BUREAU OF INDIAN STANDARDS

Program of Work

ETD 51: Electrotechnology in Mobility

Scope: To prepare Indian Standards for electrotechnical aspects of totally or partly electrically

propelled road vehicles

Liaison: **IEC TC-69 (P):** Electrical power/energy transfer systems for electrically propelled road vehicles

and industrial trucks IEC TC-23 SC-H (P): Plugs, Socket-outlets and Couplers for industrial

and similar applications, and for Electric Vehicles

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS/ISO	Road vehicles - Vehicle to grid	March, 2024	=	
	15118-1:2013	communication interface: Part 1			
	ISO 15118-1 : 2013	general information and use - Case			
	Reviewed In: 2024	definition			
2		Road vehicles - Vehicle - To - Grid	March, 2024	-	
	15118-2:2014	communication interface: Part 2			
	ISO 15118-2 : 2014	network and application protocol			
	Reviewed In: 2024	requirements			
3	IS/ISO	Road vehicles - Vehicle to grid	March, 2024	-	
	15118-3:2015	communication interface: Part 3			
	ISO 15118-3 : 2015	physical and data link layer			
	Reviewed In: 2024	requirements			
4	IS/ISO	Road vehicles - Vehicle to grid	March, 2024	-	
	15118-4:2018	communication interface: Part 4			
	ISO 15118-4 : 2018	network and application protocol			
	Reviewed In: 2024	conformance test			
5	IS/ISO	Road vehicles - Vehicle to grid	March, 2024	-	
	15118-5:2018	communication interface: Part 5			
	ISO 15118-5 : 2018	physical layer and data link layer			
	Reviewed In: 2024	conformance test			
6	IS/ISO	Road Vehicles - Vehicle to Grid		-	
	15118-8:2020	Communication Interface Part 8:			
	ISO 15118-8:2020	Physical Layer and Data Link			
		Layer Requirements for Wireless			
		Communication (First Revision)			
7	IS 17017 (Part	Electric Vehicle Conductive	July, 2023	-	Indigenous
	1):2018	Charging System Part 1 General			
		Requirements			
	Reviewed In: 2023				
8	IS 17017 (Part 2/Sec			-	Indigenous
	1):2020	Charging System Part 2 Plugs,			
		Socket-Outlets, Vehicle			
		Connectors, and Vehicle Inlets			
		Section 1 General requirements			
9	IS 17017 (Part 2/Sec	Electric Vehicle Conductive		-	Indigenous

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1	2):2020	Charging System Part 2 Plugs,			
		Socket - Outlets, Vehicle			
		Connectors and Vehicle Inlets			
		Section 2 Dimensional			
		compatibility and			
		interchangeability requirements for			
		a.c. pin and contact-tube			
		accessories			
10	IS 17017 (Part 2/Sec			-	Indigenous
	3):2020	Charging System Part 2 Plugs,			
	5).2020	Socket - Outlets, Vehicle			
		Connectors and Vehicle Inlets			
		Section 3 Dimensional			
		compatibility and			
		interchangeability requirements for			
		d.c. and a.c./d.c. pin and contact-			
11	10 17017 (D. + 0/0	tube vehicle couplers			T 1'
11	IS 17017 (Part 2/Sec			=	Indigenous
	6):2021	Charging System Part 2 Plugs,			
		Socket-Outlets, Vehicle			
		Connectors and Vehicle Inlets			
		Section 6 Dimensional			
		compatibility requirements for DC			
		pin and contact-tube vehicle			
		couplers intended to be used for			
		DC EV supply equipment where			
		protection relies on electrical			
		separation			
12	IS 17017 (Part 2/Sec	Electric Vehicle Conductive		=	Indigenous
	7):2023	Charging System Part 2 Plugs,			
	·	Socket-Outlets, Vehicle			
		Connectors and Vehicle Inlets			
		Section 7 Dimensional			
		Compatibility and Interchange			
		Ability Requirements for a.c., d.c.			
		and a.c./d.c. Pin and Contact-Tube			
		Vehicle Couplers Intended to be			
		used for a.c./d.c. EV Supply			
		Equipment where Protection Relies			
12	IC 17017 (D	on Electrical Separation	Aout 2024		Identical d d 1
13	IS 17017 (Part	Electric Vehicle Conductive	August, 2024	-	Identical under dual
	21/Sec 1):2019	Charging System Part 21			numbering
	IEC 61851-21-1:	Electromagnetic Compatibility (
		EMC) Requirements Section 1 On-			
	Reviewed In: 2024	board chargers			
	IEC 61851-21-1:				
<u></u>	2017				
14	IS 17017 (Part	Electric Vehicle Conductive	August, 2024	-	Identical under dual
	21/Sec 2):2019	Charging System Part 21			numbering
	IEC 61851-21-2:	Electromagnetic Compatibility (
	2018	EMC) Requirements Section 2			
	Reviewed In: 2024	Off-board chargers			
	IEC 61851-21-2:				
	2018				
15	IS 17017 (Part	Electric Vehicle Conductive		-	
	22/Sec 1):2021	Charging Systems Part 22 AC			
		Charging Configurations Section 1			
		- AC Charge Point for Light			
1		Electric Vehicle			

16	IS 17017 (Part	Electric Vehicle Conductive		_	Indigenous
10	23):2021	Charging Systems Part 23 dc		_	margenous
	25).2021	Electric Vehicle Supply Equipment			
17	IS 17017 (Part	Electric Vehicle Conductive		_	
1,	24):2021	Charging System Part 24 : Digital			
		Communication between a DC			
		Electric Vehicle Supply Equipment			
		and an Electric Vehicle for control			
		of DC Charging			
18	IS 17017 (Part	ELECTRIC VEHICLE		-	
	25):2021	CONDUCTIVE CHARGING			
		SYSTEM Part 25: DC EV supply			
		equipment where protection relies			
		on electrical separation			
19	IS 17017 (Part	Electric Vehicle Conductive		-	Indigenous
	30):2025	Charging Systems Part 30 Dual			
		Gun dc Electric Vehicle Supply			
		Equipment			
20	IS 17017 (Part	ELECTRIC VEHICLE		-	
	31):2024	CONDUCTIVE CHARGING			
		SYSTEM Part 31: ac or dc EV			
		supply equipment for where			
		protection relies on electrical			
	YO 4 #00 C (P)	separation			*1 1 1 1 1
21	IS 17896 (Part	Electric vehicle battery swap		-	Identical under dual
	1):2022	system - Part 1: General and			numbering
	IEC TS	Guidance			
	62840-1:2016 IEC TS				
22	62840-1:2016	Electric vehicle bettem:			Identical under dual
22	IS 17896 (Part 2):2022	Electric vehicle battery swap system - Part 2: Safety		-	
	IEC 62840-2:2016	requirements			numbering
	IEC 62840-2:2016 IEC 62840-2:2016	requirements			
	IEC 02840-2;2010				

Standards under Development

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

	Preliminary Draft Standards				
SI. No.	Doc No.	Title			
1	ETD 51 (28640) Revision	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM PART 23 DC ELECTRIC			
	of: IS 17017:2021	VEHICLE SUPPLY EQUIPMENT First Revision			

	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		
No Records Found				

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

Total Published Standards:20 Total Standards Under development:1

Aspect Wise Report

Product: 10
Code of Practices: 3
Methods of Test: 1
Terminology: 0
Dimensions: 0
System Standard: 0
Safety Standard: 2

Others: 6 Service Specification: 0 Process Specification: 0

Unclassified: 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

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

Annexure-II : List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 17017 (Part 1):2018	Electric Vehicle Conductive Charging System Part 1 General Requirements
	Reviewed In: 2023	
2	IS 17017 (Part 2/Sec	Electric Vehicle Conductive Charging System Part 2 Plugs Socket-Outlets Vehicle Connectors and
	1):2020	Vehicle Inlets Section 1 General requirements
3	IS 17017 (Part 2/Sec	Electric Vehicle Conductive Charging System Part 2 Plugs Socket - Outlets Vehicle Connectors
	2):2020	and Vehicle Inlets Section 2 Dimensional compatibility and interchangeability requirements for a c
		pin and contact-tube accessories
4	IS 17017 (Part 2/Sec	Electric Vehicle Conductive Charging System Part 2 Plugs Socket - Outlets Vehicle Connectors
	3):2020	and Vehicle Inlets Section 3 Dimensional compatibility and interchangeability requirements for d c
		and a c d c pin and contact-tube vehicle couplers
5	IS 17017 (Part 2/Sec	Electric Vehicle Conductive Charging System Part 2 Plugs Socket-Outlets Vehicle Connectors and
	6):2021	Vehicle Inlets Section 6 Dimensional compatibility requirements for DC pin and contact-tube
	ISO 622 : 2016	vehicle couplers intended to be used for DC EV supply equipment where protection relies on
		electrical separation
6	IS 17017 (Part 2/Sec	Electric Vehicle Conductive Charging System Part 2 Plugs Socket-Outlets Vehicle Connectors and
	7):2023	Vehicle Inlets Section 7 Dimensional Compatibility and Interchange Ability Requirements for a c d
		c and a c d c Pin and Contact-Tube Vehicle Couplers Intended to be used for a c d c EV Supply
		Equipment where Protection Relies on Electrical Separation
7	IS 17017 (Part 22/Sec	Electric Vehicle Conductive Charging Systems Part 22 AC Charging Configurations Section 1 -

	1):2021	AC Charge Point for Light Electric Vehicle
	ISO 21084:2019	
8	IS 17017 (Part 23):2021	Electric Vehicle Conductive Charging Systems Part 23 dc Electric Vehicle Supply Equipment
	ISO/IEC 11160-1:1996	
9	IS 17017 (Part 25):2021	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM Part 25 DC EV supply equipment
	ISO 6658 : 2017	where protection relies on electrical separation
10	IS 17017 (Part 30):2025	Electric Vehicle Conductive Charging Systems Part 30 Dual Gun dc Electric Vehicle Supply
		Equipment