### **BUREAU OF INDIAN STANDARDS**

### **Program of Work**

#### ETD 7: Low Voltage Switchgear And Controlgear

Scope: To prepare standards for switchgear and controlgear such as circuit breakers, switches,

contactors, starters, disconnectors, bus bars, fuse combination units and semiconductors

connectors and any switchgear assemblies for voltages upto and including 1 000 V ac or 1 200

V dc

Liaison: IEC TC-23 SC-23E (P): Circuit-breakers and similar equipment for household use IEC

TC-121 (P): Switchgear and controlgear and their assemblies for low voltage IEC TC-121

SC-121A (P): Low-voltage switchgear and controlgear IEC TC-121 SC-121B (P): Low-voltage switchgear and controlgear assemblies

### **Published Standards**

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10027 : 2018	Composite units of air - Break	-	-	Indigenous
		switches and rewirable type fuses			
		for voltages not exceeding 650 v			
		a.c Specification (Second			
		Revision)			
2	IS 12021 : 2015	Control transformers or switchgear	-	-	Indigenous
		and controlgear for voltages not			
		exceeding 1000 v a.c			
		Specification (First Revision)			
3	IS 12640 (Part 1):	Residual current operated		4	Identical under dual
	2016	circuitBreakers without integral			numbering
	IEC 61008-1:2012	overcurrent protection for			
	IEC 61008-1:2012	household and similar uses			
		(Rccbs): Part 1 general rules			
		(Second Revision)			
4	IS 12640 (Part 2):	Residual current operated circuit -		3	Identical under dual
	2016	Breakers with integral overcurrent			numbering
	IEC 61009-1:2012	protection for household and			
	IEC 61009-1:2012	similar uses (Rcbos): Part 2 general			
		rules			
5	IS 12640 (Part 3):	Residual Current Operated Circuit		-	Identical under dual
	2018	- Breakers Without Integral			numbering
		Overcurrent Protection for			
	IEC 61008-2-1:	Household and Similar Uses (			
	1990	RCCB's) Part 3 Applicability of			
		the General Rule to RCCB 's			
		Functionally Independent of Line			
		Voltage			
6		Residual Current Operated Circuit		-	Identical under dual
	2018	Breakers Without Integral			numbering
	IEC 61008-2-2:	Overcurrent Protection for			
	1990	Household and Similar Uses			
ı			l	ı	I

I	IEC 61008-2-2:	(RCCB's) Part 4 Applicability of		1	
	1990	the General Rules to RCCB's			
		Functionally Dependent on Line			
	10.12022 1001	Voltage	N. 1. 2016		Y 1'
7	IS 13032 : 1991 Reviewed In : 2016	Ac miniature circuit - Breaker boards for voltages not exceeding	March, 2016	2	Indigenous
	Reviewed III . 2010	1000 v - Specification			
8	IS 14577 : 2022	Electrical installations of Ships and		-	Identical under dual
	IEC 61363-1:1998	Mobile and Fixed offshore Units			numbering
	IEC 61363-1:1998	Part 1 Procedures for Calculating			
		Short Circuit Currents in Three-			
	IC 14614 2022	Phase a.c. (First Revision)			T4
9	IS 14614 : 2023 IEC 61543: 2022	Residual current-operated protective devices RCDs for		-	Identical under dual numbering
	IEC 61543: 2022	household and similar use			numbering
	120 010 10, 2022	Electromagnetic compatibility			
		(First Revision)			
10	IS 16463 (Part 11):			-	Identical under dual
	2016	devices: Part 11 surge protective			numbering
		devices connected to low - Voltage power systems - Requirements and			
	IEC 01043-11.2011	test methods			
11	IS 16463 (Part 12):			-	Identical under dual
	2017	devices: Part 12 surge protective			numbering
		devices connected to low - Voltage			
	IEC 61643-12:2008	1 2			
12	IS 17040 : 2018	Selection and application principles Circuit Breakers â€" Switched			Identical under dual
12	IEC 62335 : 2008	Protective Earth Portable Residual		_	numbering
	IEC 62335 : 2008	Current Devices for Class I and			indinio trinig
		Battery Powered Vehicle			
		Applications			
13	IS 17119 : 2019	Residual current devices with or		-	Identical under dual
	IEC 62640 : 2015 IEC 62640 : 2015	without overcurrent protection for socket - Outlets for household and			numbering
	IEC 02040 . 2013	similar uses			
14	IS 17120 : 2019	In - Cable control and protection		1	Identical under dual
	IEC 62752 : 2016	device for mode 2 charging of			numbering
	IEC 62752 : 2016	electric road vehicles (Ic - Cpd)			
15	IS 17121 : 2019	General requirements for arc fault		-	Identical under dual
	IEC 62606 : 2017 IEC 62606 : 2017	detection devices			numbering
16	IS 17122 : 2019	Electrical accessories - Circuit -			Identical under dual
	IEC 62019 : 2003	Breakers and similar equipment for			numbering
	IEC 62019 : 2003	household use - Auxiliary contact			
		units			
17	IS 5039 : 1983	Specification for distribution	March, 2021	1	Indigenous
	Reviewed In: 2021	pillars for voltages not exceeding 1000 V AC and 1200 V DC (First			
		Revision)			
18	IS/IEC 60715 : 2017		March, 2024	-	Identical under single
	NULL	switchgear and controlgear -			numbering
		Standardized mounting on rails for			
	IEC 60715 : 2017	mechanical support of switchgear,			
		controlgear and accessories (First Revision)			
19	IS/IEC 60898-1 :	Electrical accessories - Circuit -	March, 2024	-	Identical under single
	2015	Breakers for overcurrent protection	,		numbering
	IEC 60898-1 : 2015	for household and similar			
	•			•	•

ı	Reviewed In: 2024	installations, Port 1 sinovit		I	1
	iec 60898	installations: Part 1 circuit - Breakers for a.c. operation (First			
	160 00090	Revision)			
20	IS/IEC 60898-2 :	Electrical accessories Circuit-		_	Identical under single
20		breakers for overcurrent protection		_	numbering
	IEC 60898-2: 2016	for household and similar			numbering
	IEC 60898-2: 2016	installations Part 2: Circuit-			
	1EC 00090-2, 2010	breakers for AC and DC operation			
21	IS/IEC 60898-3 :	Electrical accessories - Circuit-			Identical under dual
21		breakers for overcurrent protection		_	numbering
	IEC 60898-3:2019+	for household and similar			numbering
	AMD1:2022 CSV	installations - Part 3: Circuit-			
	IEC 60898-3:2019+				
	AMD1:2022 CSV	oreakers for De operation			
22		LOW-VOLTAGE SWITCHGEAR		_	Identical under single
	2020	AND CONTROLGEAR PART 1			numbering
	IEC 60947-1:2020	GENERAL RULES			numoering
	IEC 60947-1:2020	GEIVER/IE ROLLS			
23	IS/IEC 60947-2:	Low - Voltage switchgear and	December, 2017	1	Identical under single
23	2016	controlgear: Part 2 circuit -	December, 2017	1	numbering
	IEC 60947-2 : 2016	-			
	Reviewed In : 2017	Breakers (First Revision)			
	IS/IEC 60947 - 2:				
	2016				
24	IS/IEC 60947-3:	Low-Voltage Switchgear and		_	Identical under single
-	2020	Controlgear: Part 3 Switches			numbering
	IEC 60947-3 : 2020	· ·			
	IEC 60947-3 : 2020				
		Combination Units			
25	IS/IEC 60947-3:	Low - Voltage switchgear and	January, 2018	-	Identical under single
	2012	controlgear: Part 3 switches,	<b>3</b> /		numbering
	IEC 60947-3 : 2012	disconnectors, switch disconnectors			
		and fuse - Combination units (First			
	IEC 60947-3: 2020	Revision)			
26	IS/IEC 60947-4-1:	Low-Voltage switchgear and	August, 2023	-	Identical under single
	2018	controlgear : Part 4-1 Contactors			numbering
	IEC 60947-4-1:	and motor starters			
	2018	electromechanical contactors and			
	Reviewed In: 2023	motor-Starters			
	IEC 60947-4-1:				
	2018				
27	IS/IEC 60947-4-1:	Low - Voltage switchgear and	January, 2018	-	Identical under single
	2012	controlgear: Part 4 contactors and			numbering
	IEC 60947-4-1:	motor - Starters: Sec 1			
	2012	electromechanical contactors and			
	Reviewed In: 2018	motor - Starters (First Revision)			
	IEC 60947-4-1:				
	2018				
28	IS/IEC 60947-4-2):			-	Identical under single
	2020	Controlgear: Part 4-2 Contactors			numbering
	IEC 60947-4-2:	and Motorstarters semiconductor			
	2020	motor controllers starters and Soft			
	IEC 60947-4-2:	starters			
20	2020	, , , , , , , , , , , , , , , , , , ,			T1 ( 1 1 1 1 1
29	IS/IEC 60947-4-3):	Low-Voltage Switchgear And		-	Identical under single
	2020	Controlgear: Part 4-3 Contactors			numbering
	IEC 60947-4-3:	And Motor-Starters Semiconductor			
	2020	Controllers And Semiconductor			
	IEC 60947-4-3:	Contactors For Non-Motor Loads			

ĺ	2020			I	
30	IS/IEC 60947-5-5 :	Low - Voltage switchgear and	March, 2024	-	Identical under single
	2016	controlgear: Part 5 control circuit	, .		numbering
	IEC 60947-5-5:	devices and switching elements:			
	2016	Sec 5 electrical emergency stop			
	Reviewed In: 2024	devices with mechanical latching			
	IEC 60947-5-5:	function			
	2016				
31	IS/IEC 60947-5-1):	Low-Voltage Switchgear And		-	Identical under single
	2016	Control Gear : Part 5-1 Control			numbering
	IEC 60947-5-1:	Circuit Devices And Switching			
	2016	Elements Electromechanical			
	IEC 60947-5-1:	Control Circuit Devices			
	2016				
32	IS/IEC 60947-5-1:	Low - Voltage switchgear and	January, 2018	-	Identical under single
	2009	controlgear: Part 5 control circuit			numbering
		devices and switching elements:			
	Reviewed In: 2018	Sec 1 electromechanical control			
	IEC 60947-5-1:	circuit devices (First Revision)			
	2016	, , , , , , , , , , , , , , , , , , ,		1	
33	IS/IEC 60947-5-2):	LLow-Voltage Switchgear and		-	Identical under single
	2019	Controlgear Part 5 Control Circuit			numbering
	IEC 60947-5-2:	Devices and Switching Elements			
	2019	Section 2 Proximity Switches (			
	IEC 60947-5-2: 2019	First Revision)			
34	IS/IEC 60947-6-1) :	Low voltage avitahages and		1	Identical under single
34	2021	Low-voltage switchgear and controlgear Part 6 Multiple		-	Identical under single
	IS/IEC	function equipment Section 1			numbering
	60947-6-1:2021	Transfer switching equipment			
	IS/IEC	(First Revision)			
	60947-6-1:2021	(Trist Revision)			
35	IS/IEC 60947-6-2):	Low-voltage switchgear and		_	Identical under single
	2020	controlgear Part 6-2: Multiple			numbering
	IEC 60947-6-2:	function equipment Control and			
	2020	protective switching devices or			
	IEC 60947-6-2:	equipment (CPS)			
	2020				
36	IS/IEC 61439-0:	Low-Voltage Switchgear and	March, 2024	-	Identical under single
	2014	Controlgear Assemblies Part 0			numbering
	Reviewed In: 2024	Guidance to Specifying			
	IEC 61439-0:2014	Assemblies			
37	IS/IEC 61439-1:	Low-voltage switchgear and		-	Identical under single
	2020	controlgear assemblies Part 1:			numbering
	IEC 61439-1:2020	General rules (First Revision)			
	IEC 61439-1:2020				
38	IS/IEC 61439-2:	Low-voltage switchgear and		-	Identical under single
	2020	controlgear assemblies Part 2:			numbering
	IEC 61439-2:2020	Power switchgear and controlgear			
20	IEC 61439-2:2020	assemblies (First Revision)	Manak 2024	1	Identical and described
39	IS/IEC 61439-3:	Low - Voltage switchgear and	March, 2024	_	Identical under single
	2012 IEC 61439-3 : 2012	controlgear assemblies: Part 3 distribution boards intended to be			numbering
		operated by ordinary persons (Dbo)			
	IEC 61439-3 : 2012	operated by ordinary persons (DBO)			
40	IS/IEC 61439-4 :	Low - Voltage switchgear and	March, 2024		Identical under single
+0	2012	controlgear assemblies: Part 4	iviaicii, 2024	]	numbering
	IEC 61439-4 : 2012				numbering
	Reviewed In : 2024	assemblies for construction sites			
	130 110 110 111 1 2024	assembles for construction sites		1	

1	IEC 61439-4 : 2012	(Acs)			
41	IS/IEC 61439-5:	Low-Voltage Switchgear and	March, 2024	-	Identical under single
	2014	Controlgear Assemblies Part 5			numbering
	IEC 61439-5 : 2014	Assemblies for Power Distribution			
	Reviewed In: 2024	in Public Networks			
	IEC 61439 - 5 : 2014				
42	IS/IEC 61439-6:	Low-Voltage Switchgear and	May, 2024	-	Identical under dual
	2012	Controlgear Assemblies Part 6			numbering
	IEC 61439-6 : 2012	Busbar Trunking Systems			
	Reviewed In: 2024	(Busways)			
	IEC 61439-6: 2012				
43	IS/IEC/TS 61439-7:	Low-voltage switchgear and		-	Identical under single
	2023	controlgear assemblies Part 7:			numbering
	IEC 61439-7:2022	Assemblies for specific			
	IEC 61439-7:2022	applications such as marinas			
		camping sites market squares			
		electric vehicle charging stations			
		(First Revision))			
44	IS 8588 (Part 1):	Specification for thermostatic	March, 2018	1	Modified/Technically
	1977	bimetals: Part 1 general			Equivalent
	Reviewed In: 2018	requirements and methods of tests			
	DIN 1715				

# **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			
	No Records Found				

	Draft Standards Completed WC Stage					
SI. No.	Doc No.	Title				
No Records Found						

	Finalized Draft Indian Standard				
SI. No.	Doc No.	Title			
1	ETD 7 (24761)	Low-voltage switchgear and controlgear Part 7 Ancillary equipment Section 1 Terminal blocks for copper conductors			
2	ETD 7 (24762)	Low-voltage switchgear and controlgear Part 7 Ancillary equipment Section 2 Protective conductor terminal blocks for copper Conductors			

	Finalized Draft Indian Standards under Print					
SI. No.	Doc No.	Title				
1	ETD 7 (23677) Revision of:	Residual current operated circuitBreakers without integral overcurrent protection for household				

### Total Published Standards:40 Total Standards Under development:3

### **Aspect Wise Report**

Product: 32
Code of Practices: 1
Methods of Test: 2
Terminology: 0
Dimensions: 1
System Standard: 0
Safety Standard: 3
Others: 1

 $\begin{array}{c} \text{Service Specification}: 0 \\ \text{Process Specification}: 0 \\ \text{Unclassified}: 0 \end{array}$ 

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

SI. No.	IS No. & Year	Title
1	IS 10705 : 1983	Identification Of Terminals Of Contactors And Associated Overload Relays
	Reviewed In: 1990	
2	IS 11039 : 2001	Requirements for mounting on rails in switchgear and controlgear installations
3	IS 12974 : 1990	Semiconductor Contactors
	Reviewed In: 2005	
4	IS 1336 : 1959	Recommendations for the Colour of Push-buttons
5	IS 13947 (Part 1): 1993	Low-voltage Switchgear and Controlgear - Part 1 General Rules
	Reviewed In: 2008	
6	IS 13947 (Part 2): 1993	Low-voltage Switchgear and Controlgear - Part 2 Circuit Breakers
	Reviewed In: 2008	
7	IS 13947 (Part 3): 1993	Low-voltage Switchgear and Controlgear - Part 3 Switches Disconnectors Switch Disconnectors
	Reviewed In: 2008	and Fuse Combination Units
8	IS 13947 (Part 4/Sec 1):	Low-Voltage Switchgear and Controlgear - Part 4 Contractors and Motor-Starters - Section 1
	1993	Electromechanical Contactors and Motor Starters
	Reviewed In: 2008	
9	IS 13947 (Part 5/Sec 1):	Low-Voltage Switchgear and Controlgear - Part 5 Control Circuit Devices and Switching Elements
	2004	- Section 1 Electromechanical Control Circuit Devices
10	IS 13947 (Part 5/Sec 2):	Low - Voltage switchgear and controlgear - Specification Part 5 control circuit devices and
	2004	switching elements Sec 2 proximity switches
	Reviewed In: 2014 IEC	
	60947-5-2(1 999)	
11	IS 1567 : 1960	Metal-clad switches current rating not exceeding 100 amperes
12	IS 1822 : 1967	AC motor starters of voltage not exceeding 1000 volts
13	IS 2516 (Part 1/Sec 1):	Circuit breakers Part 1 2 Requirements and tests Sec 1 Voltages not exceedding 1000 V ac or 1200
	1985	V dc
	17.00	,
14	IS 2607 : 1967	Air-break isolators for voltages not exceeding 1000 volts
1	15 2007 11307	The crown isomeory for younger not brooking 1000 your
15	IS 2675 : 1983	Enclosed distribution fuseboards and cutouts for voltages not exceeding 1000 V Ac and 1200 V
	Reviewed In: 2016	Dc
16	IS 2959 : 1985	Contractors for voltages not exceeding 1000 V ac or 1200 V dc
17	IS 3072:1975	Code of practice for installation and maintenance of switchgear

18	IS 3106 : 1996	Code of practice for selection installation maintenance of fuses voltage not exceeding 650 volts
19	IS 375 : 1963	Marking and arrangement for switchgears bus-bars main connections and auxiliary wiring
20	IS 3914 : 1967	Code of practice for selection of ac induction motor starts voltage not exceeding 1000 volts
21	IS 4047 : 1967	Specification for bitumen mastic for use in water proofing of roofs First Revision
22	IS 4064 (Part 1): 1978	Air-break switches air-break disconnectors air-break switch disconnectors and fuse-combination units for voltages not exceeding 1000V ac or 1200V dc Part 1 General requirements
23	IS 4064 (Part 2): 1978	Air-break switches air-break disconnectors air-break switch disconnectors and fuse-combination units for voltages not exceeding 1000V ac or 1200V dc Part 2 Specific requirements for the direct switching of individual motors
24	IS 5124 : 1969	Code of practice for installation and maintenance of ac induction motor starters voltage not exceeding 1000 V
25	IS 5987 : 1970	Code of practice for selection of switches voltage not exceeding 1000 V
26	IS/IEC 60898-1 : 2002 Reviewed In : 2013 IEC TS 61496-4-3: 20	Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations Part 1 Circuit-breakers for ac operation
27	IS 6875 (Part 1): 1973 Reviewed In: 1992	Control switches switching devices for control and auxiliary circuits including contactor relays for voltages up to and including 1000 V ac 1200 V dc Part 1 General requirements
28	IS 6875 (Part 2) : 1973 Reviewed In : 1992	Control switches switching devices for control and auxiliary circuits including contactor relays for voltages up to and including 1000 V ac and 1200 V dc Part 2 Push-buttons and related control switches
29	IS 6875 (Part 3) : 1980 Reviewed In : 1992	Control switches switching devices for control and auxiliary circuits including contactor relays for voltages up to and including 1 000 V ac and 1200 V dc Part 3 Rotary control switches
30	IS 8544 (Part 1): 1977	Motor starters for voltages not exceeding 1 000 V Part 1 Direction line ac starters
31	IS 8544 (Part 2) : 1977	Motor starters for voltages not exceeding 1 000 V Part 2 Star-delta starters
32	IS 8544 (Part 3/Sec 1): 1979	Motor starters for voltages not exceeding 1000 V Part 3 Rheostatic motor starters Sec 1 general requirements
33	IS 8544 (Part 3/Sec 2): 1979	Motor starters for voltages not exceeding 1 000 V Part 3 Rheostatic motor starters Sec 2 Additional requirements for ac rheostatic motor controllers
34	IS 8544 (Part 4) : 1979	Motor starters for voltages not exceeding 1 000 V Part 4 Reduced voltage ac starters two step aut transformer starters
35	IS 8623 (Part 1): 1993 Reviewed In: 2013	Low-Voltage Switchgear and Controlgear Assemblies - Part 1 Requirements for Type-Tested an Partially Type-Tested Assemblies
36	IS 8623 (Part 2): 1993 Reviewed In: 2018 IEC Pub 439-2 (1987)	Specification for low - Voltage switchgear and controlgear assemblies Part 2 particular requirements for busbar trunking systems Busways First Revision
37	IS 8623 (Part 3) : 1993 Reviewed In : 2018 IEC Pub 439-3(1990)	Specification for low - Voltage switchgear and controlgear assemblies Part 3 particular requirements for equipment where unskilled persons have access for their use
38	IS 8828 : 1996 Reviewed In : 2006	Electrical Accessories - Circuit Breakers for Over Current Protection for Household and Simila Installations

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

SI. No.	IS No. & Year	Title
1	IS 10027 : 2018	Composite units of air - Break switches and rewirable type fuses for voltages not exceeding 650 v
		a c - Specification Second Revision
2	IS 12021 : 2015	Control transformers or switchgear and controlgear for voltages not exceeding 1000 v a c -
		Specification First Revision

I	1	1
3	IS 12640 (Part 1): 2016	Residual current operated circuitBreakers without integral overcurrent protection for household
	IEC 61008-1 : 2012	and similar uses Rccbs Part 1 general rules Second Revision
	IEC 61008-1 : 2012	<u> </u>
4	IS 12640 (Part 2): 2016	Residual current operated circuit - Breakers with integral overcurrent protection for household and
	IEC 61009-1 : 2012	similar uses Rcbos Part 2 general rules
	IEC 61009-1: 2012	
5	IS 12640 (Part 4): 2018	Residual Current Operated Circuit Breakers Without Integral Overcurrent Protection for
	IEC 61008-2-2 : 1990	Household and Similar Uses RCCB 39 s Part 4 Applicability of the General Rules to RCCB 39 s
	IEC 61008-2-2 : 1990	Functionally Dependent on Line Voltage
6	IS 13032 : 1991	Ac miniature circuit - Breaker boards for voltages not exceeding 1000 v - Specification
	Reviewed In: 2016	
7	IS 16463 (Part 11): 2016	Low - Voltage surge protective devices Part 11 surge protective devices connected to low - Voltage
	IEC 61643-11 : 2011	power systems - Requirements and test methods
	IEC 61643-11:2011	
8	IS 16463 (Part 12): 2017	Low - Voltage surge protective devices Part 12 surge protective devices connected to low - Voltage
	IEC 61643-12 : 2008	power distribution systems - Selection and application principles
	IEC 61643-12:2008	
9	IS 17040 : 2018	Circuit Breakers Switched Protective Earth Portable Residual Current Devices for Class I and
	IEC 62335 : 2008	Battery Powered Vehicle Applications
	IEC 62335 : 2008	
10	IS 17119 : 2019	Residual current devices with or without overcurrent protection for socket - Outlets for household
	IEC 62640 : 2015	and similar uses
	IEC 62640 : 2015	
11	IS 17120 : 2019	In - Cable control and protection device for mode 2 charging of electric road vehicles Ic - Cpd
	IEC 62752 : 2016	
	IEC 62752 : 2016	
12	IS 17121 : 2019	General requirements for arc fault detection devices
	IEC 62606 : 2017	
	IEC 62606 : 2017	
13	IS 17122 : 2019	Electrical accessories - Circuit - Breakers and similar equipment for household use - Auxiliary
	IEC 62019 : 2003	contact units
	IEC 62019 : 2003	
14	IS 5039 : 1983	Specification for distribution pillars for voltages not exceeding 1000 V AC and 1200 V DC First
	Reviewed In: 2021	Revision
15	IS/IEC 60898-2 : 2016	Electrical accessories Circuit-breakers for overcurrent protection for household and similar
	IEC 60898-2: 2016	installations Part 2 Circuit-breakers for AC and DC operation
1.0	15/15/C (0000 2 2010	
16	IS/IEC 60898-3 : 2019	Electrical accessories - Circuit-breakers for overcurrent protection for household and similar
	IEC	installations - Part 3 Circuit-breakers for DC operation
	60898-3:2019+AMD1:2022 CSV	
	CSV	
17	IS/IEC 60947-2 : 2016	Low - Voltage switchgear and controlgear Part 2 circuit - Breakers First Revision
''	IEC 60947-2 : 2016	2011 Totago Sintengour and controlgent I are 2 circuit - Dicarces I list revision
	Reviewed In: 2017 IS/IEC	
	60947 - 2 : 2016	
18	IS/IEC 60947-3 : 2020	Low-Voltage Switchgear and Controlgear Part 3 Switches Disconnectors Switch-Disconnectors
	IEC 60947-3:2020	and Fuse-Combination Units
19	IS/IEC 60947-4-1 : 2018	Low-Voltage switchgear and controlgear Part 4-1 Contactors and motor starters electromechanical
	IEC 60947-4-1: 2018	contactors and motor-Starters
	Reviewed In: 2023	
20	IS/IEC 60947-4-2) : 2020	Low-Voltage switchgear and Controlgear Part 4-2 Contactors and Motorstarters semiconductor
	IEC 60947-4-2: 2020	motor controllers starters and Soft starters
21	IS/IEC 60947-4-3): 2020	Low-Voltage Switchgear And Controlgear Part 4-3 Contactors And Motor-Starters Semiconductor
	IEC 60947-4-3: 2020	Controllers And Semiconductor Contactors For Non-Motor Loads

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22	IS/IEC 60947-5-5 : 2016	Low - Voltage switchgear and controlgear Part 5 control circuit devices and switching elements
	IEC 60947-5-5 : 2016	Sec 5 electrical emergency stop devices with mechanical latching function
	Reviewed In: 2024 IEC	
	60947-5-5 : 2016	
23	IS/IEC 60947-5-1) : 2016	Low-Voltage Switchgear And Control Gear Part 5-1 Control Circuit Devices And Switching
	IEC 60947-5-1: 2016	Elements Electromechanical Control Circuit Devices
24	IS/IEC 60947-5-2) : 2019	LLow-Voltage Switchgear and Controlgear Part 5 Control Circuit Devices and Switching Elements
	IEC 60947-5-2: 2019	Section 2 Proximity Switches First Revision
25	IS/IEC 60947-6-1): 2021	Low-voltage switchgear and controlgear Part 6 Multiple function equipment Section 1 Transfer
	IS/IEC 60947-6-1:2021	switching equipment First Revision
26	IS/IEC 60947-6-2) : 2020	Low-voltage switchgear and controlgear Part 6-2 Multiple function equipment Control and
	IEC 60947-6-2: 2020	protective switching devices or equipment CPS
27	IS/IEC 61439-2 : 2020	Low-voltage switchgear and controlgear assemblies Part 2 Power switchgear and controlgear
	IEC 61439-2:2020	assemblies First Revision
28	IS/IEC 61439-3 : 2012	Low - Voltage switchgear and controlgear assemblies Part 3 distribution boards intended to be
	IEC 61439-3 : 2012	operated by ordinary persons Dbo
	Reviewed In: 2024 IEC	
	61439-3 : 2012	
29	IS/IEC 61439-4 : 2012	Low - Voltage switchgear and controlgear assemblies Part 4 particular requirements for assemblies
	IEC 61439-4 : 2012	for construction sites Acs
	Reviewed In: 2024 IEC	
	61439-4 : 2012	
30	IS/IEC 61439-5 : 2014	Low-Voltage Switchgear and Controlgear Assemblies Part 5 Assemblies for Power Distribution in
	IEC 61439-5 : 2014	Public Networks
	Reviewed In: 2024 IEC	
	61439 - 5 : 2014	
31	IS/IEC 61439-6 : 2012	Low-Voltage Switchgear and Controlgear Assemblies Part 6 Busbar Trunking Systems Busways
	IEC 61439-6 : 2012	
	Reviewed In: 2024 IEC	
	61439-6 : 2012	
32	IS/IEC/TS 61439-7 : 2023	Low-voltage switchgear and controlgear assemblies Part 7 Assemblies for specific applications
	IEC 61439-7:2022	such as marinas camping sites market squares electric vehicle charging stations First Revision
	12001.05,12022	sales as annually ing sites maines equal to see the sales and sales and sales and sales are sales and sales are sales and sales are sales and sales are sales are sales and sales are sale