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BUREAU OF INDIAN STANDARDS

AGENDA

Name the	No. of	Day	Date	Time	Venue
of	Meeting				
Committee)				
Rotating Machinery	nd		22 March	14:30 AM	WebEx (Online)
Sectional	34^{nd}	Friday	2024		
Committee ETD 15		-			

CHAIRMAN: Shri Mukesh Maravi MEMBER SECRETARY: Ms. Jatin Tiwari

Item 0 GENERAL

0.1 Welcome and Opening Remarks by the Chairman

Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The minutes of the 33st meeting of the Rotating Machinery Sectional Committee, ETD 15 held on 17th Nov 2023 were circulated on 22 Nov 2023.

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

The Efficiency Index is being calculated for all BIS committees. Details are given in Annex-2

Co Option request- Rabindra Sahoo from PICL. CV and authorisation is attached in Annexure -3

ITEM 3- RECENT ISSUES

IEEMA had forwarded a letter regarding non-compliance of certification to BIS and requested to discuss it in the meeting.

ITEM 4- ACTIONS ARISING OUT OF PREVIOUS MEETINGS

Sl. No.	Item No. of Last Minut es	Subject	Decision taken during the last meeting	Action/Remarks
1.	1.2 (1)	Revision of IS 9283: 2013/ Motors for Submersible Pump sets – Specification (Second Revision) ETD 15 (17922)/ P Draft circulated vide email dated 18 August 2021 with last date of comments as 17 Sep 2021.	The WC draft received many comments both editorial and technical. Corrected draft will be recirculated for WC	
2.	1.2 (2)	Revision of IS 12075: 2008 Mechanical Vibration of Rotating Electrical Machines with Shaft Heights 56 mm and Higher - Measurement, Evaluation and Limits of Vibration Severity	ETD/15/23815 was wide circulated on 17/10/23. 2 Comments were received from Mr. Ashish Shere. 1 was a mistake in typing. It has been corrected. The committee may deliberate on 2nd comment and approve for printing or 2nd WC	
3.	1.2 (5)	Revision of IS 12065	Draft received from Mr. Ashish Shere. The committee may approve for WC. The same WG was also requested to review IS 4758: 1968 'Methods of measurement of noise emitted by machines' and recommend for withdrawal, if requirements are already covered in IS 12065.	Reply is awaited.

5.	1.2 (4)		Mail Received from Mr. Ravi Singh to not merge the two standards. Members may update/finalize the two drafts to do P draft.	
6.	1.2 (3)	ETD 15 (15753) (Third Revision of IS 996: 2009) Single phase ac induction motors for general purpose	The committee discussed that its not possible to achieve efficiency in single phase motors as in 3-phase motors. Therefore, here efficiency can not be aligned with IEC 60034-30-1. In addition, IEC 60034-30-1 does not define frame to output ratio also. IEEMA was also requested to share the draft with the leading manufacturer of single phase ac motors for obtaining comments.	
7.		Revision of IS 8151 'Specification for single - Speed three - Phase induction motors for driving lifts'	Chair approval for printing is awaited. Approval may be done during meeting and will be circulated with resolution and minutes	
9.		Revision of IS 12615: 2018 Line operated three phase AC motors (IE Code) "Efficiency classes and performance specification" (Third Revision)	The committee decided to revise IS 12615: 2018 in order to bring more clarity in the scope as well as to incorporate all the suggestions received during the last meeting of ETD 15. ETD received mail from Siemens regarding the IS 12615	The committee may decide the future course of action in this regard.

Item 5 REVIEW OF PROGRAM OF WORK OF ETD 15

The Programme of work of ETD 15 is given in **Annex 2**. Committee members may give their suggestions.

5.1 Review of Standards - Taking up Revision of Pre-2000 Standards

BIS has identified a list of standards which are very old (pre year 2000). Such Standards are to either be revised with new year or withdrawn . Kindly volunteer to form a working group (4-5 members) to make reports about pre 2000 standards and submit action to be taken.

Standards to be approved for withdrawal

		Reaffirmatio	Degree of		
<u>IS No.</u>	<u>Title</u>	n Details	<u>Equivalence</u>	YEAR	ACTION TO BE TAKEN
	Specificatio				
	n for three -				
	<u>Phase</u>				DECIDED FOR
	induction				WITHDRAWAL Approved by DG
	motors for		Modified/Te		CPRI, in 2002, written in 32
<u>IS 12066 :</u>	<u>machine</u>		<u>chnically</u>		Agenda (based on IEMA: I-1978
<u>1987</u>	<u>tools</u>	March, 2019	<u>Equivalent</u>	<u>1987</u>	<u>IEMA)</u>
	<u>Brush</u>				
	<u>materials</u>				
	<u>for</u>				
	<u>electrical</u>				IEC 60773: 2021
	machinery -		Modified/Te		<u>IEC 60413: 1972</u>
<u>IS 13584 :</u>	<u>Specificatio</u>		chnically		Permission for Wide circulation
<u>1993</u>	<u>n</u>	March, 2019	<u>Equivalent</u>	<u>1993</u>	of IEC
	Methods of				
	determinati				
	on of				
	efficiency of				IS 15000 (Doub 2/Sec 1) : 2022
10 4000	rotating		Modified/Te		IS 15999 (Part 2/Sec 1): 2023
<u>IS 4889 :</u>	electrical	0047	chnically	4000	60034-2-1 (Active) adopted .
<u>1968</u>	<u>machines</u>	<u>2017</u>	<u>Equivalent</u>	<u>1968</u>	Permission to withdraw
					IS 15999 (Part 3): 2023/ IEC
					60034-3: 2020 "Specific
					Requirements for Synchronous
	<u>Turbine</u>				Generators Driven by Steam
	<u>type</u>				Turbines or Combustion Gas
	generators -				Turbines and for Synchronous
	<u>Specificatio</u>		Modified/Te		Compensators" is published. In
<u>IS 5422 :</u>	n (First		<u>chnically</u>		view of above, the committee may
<u>1996</u>	Revision)	<u>2017</u>	<u>Equivalent</u>	<u>1996</u>	approve withdrawal of IS 5422.

<u>IS 7132 :</u> 1973	Guide for testing synchronous machines	<u> 2017</u>	Modified/Te chnically Equivalent	<u>1973</u>	Requirements already covered in IS 15999 (Part 4)/ IEC 60034-4. Permission to withdraw
<u>IS 7306 :</u> 1974	Methods for determining synchronou s machine quantities from tests	<u>2017</u>	Modified/Te chnically Equivalent	<u>1974</u>	Requirements already covered in IS 15999 (Part 4)/ IEC 60034-4. Permission to withdraw
IS 9628 : 1980 BS 5000 : Part 16 : 1972	Three-phas e induction motors with type of protection 'n'	<u>March, 2019</u>	ldentical under dual numbering	<u>1980</u>	IS/ IEC 60079-15 2019 covers the requirements of IS 9628. Therefore, decided for withdrawal of IS 9628

The committee may consider.

5.2 Scientific and Periodic Journals to be subscribed

The committee may suggest scientific and periodic journals which may be subscribed by BIS to discover latest technological developments taking place in the field of rotating machinery and its related activities all over the world

5.3 Participation in National and International events related to Rotating Machinery

The committee may suggest national and international events / training program planned in the field of rotating machinery for participation.

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

The committee may look into all the topics and suggest standards to be adopted. Expert list nominations

may also be send.

Item related to SNAP

1. IEC 60034-23:2019-Edition 1.0 (2019-01-24)-Rotating electrical machines - Part 23: Repair, overhaul and reclamation

COMMITTEE MAY APPROVE FOR WIDE CIRCULATION

Committee may approve to wide circulate the said IEC standards

Item 7 DATE AND PLACE OF NEXT MEETING

Item 8 ANY OTHER BUSINESS

ANNEX 1 COMPOSITION

		ETD-15 Rotating	Machinery Sectional (Committee		
Sn.	Organization	Member Name	Member Email	Member Phone		nce out of Last 2 Meeting
					32nd	33rd
1	Bharat Heavy Electricals Limited, Bhopal	Shri Mukesh Kumar Maravi (Chairperson)	mkmaravi@bhel.in	942560471	_	Y
2	Asea Brown Boveri Limited, Faridabad	Shri Sumit Tyagi (Alternate Member) Shri Lokesh B M (Principal Member)	sumit.tyagi@in.abb.c om lokesh.b.m@in.abb.c om	981123537 7 990149017 5	Y	N
3	Bharat Bijlee Limited, Mumbai	Shri Salil Kumar (Principal Member) Shri Bhagyashree Sanjay Pawar (Alternate Member)	salil.kumar@bharatbi jlee.com bhagyashree.pawar@ bharatbijlee.com	986740725 7 987010537 4	Y	N
4	Bharat Heavy Electrical Limited, New Delhi	Shri Krushna Chandra Panda (Principal Member) Shri P Dali Naidu (Alternate Member)	kcpanda@bhel.in dalinaidu@bhel.in	949074676 2 949047378 8	N	Y
5	CG Power and Industrial Solutions, Mumbai	Shri A. Sudhakaran (Principal Member) Shri Prashant Ankalhope (Alternate Member) Shri Bhupendra Nema (Alternate Member)	sudhakaran.achuthan @cgglobal.com prashant.ankaikhope @cgglobal.com Bhupendrs.nema@cg global.com	4	Y	N

	Central Electricity	Shri Jitesh Shrivas	jitesh.cea@gmail.co	975521747		
	Authority, New Delhi	(Principal	m	2		
		Member)			3.T	***
6		Shri Rishabh Gaur	rishabh.cea1@gov.in	979592224	N	Y
		(Alternate		0		
		Member)				
	Central Power	Shri S Prashob	prashob@cpri.in	808902502		
7	Research Institute,	(Principal		7		Y
	Bengaluru	Member)			_	
	Electrical Research	Shri Ravi Singh	ravi.singh@erda.org	997894099		
	and Development	(Principal		8		
	Association,	Member)				
8	Vadodara	Shri Jitendra	j.tahilwani@erda.org		Y	Y
		Tahilwani				
		(Alternate				
		Member)				
	Engineers India	Shri S Srihari	srihari.s@eil.co.in	971785571		
	Limited, New Delhi	(Alternate		1		
	·	Member)				
		Shri Raman Sood	raman.sood@eil.co.i	981868870		
9		(Principal	n	9	N	Y
		Member)				
		Shree Ravish K.	ravish.raman@eil.co.	995319884		
		Raman (Alternate	in	7		
		Member)				
	Havells India	Shri Anil Sukumar	anil.akole@havells.c	976635833		
	Limited, Noida	Akole (Alternate	om	3		
10		Member)			Y	Y
10		Shri Vinayak Atre	vinayak.atre@havells	986607285	ĭ	ĭ
		(Principal	.com	1		
		Member)				
	Hindustan Electric	Shri Sanjay P.	spjadia@hindmotors.	982002673		
	Motors, Mumbai	Jadia (Principal	com	9		
11		Member)			NI	V
11		Shri Dilip Bhave	dilipnbhave@gmail.c		N	Y
		(Alternate	om			
		Member)				
	Integrated Electric	Dr. Praveen	praveen1@int-elec.c			
12	Company Private	Vijayraghavan	om		Y	Y
12	Limited, Bengaluru	(Principal			1	1
		Member)				
13	Indian Electrical and	Shri Seetharaman	k.seetharaman@ieem	998000498	Y	Y
					•	•

	Electronics	K. (Principal	a.org	2		
	Manufacturers	Member)				
	Association, New	Shri Praveen	praveen.kumar@roto			
	Delhi	kumar (Alternate	motive.com			
		Member)				
	Indian Pump	Shri Utkarsh	be@watermanpump.	997890050		
	Manufacturers	Chaya (Alternate	com	6		
	Association, Mumbai	Member)				
		Shri K.V. Karthik	karthik@deccanindu	989429696		
14		(Principal	stries.com	0	Y	Y
		Member)				
		Shri Anoop	anoop.agarwal@plug	722605275		
		Agarwal (Alternate	a.com	7		
		Member)				
	Ingersoll Rand India	Shri Kaushal	kaushal_pandya@irc	997899554		
	Limited, Ahmedabad	Pandya (Principal	o.com	4		
15		Member)			N	Y
13		Shri Harsh Shukla	harsh.shukla@irco.c	992448309	11	1
		(Alternate	om	8		
		Member)				
	International Copper			958223664		
	Association India,	Kumar (Principal	peralliance.org	4		
	Mumbai	Member)				
		=	jyotish.pande@coppe	981002354		
16		(Alternate	ralliance.org	4	Y	Y
		Member)				
		Shri Sanjay	Sanjay.namdeo@cop	991559389		
		Namdeo (Alternate	peralliance.org	8		
		Member)		202125515		
	_	=	rajesh.gote@ksb.com			
	Pune	(Principal		0		
17		Member)	1 1 .1 .01 1	0.42.400.5.62	Y	N
		Shri Dattatray	dattatray.katkar@ksb	842400563		
		Katkar (Alternate	.com	5		
	N	Member)		000200002		
1.0	Marathon Electric	Shri Rajiv Ranjan	rajiv.ranjan@marath	990390082	T 7	NT.
18	Motors (India)	(Principal	onelectric.com	0	Y	N
	Limited, Kolkata	Member)	1 17 4 10 4	065000060		
	NTPC Limited, New	Shri S. N. Tripathi	shaktintripathi@ntpc.			
19	Delhi	(Alternate	co.in	8	N	Y
17		Member)			1.//	1

		Shri BVVS	bvvsganesh@ntpc.co	965099958		
		Ganesh (Principal	in.	1		
		Member)				
	Scientific and	Shri A. M. Selvaraj	jd@sitarc.com	948760047		
	Industrial Testing	(Principal		3		
	and Research Centre,	Member)				
	Coimbatore	Dr. K Ulaganathan	director@sitarc.com	948774047		
20		(Principal		3	X 7	X 7
20		Member)			Y	Y
		Shri	sitarcinfo@sitarc.co			
		V.Krishnamoorthy	m			
		(Alternate				
		Member)				
	Siemens Limited,	Shri Ashish Shere	ashish.shere@siemen	983395479		
	Mumbai	(Alternate	s.com	5		
		Member)				
		Shri Pradeep	pradeep.ranade@sie			
21		Ranade (Principal	mens.com		Y	N
21		Member)			ĭ	N
		Shri Prasad	prasad.hardikar@sie			
		Hardikar	mens.com			
		(Alternate				
		Member)				
	Southern India	Dr. R.	rama.smani@gmail.c			
	Engineering	Subramanian	om			
	Manufacturers	(Principal				
22	Association,	Member)			Y	Y
	Coimbatore	Shri S. Arunkumar	arunkumars@deccan	986580969		
		(Alternate	industries.com	6		
		Member)				
	Thyssenkrupp	Shri Vaijnath G.	vaijanath.sangekar@t	703021016		
	Industrial Solutions	Sangekar	hyssenkrupp.com	8		
	(India) Private	(Alternate				
23	Limited, Mumbai	Member)			Y	N
23		Shri Charuta	charuta.mulay@thyss	900110181	1	14
		Vikram Mulay	enkrupp.com	4		
		(Principal				
		Member)				
	Toshiba	Shri Sudheer	Sudheer.tapaskar@t	704234226		
	Mitsubishi-Electric	Tapaskar (Principal	meic.in	6		
24	Industrial Systems	Member)			Y	Y
	Corporation,	Ms. Manish Joshi	manish.joshi@tmeic.	981017254		

	Bengaluru	(Alternate	in	6		
		Member)				
		Shri Venkatesulu	Venkatesulu.Thumbu			
		Thumbur	r@tmeic.in			
		(Alternate				
		Member)				
25	Nuclear	Shri Ritesh M.	critesh@npcil.co.in	983369682	N	N
	Power Corporation	Chovatia		9		
	of India Limited,	(Principal)				
	Mumbai	Jayant Kumar	jkboppa@npcil.co.in	986966914	N	N
		Boppa (Alternate)		0		
	Central					
	Ministry/Dept.					

ANNEX 2 EFFICIENCY INDEX

An Advanced Dashboard is developed to give deeper insights of standard formulation related activities; also an Efficiency Index is published for comparative assessment of various Sectional Committees which is based on 6 KPIs currently. The details of various KPIs and the logic used for calculating the efficiency index is as following:

KPI Description

- 1. % of Meetings Held For calculating this KPI number of TC meetings planned and number of TC meetings held (meetings for which attendance is recorded) are used.
- 2. Meetings Attendance % Average number of attendance in various meetings of a TC is used as KPI here.
- 3. Published Standards Timeframe % Categorization of standards is as following:
- a = No. of Standards Published in 0 to <=6 months
- b = No. of Standards Published in >6 to <=9 months
- c = No. of Standards Published in >9 to <=12 months
- d = No. of Standards Published in >12 to <=18 months
- e = No. of Standards Published in >18 to <=24 months
- f = No. of Standards Published in >24 months
- -g = Total no. of Standards
- Published Marks given are as following
- Category a= 100
- Category b = 90
- Category c = 80
- Category d = 60
- Category e = 40
- Category f = 0
- Formula used for calculating this is as following:

$$-((a*100) + (b*90) + (c*80) + (d*60) + (e*40) + (f*0))/g$$

- 4. Reviews Completed %
- For calculating this KPI number of standards reviewed against the number of standards planned for review (as per annual action plan) are used.
- 5. Inactive Members
- Removed % Number of inactive TC members (who have not attended two consecutive meetings) removed against the total number of inactive members currently present in the TC.
- 6. Comments on P-drafts
- % Comments received from how many TC members against total number of TC members is used for calculating this. More than one comment received from a TC member is treated as one comment.
- 8. Final score is calculated by adding marks received in each KPI divided by 600 (total maximum marks).

ANNEXURE-3

1. Authorization-

https://docs.google.com/document/d/1f2dVTXAj5YZx32R3VWaU5xViUXebevvW/edit?usp=drive_link&ouid=101571559841305049808&rtpof=true&sd=true

2. CV-

 $\frac{https://docs.google.com/document/d/1hVZ-BrnUbyoK-Mkkv589kPqtlOS4o5zw/edit?usp=drive_link\&ouid=101571559841305049808\&rtpof=true\&sd=true$

ANNEX - 4

Program of Work- ETD 15

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)

SI. No.	<u>IS No.</u>	<u>Title</u>	Reaffir mation Details		<u>Due in</u> 24-25
	<u>IS 11537 :</u>	Specification for centrifugal switch for single -			
1	<u> 1985</u>	Phase induction motors	<u>2017</u>	<u>Y</u>	<u>Y</u>
	<u>IS 12065 :</u>	Permissible limits of noise levels for rotating	March,		
<u>2</u>	<u> 1987</u>	electrical machines	<u>2019</u>	<u>N</u>	<u>Y</u>
	<u>IS 12066 :</u>	Specification for three - Phase induction motors	March,		
<u>3</u>	<u> 1987</u>	for machine tools	<u>2019</u>	<u>N</u>	<u>Y</u>
	<u>IS 12075 :</u>	Mechanical vibration of rotating electrical	<u>July,</u>		
<u>4</u>	2008	machines with shaft heights 56 mm and higher -	2018	<u>Y</u>	<u>Y</u>

		Measurement, evaluation and limits of vibration			
		severity (First Revision) Dimensions and Output Series of Foot Mounted			
	IS 1231 :	Induction Motors — Frame Numbers 56 to 315 L (
5	2019	Fourth Revision)		N	N
<u> </u>	2019	Line operated three phase AC motors (IE Code)		<u> </u>	<u> 18</u>
	IS 12615 :	"Efficiency classes and performance			
6	2018	specification" (Third Revision)	_	Υ	Υ
<u> </u>	IS 12642 :	<u>specification (Time Revision)</u>	=	<u>+</u>	
	1989				
	1505				
	Reaffirmed				
	but not				
	taken up for	Brush - Holders for slip rings group R, type RA -	March.		
7	revision	Specification	2019	N	Υ
<u>-</u>	IS 12998 :	Acoustics Test Code for the Measurement of			
	2024	Airborne Noise Emitted by Rotating Electrical			
<u>8</u>	1680	Machines		<u>N</u>	N
	IS 12998				
	(Part 1) :	Methods of measurement of airborne noise			
	1991	emitted by rotating electrical machinery: Part 1	Novem		
	ISO 1680/1	engineering method for free - Field conditions	ber.		
9	:1986	over a reflecting plane	2022	N	N
	IS 12998			_	
	(Part 2) :				
	1991	Methods of measurement of airborne noise			
	ISO 1680/2	emitted by rotating electrical machinery: Part 2			
<u>10</u>	:1987	survey method	<u>2018</u>	<u>Y</u>	<u>Y</u>
	<u>IS 13079 :</u>				
<u>11</u>	<u>1991</u>	Stepping motors - Specification	<u>2017</u>	<u>Y</u>	<u>Y</u>
	<u>IS 13364</u>	Ac generators driven by reciprocating internal			
	(Part 1) :	combustion engines - Specification: Part 1			
<u>12</u>	<u>1992</u>	alternators rated up to 20 kVa	<u>2018</u>	<u>Y</u>	Y
		Ac generators driven by reciprocating internal			
	<u>IS 13364</u>	combustion engines - Specification: Part 2			
	(Part 2) :	alternators rated above 20 kVa and up to 1250			
<u>13</u>	<u>1992</u>	<u>kVa</u>	<u>2018</u>	<u>Y</u>	Y
	<u>IS 13466 :</u>				
	<u>1992</u>				
	D - (C				
	Reaffirmed				
	but not				
4 4	taken up for	Drughes for sleetwisel machines Chesification	2040	N I	v
<u>14</u>	revision	Brushes for electrical machines - Specification	<u>2019</u>	<u>N</u>	<u>Y</u>
4 E	<u>IS 13525 :</u>	Flexible conductors for carbon brushes -	2040	NI.	Υ
<u>15</u>	<u>1992</u>	Specification POTATING ELECTRICAL MACHINES DART 26	<u>2019</u>	<u>N</u>	<u> </u>
	IS 13529 :	ROTATING ELECTRICAL MACHINES PART 26 EFFECTS OF UNBALANCED VOLTAGES ON THE			
16				N	NI NI
<u>16</u>	<u>2021</u>	PERFORMANCE OF THREE-PHASE CAGE		<u>N</u>	<u>N</u>

10	2023 60276: 2018	Carbon Brushes Brush Holders Commutators		N	N
<u>19</u>	60276: 2018	and Slip-Rings Definitions and Nomenclature		<u>N</u>	N
	IS 13937	Statistical methods of determining and verifying			
	(Part 1) :	stated noise emission values of machinery and	<u>Novem</u>		
	1994	equipment: Part 1 general considerations and	ber,		
<u>20</u>	ISO 7574/1	<u>definitions</u>	2022	<u>N</u>	<u>N</u>
	IS 13937	Statistical methods of determining and verifying			
	(Part 2) :	stated noise emission values of machinery and			
	1994	equipment: Part 2 methods for stated values for			
<u>21</u>	ISO 7574/2	individual machines	<u>2017</u>	<u>Y</u>	Y
	IS 13937	Statistical methods for determining and verifying			
	(Part 3) :	stated noise emission values of machinery and	Novem		
	1994	equipment: Part 3 simple (Transition) method for	ber,		
22	ISO 7574/3	stated values for batches of machines	2022	N	<u>N</u>
	IS 13937	Statistical methods of determining and verifying			
	(Part 4) :	stated noise emission values of machinery and	Novem		
	1994	equipment: Part 4 methods for stated values for	ber,		
<u>23</u>	ISO 7574/4	batches of machines	2022	<u>N</u>	<u>N</u>
	IS 14195 :	<u>- </u>			
	1994				
	<u>IECPub</u>	Brush - Holders for electrical machines - Guide to			
	<u>1015: 1990</u>	the measurement of the static thurst applied to			
24	Z	brushes	2017	Υ	Υ
	IS 14196 :	<u>51461100</u>	<u> </u>	<u>-</u>	
	<u>1994</u>				
		Definitions and terminology of brush holders for	March,		
1		Bellilling and tellilling a pragnitional	I IVI GI GI I.		
25	IEC Pub 560			N	N
<u>25</u>	<u>: 1977</u>	electrical machines	2023	<u>N</u>	<u>N</u>
<u>25</u>	<u>: 1977</u> IS 14197 :	electrical machines		<u>N</u>	<u>N</u>
	: 1977 IS 14197 : 2023	electrical machines Hydraulic Turbines Storage Pumps and	2023	_	
<u>25</u> <u>26</u>	: 1977 IS 14197 : 2023 60193: 2019	electrical machines		<u>N</u> <u>Y</u>	<u>N</u> <u>Y</u>
	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 :	electrical machines Hydraulic Turbines Storage Pumps and	2023	_	
	: 1977 IS 14197 : 2023 60193: 2019	electrical machines Hydraulic Turbines Storage Pumps and	2023	_	
	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996	electrical machines Hydraulic Turbines Storage Pumps and	2023	_	
	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed	electrical machines Hydraulic Turbines Storage Pumps and	2023	_	
	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed but not	electrical machines Hydraulic Turbines Storage Pumps and Pump-Turbines - Model Acceptance Tests	2023	_	
26	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed but not taken up for	electrical machines Hydraulic Turbines Storage Pumps and Pump-Turbines - Model Acceptance Tests Brush holders for electrical machines -	<u>2023</u> <u>2017</u>	Y	Y
	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed but not taken up for revision	Electrical machines Hydraulic Turbines Storage Pumps and Pump-Turbines - Model Acceptance Tests Brush holders for electrical machines - Specification	2023	_	
<u>26</u> <u>27</u>	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed but not taken up for revision IS 14377 :	Hydraulic Turbines Storage Pumps and Pump-Turbines - Model Acceptance Tests Brush holders for electrical machines - Specification Specification for three - Phase induction motors	2017 2017	Y	Y
26	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed but not taken up for revision IS 14377 : 1996	Hydraulic Turbines Storage Pumps and Pump-Turbines - Model Acceptance Tests Brush holders for electrical machines - Specification Specification for three - Phase induction motors for fans used in air - Conditioning and ventilation	2017 2017 2017	Y	Y
<u>26</u> <u>27</u>	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed but not taken up for revision IS 14377 : 1996 IS 14568	Brush holders for electrical machines - Specification Specification for three - Phase induction motors for fans used in air - Conditioning and ventilation Dimensions and output series for rotating	2017 2017 2017 Novem	Y	Y
<u>26</u> <u>27</u>	: 1977 IS 14197 : 2023 60193: 2019 IS 14376 : 1996 Reaffirmed but not taken up for revision IS 14377 : 1996	Hydraulic Turbines Storage Pumps and Pump-Turbines - Model Acceptance Tests Brush holders for electrical machines - Specification Specification for three - Phase induction motors for fans used in air - Conditioning and ventilation	2017 2017 2017	Y	Y

	<u>IEC 72-2 (</u> 1990)				
	IS 14569 :				
	<u>1999</u>				
	Reaffirmed				
	but not taken up for	Commutators for electrical machines -			
30	revision	Specification	2019	N	Υ
<u> </u>	IS 14578 :	opoomoation	2010		_
	<u>1999</u>				
	Reaffirmed				
	but not taken up for	Three - Phase induction motors for use in	March,		
<u>31</u>	revision	nuclear power plants - Specification	2019	<u>N</u>	<u>Y</u>
	IS 14582 :	Single-phase small ac electric motors for			
<u>32</u>	2021	centrifugal pumps for agricultural applications		<u>N</u>	<u>N</u>
			<u>Decem</u>		
00	<u>IS 14889 :</u>	Copper tamping powder for carbon brushes -	ber,		
<u>33</u>	2000	Specification Storage installation and maintenance of DC	<u>2015</u>	<u>Y</u>	<u>Y</u>
<u>34</u>	<u>IS 15429 :</u> 2004	Storage, installation and maintenance of DC motors - Code of practice	2019	<u>N</u>	<u>Y</u>
<u> </u>	IS 15880 :	motors gode or practice	2010	17	<u> </u>
	2009				
	<u>IEC</u>	Three phase cage induction motors when fed			
<u>35</u>	<u>60034-17</u>	from IGBT converters - Application guide	<u>2019</u>	<u>N</u>	<u>Y</u>
	10 45004 .	Three phase cage induction motors specifically	1		
<u>36</u>	<u>IS 15881 :</u> 2009	<u>designed or IGBT converter supply -</u> Specification	<u>June,</u> 2019	<u>N</u>	Y
<u>50</u>	IS 15999	<u>opecinication</u>	2013	13	
	(Part 1) :				
	<u>2021</u>				
	<u>IEC</u>				
27	<u>60034-1:</u>	Rotating electrical machines - Part 1 : Rating and		N	N
<u>37</u>	2017 IS 15999	<u>performance</u> Rotating Electrical Machines Part 2-1: Standard		<u>14</u>	<u> </u>
	(Part 2/Sec	Methods for Determining Losses and Efficiency			
	1): 2023	from Tests Excluding Machines for Traction			
<u>38</u>	60034-2-1	<u>Vehicles</u>		<u>N</u>	<u>N</u>
	10.4500	ROTATING ELECTRICAL MACHINES Part 3:			
	IS 15999 (Part 3) :	Specific requirements for synchronous			
	(<u>Part 3) :</u> 2023	generators driven by steam turbines or combustion gas turbines and for synchronous			
39	60034-3	compensators first revision		N	N
	IS 15999			_	_
	(Part 4/Sec	ROTATING ELECTRICAL MACHINES Part 4			
40	<u>1): 2023</u>	Electrically excited synchronous machine		. .	
<u>40</u>	<u>60034-4-1</u>	quantities Section 1 Test methods first revision		<u>N</u>	<u>N</u>

	10.45000				
	<u>IS 15999</u>				
	(Part 15) :				
	<u>2017</u>				
	<u>IEC</u>	Rotating Electrical Machines Part 15 Impulse			
	<u>60034-15 :</u>	<u>Voltage Withstand Levels of Form-Wound Stator</u>			
<u>41</u>	<u>2009</u>	Coils for Rotating ac Machines		<u>Y</u>	<u>Y</u>
	<u>IS 15999</u>				
	(Part 18/Sec	Rotating electrical machines: Part 18 partial			
	<u>41) : 2018</u>	discharge free electrical insulation systems			
	<u>IEC</u>	(Type I) used in rotating electrical machines fed			
	<u>60034-18-41</u>	from voltage converters Sec 41 qualification and			
<u>42</u>	<u>: 201</u>	<u>quality control tests</u>		<u>Y</u>	<u>Y</u>
	<u>IS 15999</u>				
	(Part 18/Sec	Rotating Electrical Machines Part 18 Partial			
	<u>42) : 2018</u>	<u>Discharge Free Electrical Insulation Systems</u>			
	<u>IEc</u>	(Type I) Used in Rotating Electrical Machines Fed			
	60034-18-42	From Voltage Converters Section 41 Qualification			
<u>43</u>	<u>: 20</u>	and quality control tests		<u>Y</u>	<u>Y</u>
	<u>IS 15999</u>				
	(Part 20/Sec				
	<u>1): 2023</u>				
	60034-20-1:	Rotating Electrical Machines Part 20-1: Control			
<u>44</u>	2002	Motors Stepping Motors		<u>N</u>	<u>N</u>
	IS 15999				
	(Part 26) :				
	2016				
	IEC	Rotating Electrical Machines Part 26 Effects of			
	600 34-26 :	Unbalanced Voltages on the Performance of			
<u>45</u>	<u>2006</u>	Three-Phase Cage Induction Motors		Y	Y
	IS 2223 :	Dimensions of flange mounted AC induction			
46	1983	motors	2017	Υ	Y
	IS 2253 :				
	1974	Designations for types of construction and			
	IEC Pub	mounting arrangements of rotating electrical			
<u>47</u>	<u>34-7 (1972)</u>	machines (First Revision)	<u>2017</u>	<u>Y</u>	<u>Y</u>
	IS 2254 :	Dimensions of vertical shaft motors for pumps			
<u>48</u>	1985	(Second Revision)	<u>2017</u>	<u>Y</u>	<u>Y</u>
	IS 2968 :				
	1964				
	DIN 42923				
	Reaffirmed				
	but not				
	taken up for				
<u>49</u>	revision	<u>Dimensions of slide rails for electric motors</u>	<u>2017</u>	<u>Y</u>	<u>Y</u>

Specification for textile motors: Part 1 loom		IS 2972				
Reaffirmed but not Specification for textile motors: Part 1 loom Textile motors (First Revision) Specification for textile motors: Part 1 loom Specification for textile motors: Part 2 loom Specification for textile motors: Part 2 card Textile motors: Part 2 card Specification for textile motors: Part 2 card Specification for textile motors: Part 2 card Motors: Part 2 card Specification for textile motors: Part 2 card Specification for textile motors: Part 2 card Motors: Part 2 card Specification for textile motors: Part 2 card Motors: Part 2 card Motors: Part 2 card Specification for textile motors: Part 2 card Motor						
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Dut not taken up for revision Specification for textile motors: Part 1 loom motors (First Revision) 2017		1979				
Dut not taken up for revision Specification for textile motors: Part 1 loom motors (First Revision) 2017		Pooffirmed				
Specification for textile motors: Part 1 loom motors (First Revision) 2017 Y Y						
Social			Specification for toxtile meters: Part 1 learn			
S 2972 (Part 2): 1979 Reaffirmed but not taken up for revision Specification for textile motors: Part 2 card motors (First Revision) S 4029: Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors Guide for testing three phase induction motors March, 2016 Y Y S 4029: Guide for testing three phase induction motors Guide for testing thre	50			2017	V	v
Reaffirmed but not taken up for revision Specification for textile motors: Part 2 card motors (First Revision) Specification for textile motors: Part 2 card motors (First Revision) Specification for textile motors: Part 2 card motors (First Revision) Specification for textile motors: Part 2 card motors (First Revision) Specification for textile motors: Part 2 card motors:	<u>50</u>		inotors (i list itevision)	<u> 2017</u>		
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Reaffirmed but not taken up for revision Specification for textile motors: Part 2 card motors (First Revision) 2017 Y Y S S S S S S S S						
Specification for textile motors: Part 2 card motors (First Revision) 2017 Y Y Y Specification for textile motors: Part 2 card motors (First Revision) 2017 Y Y Y Y Specification for textile motors: Part 2 card motors (First Revision) 2017 Y Y Y Y Y Y Y Y Y		1070				
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Specification for textile motors: Part 2 card motors (First Revision) 2017						
State			Specification for textile motors: Part 2 card			
S 4029	51		-	2017	Υ	Υ
Same Safety Same Same Same Same Safety Same Same Safety Same Safety Same Safety S	<u> </u>				<u>-</u>	<u>-</u>
IS 4665 (Part 1): 2023 Hand-Held Motor-Operated Electric Tools Safety Part 1: General requirements Second Revision N N	52				Υ	Υ
Cent 11: 2023 End	<u> </u>		(First Nevision)	2010		
Same						
Same						
Same Part 1: General requirements Second Revision N			Hand-Held Motor-Operated Electric Tools Safety			
S 4665	53				N	N
CPart 2/Sec	<u> </u>		Tutt 11 Contrat requirements Geogra Novicion			17
1): 2023 Part 2 Particular requirements Section 1 drills N N			Hand-Held Motor-Operated Flectric Tools Safety			
S						
S 4665	54				N	N
Continue			<u> </u>			
2) : 2023			Hand-held motor-operated electric tools - Safety -			
Screwdrivers and impact wrenches N N						
IS 4665	55				N	N
Chart 2/Sec 3): 2023 Part 2 Particular requirements Section 3 grinders N N N N N N N N N N N N N N N N N N					_	_
3) : 2023			Hand-held motor-operated electric tools - Safety			
Section 1 Section 2 Section 3 Section 4 Section 4 Section 5 Section 5 Section 6 Section 6 Section 7 Section 7 Section 7 Section 7 Section 6 Section 6 Section 6 Section 7 Section 6 Sect						
IS 4665 (Part 2/Sec 5): 2023 Part 2 Particular Requirements Section 5 Circular N N	<u>56</u>				<u>N</u>	<u>N</u>
5): 2023 60745-2-5 Saws N N N Saws N N N Saws Saws N N N N Saws Saws N N N N Saws Safety Fart 2/Sec Safety Safety of Hand-Held Motor-Operated Electric Tools - Safety Part 2 Particular Requirements Section 6 N N N Sams Saws N N N N Saws Safety Fart 2/Sec Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids N N N N N N N N N N N N N N N N N N N		IS 4665				
5): 2023 60745-2-5 Saws N N N Saws N N N Saws Saws N N N N Saws Saws N N N N Saws Safety Fart 2/Sec Safety Safety of Hand-Held Motor-Operated Electric Tools - Safety Part 2 Particular Requirements Section 6 N N N Sams Saws N N N N Saws Safety Fart 2/Sec Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids N N N N N N N N N N N N N N N N N N N			Hand-Held Motor-Operated Electric Tools Safety			
5760745-2-5SawsNNIS 4665 (Part 2/Sec 6): 2023Hand-Held Motor-Operated Electric Tools - Safety Part 2 Particular Requirements Section 6N5860745-2-6HammersNIS 4665 (Part 2/Sec 7): 2023Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable LiquidsN59Methods of measurement of noise emitted by						
IS 4665 (Part 2/Sec 6): 2023 Part 2 Particular Requirements Section 6 N N N	<u>57</u>		•		<u>N</u>	<u>N</u>
6): 2023 Part 2 Particular Requirements Section 6 58 60745-2-6 Hammers N N 1S 4665 (Part 2/Sec 7): 2023 Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids N N 1S 4758: Methods of measurement of noise emitted by		IS 4665				
5860745-2-6HammersNNIS 4665 (Part 2/Sec 7): 2023 59Safety of Hand-Held Motor-Operated Electric Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids Methods of measurement of noise emitted byNN		(Part 2/Sec	Hand-Held Motor-Operated Electric Tools - Safety			
IS 4665 (Part 2/Sec 7): 2023 Tools Part 2 Particular Requirements Section 7 Spray Guns for Non-Flammable Liquids N N N IS 4758: Methods of measurement of noise emitted by		<u>6)</u> : 2023	Part 2 Particular Requirements Section 6			
Cart 2/Sec Safety of Hand-Held Motor-Operated Electric 7): 2023 Tools Part 2 Particular Requirements Section 7 59 60745-2-7 Spray Guns for Non-Flammable Liquids N N IS 4758 : Methods of measurement of noise emitted by	<u>58</u>	<u>60745-2-6</u>	<u>Hammers</u>		<u>N</u>	<u>N</u>
7): 2023 Tools Part 2 Particular Requirements Section 7 59 60745-2-7 Spray Guns for Non-Flammable Liquids N N IS 4758: Methods of measurement of noise emitted by		<u>IS 4665</u>				
59 60745-2-7 Spray Guns for Non-Flammable Liquids N N IS 4758: Methods of measurement of noise emitted by		(Part 2/Sec	Safety of Hand-Held Motor-Operated Electric			
IS 4758 : Methods of measurement of noise emitted by		<u>7): 2023</u>	Tools Part 2 Particular Requirements Section 7			
	<u>59</u>	<u>60745-2-7</u>	Spray Guns for Non-Flammable Liquids		<u>N</u>	<u>N</u>
<u>60 1968 machines</u> <u>2017 Y Y</u>		<u>IS 4758 :</u>	Methods of measurement of noise emitted by			
	<u>60</u>	<u>1968</u>	<u>machines</u>	<u>2017</u>	<u>Y</u>	<u>Y</u>

	<u>IS 4889 :</u>	Methods of determination of efficiency of rotating			
<u>61</u>	<u>1968</u>	electrical machines	<u>2017</u>	<u>Y</u>	<u>Y</u>
	<u>IS 5422 :</u>	<u>Turbine type generators - Specification (First</u>			
<u>62</u>	<u>1996</u>	Revision)	<u>2017</u>	<u>Y</u>	<u>Y</u>
		Rotating electrical machines: Part 5 degrees of			
	IS/IEC	protection provided by the integral design of			
	<u>60034-5 :</u>	rotating electrical machines (IP Code) -	May,	3.7	
<u>63</u>	2000	Classification (Second Revision)	<u>2018</u>	<u>Y</u>	<u>Y</u>
	IS/IEC				
	<u>60034-8 :</u>				
	<u>2014</u>	Datation Floatrical Machines Dout 0 Tamainal			
	<u>IEC</u>	Rotating Electrical Machines Part 8 Terminal	A		
64	<u>60034-8:</u>	Markings and Direction of Rotation (Third	Augus	V	v
<u>64</u>	2014	Revision)	<u>t, 2018</u>	Y	Y
	IS/IEC 60034-27-4)	Rotating Electrical Machines Part 27 Winding			
	<u>: 2018</u>	Insulation of Rotating Electrical Machines			
	<u>. 2016</u> <u>IEC</u>	Section 4 Measurement of insulation resistance			
<u>65</u>	60034-27-4	and polarization index		Υ	Y
<u> </u>	IS 6362 :	and polarization mack			
	1995				
	IEC Pub		<u>Novem</u>		
	<u>34-6 : 1991</u>	Designation of methods of cooling of rotating	ber.		
66	ZY	electrical machines (First Revision)	2022	<u>N</u>	<u>N</u>
	IS 7132 :	<u> </u>			
<u>67</u>	<u>1973</u>	Guide for testing synchronous machines	2017	<u>Y</u>	<u>Y</u>
	IS 7306 :	Methods for determining synchronous machine			
<u>68</u>	1974	quantities from tests	<u>2017</u>	<u>Y</u>	<u>Y</u>
		Three - Phase squirrel cage induction motors for			
	<u>IS 7538 :</u>	centrifugal pumps for agricultural application -			
<u>69</u>	<u>1996</u>	Specification (First Revision)	<u>2017</u>	<u>Y</u>	<u>Y</u>
	<u>IS 7572 :</u>	Guide for testing single - Phase AC and universal			
<u>70</u>	<u>1974</u>	<u>motors</u>	<u>2017</u>	<u>Y</u>	<u>Y</u>
	<u>IS 8151 :</u>	Specification for single - Speed three - Phase			
<u>71</u>	<u>1976</u>	induction motors for driving lifts	<u>2017</u>	<u>Y</u>	<u>Y</u>
			<u>Novem</u>		
	IS 8223 :	<u>Dimensions and output series for rotating</u>	<u>ber,</u>		
<u>72</u>	<u>1999</u>	electrical machines (First Revision)	<u>2022</u>	<u>N</u>	<u>N</u>
	10 0000	Values of performance characteristics for			
	<u>IS 8789 :</u>	three-phase induction motors with degree of			
<u>73</u>	<u>2021</u>	protection 2X		<u>N</u>	<u>N</u>
	10.000	Code of Practice for Storage, Installation and			
74	IS 900 :	Maintenance of Induction Motors (Third Revision		NI.	N.
<u>74</u>	2019	Mataya fay ay hyperaible property. Consideration	Merr	<u>N</u>	<u>N</u>
75	<u>IS 9283 :</u>	Motors for submersible pumpsets - Specification	<u>May,</u>	V	v
<u>75</u>	2013	(Second Revision)	2018	<u>Y</u>	<u>Y</u>
76	<u>IS 9320 :</u>	Guido for tacting direct. Current (DC) machines	March,	V	Υ
<u>76</u>	<u>1979</u>	Guide for testing direct - Current (DC) machines	<u>2017</u>	<u>Y</u>	<u> </u>

_				
<u>1980</u>	machine motors	<u>2018</u>	<u>Y</u>	<u>Y</u>
<u>IS 9628 :</u>				
<u>1980</u>				
BS 5000 :				
Part 16 :	Three-phase induction motors with type of	March,		
<u> 1972</u>	protection 'n'	<u> 2019</u>	<u>N</u>	<u>Y</u>
IS 9670 :	Specification for direct current micromotor for	March,		
1980	cassette tape recorders and other applications	2019	N	<u>Y</u>
IS 9919 :				
Reaffirmed				
but not		<u>Februa</u>		
taken up for	Guide for selection and use of carbon brushes in	ry,		
revision	electrical rotating machines (First Revision)	<u>2018</u>	<u>Y</u>	<u>Y</u>
IS 996 :				
2009				
IEC 34-1				
(1969 BS				
170: 1962				
JIS				
<u>4203-1973</u>				
BS 1608 :	Single phase a.c. induction motors for general			
1966	purpose (Third Revision)	<u>2019</u>	N	<u>Y</u>
	IS 9628: 1980 BS 5000: Part 16: 1972 IS 9670: 1980 IS 9919: 1999 Reaffirmed but not taken up for revision IS 996: 2009 IEC 34-1 (1969 BS 170: 1962 JIS 4203-1973 BS 1608:	Part 1): 1980 S 9628: 1980 BS 5000: Part 16: 1972 S 9670: 1980 S 9919: 1999 Reaffirmed but not taken up for revision IS 996: 2009 IEC 34-1 (1969 BS 170: 1962 JIS 4203-1973 BS 1608: S 1608:	Part 1): for definite purposes: Part 1 domestic laundry machine motors March, 2018	Part 10 : 1980 S 9628 : 1980 S 9670 : 1980 S 9919 : 1999 Reaffirmed but not taken up for revision revision IS 996 : 2009 IEC 34-1 (1969 BS 170: 1962 JIS 4203-1973 BS 1608 : Single phase a.c. induction motors for general S 1980 S 108 : Single phase a.c. induction motors for general S 1980 S 1880 S 1

ANNEX 3 ETD 15 Rotating Machinery/ Pre 2000 Status

			<u>Degre</u>			
			e of			
		Reaffirm				LATEST
		ation	alenc	YEA	ACTION TO BE	IEC (IF
IS No.	Title	<u>Details</u>	<u>e</u>	R	TAKEN	PRESENT
<u>10 140.</u>	11110	<u>Dotano</u>		17	Dr C Murugesan,	INCOLINI
					SIEMA	
					kindly agreed to	
					review and	
	Specification for centrifugal				provide revised	
IS 11537 :	switch for single - Phase		Indige		draft. Draft is	
1985	induction motors	2017	nous	1985	awaited.	
			Modifi			
			ed/Te			
			chnic			
	Permissible limits of noise		ally			
IS 12065:	levels for rotating electrical	March,	Equiv			
<u>1987</u>	<u>machines</u>	<u>2019</u>	alent	<u>1987</u>	P draft approval	
			<u>Modifi</u>			
			ed/Te			
			<u>chnic</u>			
	Specification for three -		<u>ally</u>		<u>DECIDED FOR</u>	
<u>IS 12066 :</u>	Phase induction motors for	March,	<u>Equiv</u>		<u>WITHDRAWAL</u>	
<u>1987</u>	machine tools	<u>2019</u>	<u>alent</u>	<u>1987</u>		
<u>IS 12642 :</u>						
<u>1989</u>						
			<u>Modifi</u>			
<u>Reaffirme</u>			ed/Te			
d but not			<u>chnic</u>			
taken up	Brush - Holders for slip		<u>ally</u>			
for	rings group R, type RA -	March,	<u>Equiv</u>			
revision	<u>Specification</u>	<u>2019</u>	<u>alent</u>	<u>1989</u>		
					Revised edition of	
	Mathada at massassassassassassassassassassassassass				<u>ISO 1680</u>	
10.40000	Methods of measurement of		lala 4'		covers	
IS 12998	airborne noise emitted by		<u>Identi</u>		requirement of	
(Part 1) :	rotating electrical		<u>cal</u>		both	
<u>1991</u>	machinery: Part 1		under		parts of IS 12998.	
<u>ISO</u>	engineering method for free - Field conditions over a	Novomb	<u>dual</u>		Therefore, ISO	
1680/1 -1986		Novemb		1991	1680 may be	
<u>:1986</u>	reflecting plane	<u>er, 2022</u>	<u>ering</u>	1331	adopted replacing	

					<u>both IS.</u> Published.	
					<u>r ublistieu.</u>	
					Revised edition of	
					ISO 1680	
					<u>covers</u> <u>requirement of</u>	
					both	
					parts of IS 12998.	
					Therefore, ISO	
IS 12998			<u>Identi</u>		1680 may be	
(Part 2) :	Methods of measurement of		<u>cal</u>		adopted replacing	
<u>1991</u> ISO	airborne noise emitted by		under		<u>both IS.</u> Published.	
1680/2	rotating electrical machinery: Part 2 survey		dual numb		IS 12998 : 2024	
:1987	method	2018	ering	1991	10 12330 . 2024	
<u> </u>		<u></u>	3		<u>IEC</u>	
			<u>Modifi</u>		<u>60034-20-1</u>	
			ed/Te		<u>may</u>	
			chnic		<u>be</u>	
IS 13079 :	Stepping motors -		<u>ally</u> Equiv		<u>adopted.</u> UNDER PRINT	
1991	Specification	2017	alent	1991	UNDER PRINT	
1001	Ac generators driven by	2011	Modifi	1001		
	reciprocating internal		ed/Te			
	combustion engines -		<u>chnic</u>			
<u>IS 13364</u>	Specification: Part 1		<u>ally</u>			
(Part 1) :	alternators rated up to 20	2040	<u>Equiv</u>	4000	ADD circulated	
<u>1992</u>	<u>kVa</u> Ac generators driven by	<u>2018</u>	<u>alent</u> Modifi	<u>1992</u>	ARP circulated	
	reciprocating internal		ed/Te			
	combustion engines -		chnic			
<u>IS 13364</u>	Specification: Part 2		ally			
(Part 2) :	alternators rated above 20		<u>Equiv</u>			
<u>1992</u>	kVa and up to 1250 kVa	<u>2018</u>	<u>alent</u>	<u>1992</u>	ARP circulated	
10 42466 -					<u>Dr</u>	
<u>IS 13466 :</u> 1992					<u>Praveen</u> <u>Vijayraqvan,</u>	
1002			Modifi		kindly agreed to	
Reaffirme			ed/Te		review and	
d but not			chnic		provide revised	
taken up			<u>ally</u>		<u>drafts. Draft is</u>	
for	Brushes for electrical	0040	<u>Equiv</u>	4000	<u>awaited.</u>	
revision	machines - Specification	<u>2019</u>	<u>alent</u>	<u>1992</u>	Dr C Murugasas	
			Modifi ed/Te		<u>Dr C Murugesan,</u> <u>SIEMA</u>	
	Flexible conductors for		chnic		kindly agreed to	
IS 13525 :	carbon brushes -		ally		review and	
<u>1992</u>	Specification	<u>2019</u>	Equiv	<u>1992</u>	provide revised	

			alent		draft. Draft is awaited.	
<u>IS 13555 :</u> 1993	Guide for selection and appltcation of 3 - Phase AC induction motors for different types of driven equipment	March, 2019	Indige nous	<u>1993</u>	<u>I</u>	
<u>IS 13584 :</u> 1993	Brush materials for electrical machinery - Specification	<u>March,</u> 2019	Modifi ed/Te chnic ally Equiv alent	1993	IEC 60773: 2021 IEC 60413: 1972 Permission for Wide circulation of IEC	
IS 13937 (Part 1) : 1994 ISO 7574/1	Statistical methods of determining and verifying stated noise emission values of machinery and equipment: Part 1 general considerations and definitions	Novemb er, 2022	Identi cal under dual numb ering	1994		
IS 13937 (Part 2) : 1994 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	2017	Identi cal under dual numb ering	1994		
IS 13937 (Part 3) : 1994 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	Novemb er, 2022	Identi cal under dual numb ering	1994		
IS 13937 (Part 4) : 1994 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	Novemb er, 2022	Identi cal under dual numb ering	1994		
IS 14195 : 1994 IECPub 1015: 1990 z	Brush - Holders for electrical machines - Guide to the measurement of the static thurst applied to brushes	2017	Identi cal under dual numb		IEC identical to 1990	

			ering			
			Identi			
IS 14196 :			<u>cal</u>			
1994						
	Definitions and towningless.		under			
IEC Pub	<u>Definitions and terminology</u>		<u>dual</u>			
<u>560 :</u>	of brush holders for	March,	<u>numb</u>			
<u>1977</u>	electrical machines	<u>2023</u>	ering	<u>1994</u>		
					<u>Dr</u>	
<u>IS 14376 :</u>					<u>Praveen</u>	
<u>1996</u>					<u>Vijayragvan,</u>	
			<u>Modifi</u>		kindly agreed to	
Reaffirme			ed/Te		review and	
d but not			chnic		provide revised	
taken up			ally		drafts. Draft is	
	Druch holders for electrical					
<u>for</u>	Brush holders for electrical	0047	<u>Equiv</u>	4000	<u>awaited</u>	
revision	machines - Specification	<u>2017</u>	alent	<u>1996</u>		
			<u>Modifi</u>			
			ed/Te			
	Specification for three -		<u>chnic</u>			
	Phase induction motors for		<u>ally</u>			
IS 14377 :	fans used in air -		Equiv			
1996	Conditioning and ventilation	2017	alent	1996	(IEEMA 8 : 1987)	
1000	Dimensions and output		Identi	1000	<u>(122111) (0 1 1001 </u>	
IS 14568	series for rotating electrical					
			<u>cal</u>			
(Part 2) :	machines: Part 2 frame		<u>under</u>			
1998	<u>numbers 355 to 1000 and</u>		dual			
<u>IEC 72-2 (</u>	flange numbers 1180 to	<u>Novemb</u>	<u>numb</u>			
<u>1990</u>)	<u>2360</u>	<u>er, 2022</u>	<u>ering</u>	<u>1998</u>		
					<u>Dr</u>	
<u>IS 14569 :</u>					<u>Praveen</u>	
<u>1999</u>					<u>Vijayragvan,</u>	
					kindly agreed to	
Reaffirme					review and	
d but not					provide revised	
taken up					drafts. Draft is	
for	Commutators for electrical		Indige		awaited.	
revision	machines - Specification	2019		<u>1999</u>	awaitea.	
	machines - Specification	<u> </u>	nous	1333		
<u>IS 14578 :</u>						
<u>1999</u>						
<u>Reaffirme</u>						
d but not						
taken up	Three - Phase induction					
for	motors for use in nuclear	March,	<u>Indige</u>		Review to be	
revision	power plants - Specification	2019	nous	1999	allotted to NPCIL	
			Modifi		<u>Shri</u>	
	Dimensions of flange		ed/Te		Dilip	
IS 2223 :	mounted AC induction				Bhave	
		2047	<u>chnic</u>	1002		
<u>1983</u>	<u>motors</u>	<u>2017</u>	<u>ally</u>	<u>1983</u>	<u>kindly</u>	

			<u>Equiv</u>		agreed to review	
			<u>alent</u>		and provide	
					the revised draft.	
					Draft is	
					awaited	
					awaitea	
			Idonti			
10 0050	Beste sette se feet see of		<u>ldenti</u>			
<u>IS 2253 :</u>	<u>Designations for types of</u>		<u>cal</u>			
<u>1974</u>	construction and mounting		<u>under</u>			
IEC Pub	arrangements of rotating		<u>dual</u>			
<u>34-7</u>	electrical machines (First		<u>numb</u>			
<u>(1972)</u>	<u>Revision)</u>	<u> 2017</u>	<u>ering</u>	<u>1974</u>		
					Shri K V Karthik,	
					IPMA was	
					requested	
					to	
			Identi		review	
			cal		and	
	Dimensions of vertical about		under		provide revised	
10.0074	Dimensions of vertical shaft		<u>dual</u>		draft. Draft is	
<u>IS 2254 :</u>	motors for pumps (Second		<u>numb</u>		<u>awaited.</u>	
<u>1985</u>	<u>Revision)</u>	<u>2017</u>	<u>ering</u>	<u>1985</u>		
<u>IS 2968 :</u>						
<u>1964</u>						
<u>DIN</u>						
42923						
			Identi			
Reaffirme			cal			
d but not			under			
taken up			dual			
for	Dimensions of slide rails for		numb			
revision	electric motors	2017	ering	1964		
	GIECUIC IIIOLOIS	<u> 2017</u>	emy	1304		
IS 2972						
(Part 1) :					Ohad Baran I	
<u>1979</u>					Shri Prasad	
					<u>Hardikar, Siemens</u>	
<u>Reaffirme</u>					kindly agreed to	
d but not					review and	
taken up	Specification for textile				provide the	
for	motors: Part 1 loom motors		<u>Indige</u>		revised drafts	
revision	(First Revision)	<u> 2017</u>	nous	<u>1979</u>		
IS 2972						
(Part 2) :						
<u>1979</u>					Shri Prasad	
1010					Hardikar, Siemens	
Reaffirme					kindly agreed to	
d but not	Specification for textile				review and	
	-		Indias			
taken up	motors: Part 2 card motors	2047	<u>Indige</u>	4070	provide the	
<u>for</u>	(First Revision)	<u> 2017</u>	nous	<u> 1979</u>	<u>revised drafts</u>	

revision						
101131011					The same WG was	
					also	
					requested to	
					<u>review IS 4758:</u>	
					<u>1968</u>	
					<u>'Methods</u>	
					<u>of</u>	
					measurement of	
					noise emitted	
					by machines' and	
					<u>recommend</u>	
					<u>for</u>	
					<u>withdrawal,</u>	
					<u>if</u>	
			<u>Modifi</u>		<u>requirements</u>	
			ed/Te		<u>are</u>	
			<u>chnic</u>		<u>already</u>	
			<u>ally</u>		covered in IS	
<u>IS 4758 :</u>	Methods of measurement of		<u>Equiv</u>		<u>12065.</u>	
1968	noise emitted by machines	<u> 2017</u>	alent	1968		
			Modifi		IS 15999 (Part	
			ed/Te		2/Sec 1): 2023	
			chnic		60034-2-1 (Active)	
	Methods of determination of		ally		adopted .	
IS 4889 :	efficiency of rotating		Equiv		Permission to	
1968	electrical machines	2017	alent	1968	<u>withdraw</u>	
1000	<u>orodriodrinaoninoo</u>	<u> 2017</u>	<u>uione</u>	1000	IS 15999 (Part 3):	
					2023/ IEC	
					60034-3:	
					2020	
					<u>"Specific</u>	
					Requirements for	
					Synchronous	
					<u>Generators</u>	
					<u>Driven by</u>	
					Steam	
					<u>Steam</u> <u>Turbines</u>	
					or Combustion Gas	
					Turbines and for	
					Synchronous Componentors" is	
			N/1 ~ ~!:£:		Compensators" is	
			Modifi		published.	
			ed/Te		<u>In</u>	
			<u>chnic</u>		<u>view</u>	
10.5400	Turbine type generators -		<u>ally</u>		<u>of</u>	
<u>IS 5422 :</u>	Specification (First	004=	<u>Equiv</u>	4000	above,	
<u>1996</u>	<u>Revision)</u>	<u>2017</u>	<u>alent</u>	<u>1996</u>	<u>the</u>	

					committee may approve withdrawal of IS 5422.	
IS 6362 : 1995 IEC Pub 34-6 : 1991 zy	Designation of methods of cooling of rotating electrical machines (First Revision)	Novemb er, 2022	Identi cal under dual numb ering	<u>1995</u>		IEC 60034-6:1 991
<u>IS 7132 :</u> 1973	Guide for testing synchronous machines	<u> 2017</u>	Modifi ed/Te chnic ally Equiv alent	1973	Requirements already covered in IS 15999 (Part 4)/ IEC 60034-4. Permission to withdraw	
<u>IS 7306 :</u> 1974	Methods for determining synchronous machine quantities from tests	2017	Modifi ed/Te chnic ally Equiv alent	1974	Requirements already covered in IS 15999 (Part 4)/ IEC 60034-4. Permission to withdraw	
IS 7538 : 1996	Three - Phase squirrel cage induction motors for centrifugal pumps for agricultural application - Specification (First Revision)	2017	Indige nous		UNDER REVISION	
<u>IS 7572 :</u> 1974	Guide for testing single - Phase AC and universal motors	<u>2017</u>	Modifi ed/Te chnic ally Equiv alent	<u>1974</u>	UNDER REVISION	
IS 8151 : 1976	Specification for single - Speed three - Phase induction motors for driving lifts	2017	Modifi ed/Te chnic ally Equiv alent	<u>1976</u>	Revision Under Print	
<u>IS 8223 :</u> <u>1999</u>	<u>Dimensions and output</u> <u>series for rotating electrical</u> <u>machines (First Revision)</u>	Novemb er, 2022	Modifi ed/Te chnic	<u>1999</u>	Earlier P draft had been dropped	

			<u>ally</u>			
			<u>Equiv</u>			
			alent			
					<u>Dr</u>	
					Praveen	
			NA11-C-		<u>Vijayragvan,</u>	
			<u>Modifi</u>		kindly agreed to	
			ed/Te		<u>review and</u>	
			<u>chnic</u>		<u>provide revised</u>	
			<u>ally</u>		<u>drafts. Draft is</u>	
IS 9320 :	Guide for testing direct -	March,	Equiv		awaited	
1979	Current (DC) machines	2017	alent	<u>1979</u>		
	Specification for single -					
	Phase electric motors for					
IS 9582	definite purposes: Part 1					
(Part 1) :	domestic laundry machine	March,	Indige			
1980	motors	2018		1980		
1900	<u>IIIOtOIS</u>	2010	nous	1900	10/150 00070 45	
					IS/ IEC 60079-15	
					2019 covers	
					the requirements	
			<u>Identi</u>		<u>of IS 9628.</u>	
<u>IS 9628 :</u>			<u>cal</u>		<u>Therefore,</u>	
<u>1980</u>			<u>under</u>		<u>decided</u>	
BS 5000 :	Three-phase induction		<u>dual</u>		<u>for</u>	
Part 16 :	motors with type of	March,	numb		withdrawal of IS	
1972	protection 'n'	2019	ering	1980	9628	
	Specification for direct				Phase-2 review	
	current micromotor for				Document	
<u>IS 9670 :</u>	cassette tape recorders and	March,	Indige		circulated	
1980	other applications	2019	nous	1980	<u>cii cuiateu</u>	
1300	σιτει αρριτατίστιο	<u> 2013</u>	iious	1300	Dr	
10 0040 -						
<u>IS 9919 :</u>					<u>Praveen</u>	
<u>1999</u>					<u>Vijayragvan,</u>	
					kindly agreed to	
Reaffirme					review and	
d but not					provide revised	
taken up	<u>of carbon brushes in</u>				<u>drafts. Draft is</u>	
<u>for</u>	electrical rotating machines	_	_		<u>awaited</u>	
revision	(First Revision)	<u>, 2018</u>	nous	<u>1999</u>		