BUREAU OF INDIAN STANDARDS

Program of Work

LITD 10: Power System Control And Associated Communications

Scope: To prepare Indian Standards relating to: a) Power system control equipment and systems

including EMS (Energy Management System) b) DMS (Distribution Management System) c) SCADA (Supervisory Control and Data Acquisition) d) Distribution automation, Smart Grid, teleprotection and associated communications used in planning, operation and maintenance of

power systems.

Liaison: IEC TC-IEC TC (P): Power systems management and associated information exchange IEC

TC-IEC SyC Smart Energy (P): Smart Energy

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 12746 (Part 1/Sec	Telecontrol equipment and	January, 2021	-	Identical under dual
	1): 1999	systems: Part 1 general			numbering
	IEC 60870-1-1	considerations: Sec 1 general			
	Reviewed In: 2021	principles			
	IEC 60870-1-1:				
	1988				
2	IS 12746 (Part 1/Sec	1 1	August, 2022	-	Identical under dual
	2): 1993	systems: Part 1 general			numbering
	IEC 60870-1-2	considerations: Sec 2 guide for			
	Reviewed In: 2022	specifications			
	IEC 60870-1-2:				
	1989				
3	IS 12746 (Part 1/Sec	1 1	July, 2023	-	Identical under dual
	3): 2020	Systems Part 1 General			numbering
		Considerations Section 3 Glossary (
	1997	First Revision)			
	Reviewed In: 2023				
	IEC 60870-1-3:				
	1997				
4		Telecontrol equipment and systems		-	Identical under single
	2023	Part 2: Operating conditions			numbering
	IEC 60870-2-1:1995	11 5			
	IEC	electromagnetic compatibility			
	60870-2-1:1995				
5	IS 12746 (Part 3):	Telecontrol equipment and	March, 2023	-	Identical under dual
	1995	systems: Part 3 interfaces			numbering
	IEC 60870-3	(Electrical Characteristics)			
	Reviewed In: 2023				
	IEC 60870-3:1989				
6	IS 12746 (Part 4):	Telecontrol equipment and	September, 2022	-	Identical under dual
	1993	systems: Part 4 performance			numbering
	IEC 60870-4	requirements			
	Reviewed In: 2022				
I		l l		I	

	IEC 60870-4:1990			I	1
7	IS 12746 (Part 5/Sec	Telecontrol equipment and	August, 2022	-	Identical under dual
,	1): 1993	systems: Part 5 transmission	1148450, 2022		numbering
	IEC 60870-5-1	protocols: Sec 1 transmission			numo vimg
	Reviewed In: 2022	frame formats			
	IEC 60870-5-1:1990				
8	IS 12746 (Part 5/Sec	Telecontrol equipment and	June, 2022	_	Identical under dual
o	2): 1998	systems: Part 5 transmission	Julie, 2022	_	numbering
	IEC 60870-5-2	protocols: Sec 2 link transmission			numbering
		-			
	Reviewed In : 2022	procedure			
0	IEC 60870-5-2:1992	T. 1	I 1 2022		X1 2 1 1 1 1
9	IS 12746 (Part 5/Sec	1 1	July, 2022	-	Identical under dual
	3):1998	systems: Part 5 transmission			numbering
	IEC 60870-5-3	protocols: Sec 3 general structure			
	Reviewed In: 2022	of application data			
	IEC 60870-5-3:1992				
10	IS 14392 : 1996	General considerations for	March, 2023	-	Identical under dual
	IEC 61085	telecommunication services for			numbering
	Reviewed In: 2023	electric power systems			
	IEC 61085				
11	IS 15654 : 2006	Supervisory Control and Data	March, 2021	-	Indigenous
	Reviewed In: 2021	Acquisition (SCADA) System for			
		Oil and Gas Pipeline			
12	IS 15655 : 2006	Telecommunication facilities for	March, 2021	_	Indigenous
	Reviewed In : 2021	operation and maintenance of oil			111015411040
	reviewed in : 2021	and gas pipeline			
13	IS 15953 : 2011	Supervisory control and data	October, 2020	_	Indigenous
13	Reviewed In : 2020	acquisition (SCADA) system for	October, 2020		margenous
	Reviewed III . 2020	-			
14	IS 16334 : 2015	power system applications	Mar. 2022		Indiannous
14	Reviewed In : 2023	Power system communications -	May, 2023	-	Indigenous
1.5		Interoperability - Guidelines	Mar. 2022		Indiana
15	IS 16335 : 2015	Power control systems - Security	May, 2023	-	Indigenous
1.6	Reviewed In: 2023	requirements	37 2022		T 1:
16	IS 16336 (Part 1):	Common information model	May, 2023	-	Indigenous
		(CIM) for information exchange in			
	Reviewed In: 2023	the context of electrical utilities:			
		Part 1 companion specification			
17	IS 16336 (Part 2):	Common information model	May, 2023	-	Indigenous
	2015	(CIM) for information exchange in			
	Reviewed In: 2023	the context of electrical utilities:			
		Part 2 CIM Extensions for ABT			
		based regulated markets and load			
		shedding and restoration			
		mechanism			
18	IS 16336 (Part 3):	Common Information Model	June, 2022	-	Indigenous
	2018	(CIM) for Information Exchange in	,		
		the Context of Electrical Utilities			
	Reviewed In: 2022	Part 3 Application Use Cases for			
	TO VICTOR III . 2022	System Operation			
19	IS 17648 : 2021	Guideline for distributed		_	Indigenous
17	10 1/040 . 2021			1	margenous
		management system in the context			
20	TC 10050 - 2022	of electrical utilities		1	To diana
20	IS 18058 : 2023	Guidelines for Supervisory Control		1	Indigenous
		and Data Acquisition (SCADA)			
		System Displays			
21	IS 1885 (Part 50):	Electrotechnical Vocabulary Part		-	Identical under dual
	2021	371 Telecontrol			numbering
	IEC 60050-371:1984				
	IEC				
	I I	ı		I	I

I	60050-371:1984			I	I
22		Teleprotection equipment of power		-	Identical under single
	1999	systems Performance and testing			numbering
	IEC 60834-1: 1999	Part 1: Command systems			
	IEC 60834-1: 1999				
23	IS/IEC/TS	Telecontrol equipment and systems	September, 2024	-	Identical under single
	60870-5-7 : 2013	Part 5-7: Transmission protocols			numbering
	IEC TS	Security extensions to IEC			
	60870-5-7:2013	60870-5-101 and IEC 60870-5-104			
	Reviewed In: 2024	protocols applying IEC 62351			
	IEC TS				
	60870-5-7:2013				
24	IS/IEC/TR 61850-1 :	Communication networks and	August, 2020	-	Identical under single
	2013	systems for power utility			numbering
		automation: Part 1 introduction and			
	2013	overview			
	Reviewed In: 2020				
	IEC/TR 61850 -1:				
	2013				
25	IS/IEC/TS 61850-2 :	Communication Networks and		-	Identical under single
	2019	Systems in substations Part 2			numbering
	IEC 61850-2:2019	Glossary			
1	IEC 61850-2:2019		1.1.0000		T1 1 1
26	IS/IEC 61850-3:	Communication networks and	July, 2020	-	Identical under single
	2013	systems for power utility			numbering
	IEC 61850-3 : 2013	automation: Part 3 general			
	Reviewed In: 2020	requirements			
27	IEC 61850 - 3 : 2013				Identical and 1 1
27	IS/IEC 61850-4 : 2020	COMMUNICATION NETWORKS AND SYSTEMS		-	Identical under single
		NETWORKS AND SYSTEMS			numbering
	IEC 61850-4:2020	FOR POWER UTILITY			
	IEC 61850-4:2020	AUTOMATION Part 4: System			
28	IS/IEC 61850-5 :	and project management Communication networks and			Identical under single
20	2022	systems for power utility		_	numbering
		automation Part 5: Communication			numbering
	IEC 61850-5:2022	requirements for functions and			
	ILC 01030 3.2022	device models First Revision			
29	IS/IEC 61968-1:	Application integration at electric		_	Identical under single
-	2020	utilities System Interfaces for			numbering
	IEC 61968-1:2020	distribution management Part 1:			
	IEC 61968-1:2020	Interface architecture and general			
		recommendations			
30	IS/IEC 61968-2 :	Application integration at electric	May, 2023	-	Identical under single
	2011	utilities - System interfaces for	<i>j</i> , =		numbering
	IEC 61968-2 : 2011	distribution management: Part 2			
	Reviewed In: 2023	glossary			
	IEC TS 61968 : Part				
	2:2011				
31	IS/IEC 61968-3:	Application integration at electric		-	Identical under single
	2021	utilities System interfaces for			numbering
	IEC 61968-3:2021	distribution management Part 3:			
L	IEC 61968-3:2021	Interface for network operations			
32	IS/IEC 61968-4:	Application integration at electric		-	Identical under single
	2019	utilities System Interfaces for			numbering
	IEC 61968-4:2019	distribution management Part 4:			
	IEC 61968-4:2019	Interfaces for records and asset			
		management			
33	IS/IEC 61968-6:	Application integration at electric	May, 2023	-	Identical under single
I	I	·	-	I	I

	2015 IEC 61968-6 : 2015	utilities - System interfaces for distribution management: Part 6			numbering
	Reviewed In : 2023	interfaces for maintenance and			
	IEC 61968 : Part 6 :	construction			
	2015				
34	IS/IEC 61968-8:	Application integration at electric	December, 2020	-	Identical under single
	2015	utilities - System interfaces for			numbering
		distribution management: Part 8			
	Reviewed In: 2020	interfaces for customer operations			
	IEC 61968 : Part 8 :				
	2015				
35	IS/IEC 61968-9:	Application integration at electric	August, 2020	-	Identical under single
	2013	utilities - System interfaces for			numbering
	IEC 61968-9 : 2013	distribution management: Part 9			
	Reviewed In: 2020	interfaces for meter reading and			
	IEC 61968 : Part 9 :	control			
	2013		0.001		*1
36	IS/IEC 61970-1:	Energy management system	September, 2021	-	Identical under dual
	2005	application program interface			numbering
	Reviewed In: 2021	(EMS - API): Part 1 guidelines and			
	Reviewed In: 2021 IEC 61970-1: 2005	general requirements			
37	IS/IEC/TS 61970-2 :	Energy Management System	January, 2021		Identical under dual
] 37	2004	Application Programme Interface	January, 2021	_	numbering
	IEC/TS/61970-2 :	(EMS-API) Part 2 Glossary			numbering
	2004	(ENIS 711 1) 1 art 2 01055ary			
	Reviewed In: 2021				
	IEC/TS/61970-2:				
	2004				
38	IS/IEC 61970-301:	Energy management system		-	Identical under single
	2022	application program interface EMS-			numbering
	IEC 61970-301:2022	API Part 301: Common			
	IEC	information model CIM base			
	61970-301:2022				
39	IS/IEC/TS	Energy management system		-	Identical under single
		application program interface EMS-			numbering
	IEC/TS	API Part 401: Profile framework			
	61970-401:2022	First Revision			
	IEC/TS				
40	61970-401:2022	Engage management and			Identical and description
40	IS/IEC 61970-452 : 2021	Energy management system application program interface EMS-		_	Identical under single numbering
	2021 IEC 61970-452:2021	API Part 452: CIM static			numbering
	IEC 01970-432.2021 IEC	transmission network model			
	61970-452:2021	profiles			
41	IS/IEC 61970 : 2017	-		-	Identical under single
		application program interface EMS-			numbering
	IEC	API - Part 452: CIM static			
	61970-452:2021	transmission network model			
		profiles			
42	IS/IEC/TS 62351-1:	Power systems management and	June, 2022	-	Identical under single
	2007	associated information exchange -			numbering
	Reviewed In: 2022	Data and communications:			
	IEC/TS	Security: Part 1 communication			
	62351-1:2007	network and system: Security -			
12	10/IEC/E0 (0051 0	Introduction to: Security issues	I. 2022		Tilanda I I I I
43	IS/IEC/TS 62351-2 : 2008	Power systems management and	June, 2022	· -	Identical under single
	2008 Reviewed In: 2022	associated information exchange - Data and communications:			numbering
	Reviewed III . 2022	Data and Communications.			

1	IEC/TS	Security: Part 2 glossary of terms		1	
	62351-2:2008	, c ,			
44	IS/IEC 62351-3:	Power systems management and		-	Identical under single
	2023	associated information exchange -			numbering
	IEC 62351-3:2023	Data and communications security			
	IEC 62351-3:2023	- Part 3: Communication network			
		and system security - Profiles			
		including TCPIP (Third Revision)			
45	IS/IEC/TS 62351-4:	Power systems management and		-	Identical under single
	2020	associated information exchange -			numbering
		Data and communications security			
	IEC 62351-4:2020	- Part 4: Profiles including MMS			
15	YG (YE) G (FEG. < 22.54. 5	and derivatives			
46	IS/IEC/TS 62351-5:	Power systems management and		=	Identical under single
	2023	associated information exchange			numbering
	IEC/TS	Data and communications security			
	62351-5:2023	Part 5: Security for IEC 60870-5			
	IEC/TS	and derivatives Second Revision			
17	62351-5:2023 IS/IEC 62351-6:	POWER SYSTEMS			Identical under single
47	2020	MANAGEMENT AND		_	Identical under single numbering
	IEC 62351-6:2020	ASSOCIATED INFORMATION			numbering
	IEC 62351-6:2020	EXCHANGE DATA AND			
	ILC 02331-0.2020	COMMUNICATION SECURITY			
		Part 6: Security for IEC 61850			
48	IS/IEC 62351-7:	Power systems management and		_	Identical under single
	2017	associated information exchange			numbering
	IEC 62351-7:2017	Data and communications security			numeering
	IEC 62351-7:2017	Part 7: Network and System			
		Management NSM data object			
		models			
49	IS/IEC 62351-8:	Power systems management and	August, 2024	-	Identical under single
	2020	associated information exchange			numbering
	IEC 62351-8:2020	Data and communications security			
	Reviewed In: 2024	Part 8: Role-based access control			
	IEC 62351-8:2020	for power system management			
50	IS/IEC 62351-9:	Power systems management and		-	Identical under single
	2023	associated information exchange -			numbering
	IS/IEC	Data and communications security			
	62351-9:2023	- Part 9: Cyber security key			
	IS/IEC	management for power system			
	62351-9:2023	equipment (First Revision)			
51	IS/IEC/TR 62351-10	•	August, 2024	-	Identical under single
	: 2012	associated information exchange -			numbering
	IEC TR	Data and communications security			
	62351-10:2012	Part 10: Security architecture			
	Reviewed In: 2024	guidelines			
	IEC TR				
50	62351-10:2012	Decrease acceptance in a constance i	Camta 1 2024		Identical and a 1
52	IS/IEC 62351-11:	Power systems management and	September, 2024	-	Identical under single
	2016 IEC 62351, 11:2016	associated information exchange			numbering
	Reviewed In : 2024	Data and communications security Part 11: Security for XML			
	IEC 62351-11:2016	documents			
53	IS/IEC/TR 62351-12		September, 2024	_	Identical under single
	: 2016	associated information exchange	50ptc111001, 2024	_	numbering
	IEC TR	Data and communications security			numbering
	62351-12:2016	Part 12: Resilience and security			
	Reviewed In : 2024	recommendations for power			
1		101 pone			

1	IEC TD			ı	1
	IEC TR	systems with distributed energy			
	62351-12:2016	resources DER cyber-physical			
L	YO WE COME 4 40	systems	9 1 2024		
54	IS/IEC/TR 62351-13	j	September, 2024	-	Identical under single
	: 2016	associated information exchange -			numbering
	IEC TR	Data and communications security			
	62351-13:2016	Part 13: Guidelines on security			
	Reviewed In: 2024	topics to be covered in standards			
	IEC TR	and specifications			
	62351-13:2016				
55	IS/IEC/TR	Power systems management and		-	Identical under single
	62351-90-1) : 2018	associated information exchange			numbering
	IEC TR	-Data and communications security			
	62351-90-1:20	Part 90-1: Guidelines for handling			
	IEC TR	role-based access control in power			
	62351-90-1:20	systems			
56	IS/IEC/TR	Power systems management and	August, 2024	_	Identical under single
	62351-90-2 : 2018	associated information exchange	1148450, 2021		numbering
	IEC TR	Data and communications security			numbering
	62351-90-2:20	Part 90-2: Deep packet inspection			
	Reviewed In : 2024	of encrypted communications			
		or encrypted communications			
	IEC TR				
	62351-90-2:2018				71 1 . 1 . 1
57	IS/IEC/TR	Power systems management and		-	Identical under single
	62351-90-3) : 2021	associated information exchange -			numbering
	IEC TR	Part 90 Data and communications			
	62351-90-3:2021	securitySection 3: Guidelines			
	IEC TR	for network and system			
	62351-90-3:2021	management			
58	IS/IEC/TS	Power systems management and	August, 2024	-	Identical under single
	62351-100-1 : 2018	associated information exchange			numbering
	IEC TS	Data and communications security			
	62351-100-1:2	Part 100-1: Conformance test cases			
	Reviewed In: 2024	for IEC TS 62351-5 and IEC TS			
	IEC TS	60870-5-7			
	62351-100-1:2018				
59	IS/IEC/TS	Power systems management and	August, 2024	-	Identical under single
	62351-100-3 : 2020	associated information exchange			numbering
	IEC TS	Data and communications security			
		Part 100-3: Conformance test cases			
	Reviewed In: 2024	for IEC 62351-3 the secure			
	IEC TS	communication extension for			
	62351-100-3:2020	profiles including TCPIP			
60	IS/IEC/TS	Power systems management and		 	Identical under single
1		associated information exchange -		_	numbering
	IEC TS	Part 100: Data and communication			numbering
	62351-100-6:2022	security Section 6: Cybersecurity			
	IEC TS	conformance testing for IEC			
	62351-100-6:2022	61850-8-1 and IEC 61850-9-2		-	
61		Power line communication systems		-	Identical under single
	2012	for power utility applications Part			numbering
		1: Planning of analogue and digital			
	IEC 62488-1: 2012	power line carrier systems			
		operating over EHVHVMV			
L_		electricity grids		<u> </u>	
62	IS/IEC 62488-2 :	Power line communication systems		-	Identical under single
	2017	for power utility applications Part			numbering
	IEC 62488-2: 2017	2: Analogue power line carrier			
	IEC 62488-2: 2017	terminals or APLC			
				1	1

63	IS/IEC 62488-3 :	Power line communication systems		_	Identical under single
	2021	for power utility applications Part			numbering
	IEC 62488-3:2021	3: Digital Power Line Carrier			
	IEC 62488-3:2021	DPLC Terminals and hybrid			
	120 02 100 5,2021	ADPLC Terminals			
64	IS/IEC 62746-10-1)			-	Identical under single
	: 2018	customer energy management and			numbering
	IEC	the power management system -			
	62746-10-1:2018	Part 10-1: Open Automated			
	IEC	Demand Response			
	62746-10-1:2018	1			
65	IS 8792 : 2023	Line Traps for AC Power Systems		-	Identical under dual
	IEC 60353:1989	Second Revision			numbering
	IEC 60353:1989				
66	IS 8793 : 1995	Line traps for ac power systems	May, 2023	-	Modified/Technically
	Reviewed In: 2023	methods of tests (First Revision)	-		Equivalent
	IEC 60353				_
67	IS 8997 : 2022	COUPLING DEVICES FOR PLC		-	Modified/Technically
	IEC 60481:1974	SYSTEMS			Equivalent
68	IS 8998 : 2023	Coupling Devices for PLC Systems		-	Modified/Technically
	IEC 60481:1974	ï¿⅓ Methods of Tests (First			Equivalent
		Revision)			
69	IS 9859 (Part 1):	Code of Practice for Installation		=	Indigenous
	2023	and Maintenance of Outdoor			
		Power Line Carrier Equipment			
		Part 1 Line Traps			
70	IS 9859 (Part 2):	Installation and Maintenance of		-	Indigenous
	2023	Outdoor Power Line Carrier			
		Equipment � Code of Practice			
		Part 2 Coupling Devices (First			
		Revision)			
71	IS 9859 (Part 3):	Installation and Maintenance of		-	Indigenous
	2023	Outdoor Power Line Carrier			
		Equipment � Code of Practice			
		Part 3 Coupling			
		Capacitors/Capacitor Voltage			
		Transformers (First Revision)			

Standards under Development

		Projects Approved	
SI. No.	SI. No. Doc No. Title		
No Records Found			

	Preliminary Draft Standards			
SI. No.	SI. No. Doc No. Title			
	No Records Found			

	Drafts Standards in WC Stage		
SI. No.	Doc No.	Title	
1	LITD 10 (24782) Revision	Power Control Systems Security Requirements First Revision	
	of: IS 16335:2015		

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title		
	No Records Found			

		Finalized Draft Indian Standard	
SI. No.	SI. No. Doc No. Title		
No Records Found			

Finalized Draft Indian Standards under Print		
SI. No.	Doc No.	Title
No Records Found		

Total Published Standards:67 Total Standards Under development:1

Aspect Wise Report

Product: 0
Code of Practices: 60
Methods of Test: 4
Terminology: 4
Dimensions: 0
System Standard: 0
Safety Standard: 0
Others: 2
Service Specification: 0
Process Specification: 0

Unclassified: 0

Annexure-I: List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 10706 : 1983	Methods of tests for single sideband PLC terminals
	Reviewed In: 2020	
2	IS 13241 (Part 1): 1991	Installation and Maintenance of Indoor PLC Equipment - Code of Practice Part 1 PLC Terminals
	Reviewed In: 2021	
3	IS 13968 (Part 1/Sec 15):	Performance and testing of teleprotection equipment of power systems Part 1 narrow band
	1994	command systems
	Reviewed In: 2020	
4	IS 3700 (Part 1): 1972	Essential Ratings and Characteristics of Semiconductor Devices - Part 1 General
	Reviewed In: 1999	
5	IS 3700 (Part 2): 1972	Essential ratings and characteristics of semiconductor devices Part 2 Low power signal diodes
	Reviewed In: 1999	
6	IS 3700 (Part 3): 1973	Essential ratings and characteristics of semiconductor devices Part 3 Rectifier diodes
	Reviewed In: 1998	
7	IS 3700 (Part 4): 1968	Essential ratings and characteristics of semiconductor devices Part 4 Low power small signal
	Reviewed In: 2002	transistors
8	IS 3700 (Part 5): 1968	Essential Ratings and Characteristics of Semiconductor Devices - Part V Power Transistor
	Reviewed In: 1998	
9	IS 3700 (Part 6): 1968	Essential ratings and characteristics of semiconductor devices Part 6 Switching transistors
	Reviewed In: 1998	
10	IS 3700 (Part 8): 1970	Essential Ratings and Characteristics of Semiconductor Devices - Part VIII Voltage Regulator and
	Reviewed In: 1999	Voltage Reference Diodes
11	IS 3700 (Part 9): 1972	Essential ratings and characteristics of semiconductor devices Part 9 Variable capacitance diodes
	Reviewed In: 2002	
12	IS 3700 (Part 10): 1982	Essential Ratings and Characteristics of Semiconductor Devices - Part X Field-Effect Transistors
	Reviewed In: 1999	
13	IS 3700 (Part 11): 1984	Essential Ratings and Characteristics of Semiconductor Devices - Part 11 Light Emitting Diodes

14	1	Reviewed In: 2002	
Reviewed In: 2002 15 S 1371 S (Part 2): 1971 Reviewed In: 2002 16 IS 3715 (Part 2): 1971 Reviewed In: 2002 17 IS 4400 (Part 1): 1967 Reviewed In: 1999 18 IS 4400 (Part 1): 1981 Reviewed In: 1999 19 IS 4400 (Part 4): 1981 Reviewed In: 1999 20 IS 4400 (Part 4): 1981 Reviewed In: 1999 21 IS 4400 (Part 4): 1981 Reviewed In: 1999 22 IS 4400 (Part 9): 1999 23 IS 4400 (Part 9): 1999 24 IS 4400 (Part 9): 1999 25 IS 4400 (Part 9): 1999 26 IS 4400 (Part 9): 1999 27 IS 4400 (Part 9): 1999 28 IS 4400 (Part 10): 1983 Reviewed In: 2002 29 IS 4400 (Part 10): 1983 Reviewed In: 2002 20 IS 4400 (Part 10): 1983 Reviewed In: 2002 20 IS 5000 (Part 1): 1969 21 IS 5000 (Part 1): 1969 22 IS 5000 (Part 1): 1969 23 IS 5000 (Part 1): 1969 24 IS 5000 (Part 2): 1969 25 IS 5000 (Part 2): 1969 26 IS 5000 (Part 2): 1969 27 IS 5000 (Part 2): 1969 28 IS 5000 (Part 2): 1969 29 IS 5000 (Part 1): 1969 20 IS 5000 (Part 1): 1969 21 IS 5000 (Part 1): 1969 22 IS 5000 (Part 1): 1969 23 IS 5000 (Part 1): 1969 24 IS 5000 (Part 1): 1969 25 IS 5000 (Part 1): 1969 26 IS 5000 (Part 1): 1969 27 IS 5000 (Part 1): 1969 28 IS 5000 (Part 1): 1969 29 IS 5000 (Part 1): 1969 20 IS 5000 (Part 1): 1969 21 IS 5000 (Part 1): 1969 22 IS 5000 (Part 1): 1969 23 IS 5000 (Part 1): 1969 24 IS 5000 (Part 1): 1969 25 IS 5000 (Part 1): 1969 26 IS 5000 (Part 1): 1969 27 IS 5000 (Part 1): 1969 28 IS 5000 (Part 1): 1969 29 IS 5000 (Part 1): 1969 20 Dimensions of semiconductor devices Base outline OB 2 20 IS 5000 (Part 1): 1969 21 Dimensions of semiconductor devices Devices outline OB 3 22 IS 5000 (Part 1): 1969 23 IS 5000 (Part 1): 1969 24 IS 5000 (Part 2): 1969 25 Dimensions of semiconductor devices Base outline OB 3 26 IS 5000 (Part 3): 1969 27 Dimensions of semiconductor devices Base outline OB 3 28 IS 5000 (Part 3): 1969 29 Dimensions of semiconductor devices Base outline OB 4 29 IS 5000 (Part 3): 1969 20 Dimensions of semiconductor devices Base outline OB 5 20 Dimensions of semiconductor devices Base outline OB 5 20	14		Letter symbols for semiconductor devices Part 1 General aspects
15 18 3715 (Part 2): 1971 Letter symbols for semiconductor devices Part 2 Diodes	1	· · · · · · · · · · · · · · · · · · ·	Letter of moons for semiconductor devices furt i Centeral aspects
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Letter Symbols for Semiconductor Devices - Part III Transistors	13	` /	Letter symbols for semiconductor devices Fart 2 Diodes
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Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
No Records Found		