR GENERAL PURPOSE Fourth Revision   |
| 3       | ETD 15 (25628)                                   | Rotating electrical machines Part 23 Repair overhaul and reclamation   |
| 4       | ETD 15 (25634) Revision<br>of: IS/IEC 60034:2000 | Rotating electrical machines - Part 5 Degrees of protection provided by the integral design of rotating electrical machines IP code - Classification Third Revision  |
| 5       | ETD 15 (26272) Revision<br>of: IS 15999:2018     | Rotating electrical machines - Part 18-41 Partial discharge free electrical insulation systems Type I used in rotating electrical machines fed from voltage converters - Qualification and quality control tests |
| 6       | ETD 15 (26273) Revision<br>of: IS 15999:2018     | Rotating electrical machines - Part 18-42 Partial discharge resistant electrical insulation systems Type II used in rotating electrical machines fed from voltage converters - Qualification tests               |

**Total Published Standards:67 Total Standards Under development:17**

**Aspect Wise Report**

Product : 32  
 Code of Practices : 9  
 Methods of Test : 14  
 Terminology : 8  
 Dimensions : 4  
 System Standard : 0  
 Safety Standard : 1  
 Others : 0  
 Service Specification : 0  
 Process Specification : 0  
 Unclassified : 0

**Annexure-I :List of Indian Standards Withdrawn/Superseded**

| Sl. No. | IS No. & Year   | Title  |
|---------|---|--|
| 1       | IS 10534 : 1983<br>ISO/DIS 6190<br>Reviewed In :<br>2017 ISO/DIS 6190 | Method of measurement of airborne noise emitted by gas turbine installations |
| 2       | IS 12066 : 1987<br>Reviewed In : 2019 IEMA:<br>1-1978 IEMA            | Specification for three - Phase induction motors for machine tools           |
| 3       | IS 12615 : 2011<br>Identical  | Energy Efficient Induction Motors - Three Phase Squirrel Cage                |
| 4       | IS 12802 : 1989<br>IEC 34-1   | Temperature-rise Measurements Of Rotating Electrical Machines                |



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|----|---|--|
|    | Reviewed In : 2009  |  |
| 5  | IS 12824 : 1989<br>IEC 34-1<br>Reviewed In : 2009   | Prelaminated particle boards from wood and other lignocellulosic material - Specification First Revision   |
| 6  | IS 12998 (Part 1) : 1991<br>ISO 1680-1<br>Reviewed In : 2022 ISO<br>1680/1 :1986              | Methods of measurement of airborne noise emitted by rotating electrical machinery Part 1 engineering method for free - Field conditions over a reflecting plane            |
| 7  | IS 12998 (Part 2) : 1991<br>ISO 1680-2<br>Reviewed In : 2018 ISO<br>1680/2 :1987              | Methods of measurement of airborne noise emitted by rotating electrical machinery Part 2 survey method   |
| 8  | IS 13079 : 1991<br>Reviewed In : 2017 BS<br>5000 : Part 60 : 1982                             | Stepping motors - Specification  |
| 9  | IS 13107 : 1991<br>IEC 279<br>Reviewed In : 2013  | Guide for measurement of winding resistance of an ac machine during operation at alternating voltage   |
| 10 | IS 14222 : 1995<br>IEC 3415<br>Reviewed In : 2017 IEC<br>Pub 34-15 : 1990                     | Impulse voltage withstand levels of rotating a c machines with form - Wound stator coils   |
| 11 | IS 14568 (Part 2) : 1998<br>IEC 72-2 : 1990<br>Reviewed In : 2022 IEC<br>72-2 ( 1990 )        | Dimensions and output series for rotating electrical machines Part 2 frame numbers 355 to 1000 and flange numbers 1180 to 2360   |
| 12 | IS 15999 (Part 4) : 2017<br>IEC 60034-4 : 2008<br>IEC 60034-4 : 2008                          | Rotating electrical machines Part 4 methods for determining synchronous machine quantities from tests  |
| 13 | IS 15999 (Part 9) : 2016<br>IEC 60034-9 : 2003<br>IEC 60034-9 : 2007                          | Rotating Electrical Machines Part 9 Noise Limits   |
| 14 | IS 15999 (Part 14) : 2016<br>IEC 60034-14:2007  | Rotating Electrical Machines Part 14 Mechanical Vibration of Certain Machines with Shaft Heights 56 mm and Higher- Measurement Evaluation and Limits of Vibration Severity |
| 15 | IS 2968 : 1964<br>Reviewed In : 2017<br>Reaffirmed but not taken up<br>for revision DIN 42923 | Dimensions of slide rails for electric motors  |
| 16 | IS 2972 (Part 3) : 1979<br>Reviewed In : 2017   | Specification for textile motors Part 3 spinning frame motors First Revision   |
| 17 | IS 3003 (Part 1) : 1977<br>Reviewed In : 1991   | Carbon brushes for electrical machines Part 1 Definitions and nomenclature   |
| 18 | IS 3003 (Part 2) : 1977   | Carbon brushes for electrical machines Part 2 Test methods for brush materials   |
| 19 | IS 3003 (Part 3) : 1978   | Carbon brushes for electrical machines Part 3 Dimensions and requirements  |
| 20 | IS 3003 (Part 4) : 1978   | Carbon brushes for electrical machines Part 4 Dimensions of chamfers bevels and terminations   |
| 21 | IS 325 : 1996<br>IEC 60034-1<br>Reviewed In : 2012  | Three-phase Induction Motors   |
| 22 | IS 3682 : 1966<br>Reviewed In : 2017  | Flameproof ac motors for use in mines  |
| 23 | IS 4665 (Part 2) : 1984<br>Reviewed In : 2017 CEE<br>Pub 20 II-1975 BS 2769:<br>1964          | Specification for portable electric motor - Operated tools Part 2 specific requirements for tools  |
| 24 | IS 4691 : 1985  | Rotating electrical Machines Part 5 Degrees of protection provided by enclosure for rotating   |

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|----|--|---|
|    | Reviewed In : 2009   | electrical machinery  |
| 25 | IS 4722 : 2001<br>IEC 60034-03<br>Reviewed In : 2007   | Rotating Electrical Machines  |
| 26 | IS 4728 : 1975<br>Reviewed In : 2007   | Specification for wooden boxes for packaging of apples  |
| 27 | IS 4729 : 1975   | Measurement and evaluation of vibration of rotating electrical machines                                       |
| 28 | IS 4889 : 1968<br>IEC 2 D<br>Reviewed In : 2017 IEC document 2D (United Kingdom) 5 Comments from the British Committee on Document 2D (Secretariat)        | Methods of determination of efficiency of rotating electrical machines  |
| 29 | IS/IEC 60034-1 : 2004<br>Reviewed In : 2012 IEC 60034-1 : 2004   | Rotating electrical machines Part 1 Rating and performance  |
| 30 | IS 7132 : 1973<br>IEC 60034-1<br>Reviewed In : 2017 IEC Pub 34-1 ( 1969 ) IEC Pub 344 ( 1967 ) IEEE 115-1965   | Guide for testing synchronous machines  |
| 31 | IS 7306 : 1974<br>EC 60034-4<br>Reviewed In : 2017 IEC Publication 34-4 (1967)<br>Rotating electrical machines, Part 4 : Methods for determining synchrono | Methods for determining synchronous machine quantities from tests   |
| 32 | IS 7816 : 1975<br>Reviewed In : 2017 IEEE Code No. 43  | Guide for testing insulation resistance of rotating machines  |
| 33 | IS 9582 (Part 1) : 1980<br>Reviewed In : 2018<br>Reaffirmed but not taken up for revision  | Specification for single - Phase electric motors for definite purposes Part 1 domestic laundry machine motors |
| 34 | IS 9628 : 1980<br>Reviewed In : 2019 BS 5000 : Part 16 : 1972  | Three-phase induction motors with type of protection n  |
| 35 | IS 9670 : 1980<br>Reviewed In : 2019   | Specification for direct current micromotor for cassette tape recorders and other applications                |

### Annexure-II :List of Indian Product Standards

| SI. No. | IS No. & Year   | Title  |
|---------|---|--|
| 1       | IS 11537 : 1985<br>Reviewed In : 2017<br>Reaffirmed but not taken up for revision                                       | Specification for centrifugal switch for single - Phase induction motors                 |
| 2       | IS 12642 : 1989<br>IEC 60778<br>Reviewed In : 2019<br>Reaffirmed but not taken up for revision IEC Report 778 ( 198-I ) | Brush - Holders for slip rings group R type RA - Specification                           |
| 3       | IS 13364 (Part 1) : 1992  | Ac generators driven by reciprocating internal combustion engines - Specification Part 1 |

|    |  |  |
|----|--|--|
|    | IEC 60034-1<br>Reviewed In : 2024  | alternators rated up to 20 kVa   |
| 4  | IS 13364 (Part 2) : 1992<br>IEC 60341<br>Reviewed In : 2024 IEC :<br>Pub 34-1- 1983 IS 4722 :<br>1968 BS 5000 Part 99-1974<br>( 1981 ) ANSI C50. IO-<br>1977. NEMA MG 1.22-1 | Ac generators driven by reciprocating internal combustion engines - Specification Part 2<br>alternators rated above 20 kVa and up to 1250 kVa  |
| 5  | IS 13466 : 1992<br>IEC 60136, 467, 773<br>Reviewed In : 2019<br>Reaffirmed but not taken up<br>for revision iec Pub 136 ( 1986<br>Pub 467 ( 1974 ) IEC<br>Pub 773 ( 1983 )   | Brushes for electrical machines - Specification  |
| 6  | IS 13525 : 1992<br>Reviewed In : 2019<br>Reaffirmed but not taken up<br>for revision JIS C 2802 :<br>1970  | Flexible conductors for carbon brushes - Specification   |
| 7  | IS 14195 : 1994<br>IEC 61015<br>Reviewed In : 2024 IEC Pub<br>1015: 1990 z   | Brush - Holders for electrical machines - Guide to the measurement of the static thrust applied to<br>brushes  |
| 8  | IS 14376 : 1996<br>IEC 136<br>Reviewed In : 2017<br>Reaffirmed but not taken up<br>for revision IEC Pub 136<br>(1Y86)  | Brush holders for electrical machines - Specification  |
| 9  | IS 14377 : 1996<br>Reviewed In : 2017 IEEMA<br>8 : 1987  | Specification for three - Phase induction motors for fans used in air - Conditioning and ventilation   |
| 10 | IS 14569 : 1999<br>Reviewed In : 2019<br>Reaffirmed but not taken up<br>for revision   | Commutators for electrical machines - Specification  |
| 11 | IS 14578 : 1999<br>Reviewed In : 2019<br>Reaffirmed but not taken up<br>for revision   | Three - Phase induction motors for use in nuclear power plants - Specification   |
| 12 | IS 14582 : 2021<br>ISO/IEC 39794-1:2019  | Single-phase small ac electric motors for centrifugal pumps for agricultural applications  |
| 13 | IS 14889 : 2000<br>Reviewed In : 2015<br>Reaffirmed but not taken up<br>for revision   | Copper tamping powder for carbon brushes - Specification   |
| 14 | IS 15881 : 2009<br>Reviewed In : 2019  | Three phase cage induction motors specifically designed for IGBT converter supply -<br>Specification   |
| 15 | IS 15999 (Part 1) : 2021<br>IEC 60034-1: 2017<br>ISO 26262-10:2018   | Rotating electrical machines - Part 1 Rating and performance   |
| 16 | IS 15999 (Part 3) : 2023<br>60034-3  | ROTATING ELECTRICAL MACHINES Part 3 Specific requirements for synchronous<br>generators driven by steam turbines or combustion gas turbines and for synchronous compensators<br>first revision |
| 17 | IS 15999 (Part 20/Sec 1) :<br>2023<br>60034-20-1: 2002   | Rotating Electrical Machines Part 20-1 Control Motors Stepping Motors  |

|    |   |   |
|----|---|---|
| 18 | IS 2972 (Part 1) : 1979<br>Reviewed In : 2017<br>Reaffirmed but not taken up<br>for revision          | Specification for textile motors Part 1 loom motors First Revision  |
| 19 | IS 2972 (Part 2) : 1979<br>Reviewed In : 2017<br>Reaffirmed but not taken up<br>for revision          | Specification for textile motors Part 2 card motors First Revision  |
| 20 | IS 4665 (Part 1) : 2023<br>60745-1: 2006  | Hand-Held Motor-Operated Electric Tools Safety Part 1 General requirements Second Revision  |
| 21 | IS 4665 (Part 2/Sec 1) :<br>2023<br>60745-2-1   | Hand-Held Motor-Operated Electric Tools Safety Part 2 Particular requirements Section 1 drills<br>and impact drills                   |
| 22 | IS 4665 (Part 2/Sec 2) :<br>2023<br>60745-2-2   | Hand-held motor-operated electric tools - Safety - Part 2 Particular requirements Section 2<br>screwdrivers and impact wrenches       |
| 23 | IS 4665 (Part 2/Sec 3) :<br>2023<br>60745-2-3   | Hand-held motor-operated electric tools - Safety Part 2 Particular requirements Section 3 grinders<br>polishers and disk-type sanders |
| 24 | IS 4665 (Part 2/Sec 5) :<br>2023<br>60745-2-5   | Hand-Held Motor-Operated Electric Tools Safety Part 2 Particular Requirements Section 5<br>Circular Saws                              |
| 25 | IS 4665 (Part 2/Sec 6) :<br>2023<br>60745-2-6   | Hand-Held Motor-Operated Electric Tools - Safety Part 2 Particular Requirements Section 6<br>Hammers                                  |
| 26 | IS 4665 (Part 2/Sec 7) :<br>2023<br>60745-2-7   | Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7<br>Spray Guns for Non-Flammable Liquids    |
| 27 | IS 5422 : 1996<br>IEC 60034-3<br>Reviewed In : 2017 IEC<br>Pub 34-3 (1988)                            | Turbine type generators - Specification First Revision  |
| 28 | IS 7538 : 1996<br>Reviewed In : 2017  | Three - Phase squirrel cage induction motors for centrifugal pumps for agricultural application -<br>Specification First Revision     |
| 29 | IS 8151 : 2024  | Single-Speed Three-Phase Induction Motors for Driving Lifts - Specification First Revision  |
| 30 | IS 8789 : 2021<br>ISO/IEC TS 23167 : 2020   | Values of performance characteristics for three-phase induction motors with degree of protection<br>2X                                |
| 31 | IS 9283 : 2024  | LINE OPERATED A C MOTORS FOR SUBMERSIBLE PUMPSETS - SPECIFICATION<br>THIRD REVISION   |
| 32 | IS 996 : 2009<br>Reviewed In : 2019 IEC<br>34-1 (1969 BS 170: 1962<br>JIS 4203-1973 BS 1608 :<br>1966 | Single phase a c induction motors for general purpose Third Revision  |