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 15118-1 : 2013 ISO 15118-1 : 2013 ISO 15118-1	Road vehicles - Vehicle to grid communication interface: Part 1 general information and use - Case definition		-	Identical under single numbering
2	IS/ISO 15118-2 : 2014 ISO 15118-2 : 2014 ISO 151128-2	Road vehicles - Vehicle - To - Grid communication interface: Part 2 network and application protocol requirements		-	Identical under single numbering
3	IS/ISO 15118-3 : 2015 ISO 15118-3 : 2015 ISO 15118-4	Road vehicles - Vehicle to grid communication interface: Part 3 physical and data link layer requirements		-	Identical under single numbering
4	IS/ISO 15118-4 : 2019 ISO 15118-4 : 2018 ISO 15118-3	Road vehicles - Vehicle to grid communication interface: Part 4 network and application protocol conformance test		-	Identical under single numbering
5	IS/ISO 15118-5 : 2018 ISO 15118-5 : 2018 ISO 15118-5 : 2018	Road vehicles - Vehicle to grid communication interface: Part 5 physical layer and data link layer conformance test		-	Identical under single numbering
6	IS/ISO 15118-8 : 2020 ISO 15118-8:2020 ISO 15118-8:2020	Road Vehicles --- Vehicle to Grid Communication Interface Part 8: Physical Layer and Data Link Layer Requirements for Wireless Communication (First Revision)		-	Identical under single numbering
7	IS 17017 (Part 1) : 2018 IEC 61851-1	Electric Vehicle Conductive Charging System Part 1 General Requirements		-	Modified/Technically Equivalent
8	IS 17017 (Part 2/Sec 1) : 2020 62196-1	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket-Outlets, Vehicle Connectors, and Vehicle Inlets Section 1 General requirements		-	Modified/Technically Equivalent
9	IS 17017 (Part 2/Sec	Electric Vehicle Conductive		-	Modified/Technically

	2) : 2020 62196-2	Charging System Part 2 Plugs, Socket â€“ Outlets, Vehicle Connectors and Vehicle Inlets Section 2 Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories			Equivalent
10	IS 17017 (Part 2/Sec 3) : 2020 62196-3	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket â€” Outlets, Vehicle Connectors and Vehicle Inlets Section 3 Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers		-	Modified/Technically Equivalent
11	IS 17017 (Part 2/Sec 6) : 2021 IEC 62196-2-6	Electric Vehicle Conductive 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		-	Modified/Technically Equivalent
12	IS 17017 (Part 2/Sec 7) : 2023	Electric Vehicle Conductive 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 on Electrical Separation		-	Indigenous
13	IS 17017 (Part 21/Sec 1) : 2019 IEC 61851-21-1 : 2017 IEC 61851-21-1:2017	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility (EMC) Requirements Section 1 On-board chargers		-	Identical under dual numbering
14	IS 17017 (Part 21/Sec 2) : 2019 IEC 61851-21-2 : 2018 IEC 61851-21-2:2018	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility (EMC) Requirements Section 2 Off-board chargers		-	Identical under dual numbering
15	IS 17017 (Part 22/Sec 1) : 2021	Electric Vehicle Conductive Charging Systems Part 22 AC Charging Configurations Section 1 - AC Charge Point for Light Electric Vehicle		-	Indigenous
16	IS 17017 (Part 23) : 2021	Electric Vehicle Conductive Charging Systems Part 23 dc		-	Modified/Technically Equivalent

	IEC 61851-23	Electric Vehicle Supply Equipment			
17	IS 17017 (Part 24) : 2021 IEC 61851-24	Electric Vehicle Conductive Charging System Part 24 : Digital Communication between a DC Electric Vehicle Supply Equipment and an Electric Vehicle for control of DC Charging		-	Modified/Technically Equivalent
18	IS 17017 (Part 25) : 2021 IEC 61851-25	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM Part 25: DC EV supply equipment where protection relies on electrical separation		-	Modified/Technically Equivalent
19	IS 17017 (Part 31) : 2024	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM Part 31: ac or dc EV supply equipment for where protection relies on electrical separation		-	Indigenous
20	IS 17896 (Part 1) : 2022 IEC TS 62840-1:2016 IEC TS 62840-1:2016	Electric vehicle battery swap system - Part 1: General and Guidance		-	Identical under dual numbering
21	IS 17896 (Part 2) : 2022 IEC 62840-2:2016 IEC 62840-2:2016	Electric vehicle battery swap system - Part 2: Safety requirements		-	Identical under dual numbering

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards

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
1	ETD 51 (17180)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 4 LIGHT ELECTRIC VE-HICLES SECTION 3 COMMUNICATION PROTOCOL
2	ETD 51 (19366)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 4 LIGHT ELECTRIC VEHICLES SECTION 1 GUIDELINES AND PACK DIMENSIONS
3	ETD 51 (19367)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 4 LIGHT ELECTRIC VEHICLES SECTION 2 CONNECTION SYSTEMS
4	ETD 51 (20356)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 3 CENTRAL MANAGEMENT SYSTEM

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	ETD 51 (21658)	Electric Vehicle Conductive Charging Systems Part 30 Dual Gun dc Electric Vehicle Supply Equipment

Total Published Standards:20 Total Standards Under development:5

Aspect Wise Report

Product : 5
Code of Practices : 3
Methods of Test : 1
Terminology : 0
Dimensions : 4
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 IEC 61851-1	Electric Vehicle Conductive Charging System Part 1 General Requirements
2	IS 17017 (Part 2/Sec 1) : 2020 62196-1	Electric Vehicle Conductive Charging System Part 2 Plugs Socket-Outlets Vehicle Connectors and Vehicle Inlets Section 1 General requirements
3	IS 17017 (Part 22/Sec 1) : 2021 ISO 21084:2019	Electric Vehicle Conductive Charging Systems Part 22 AC Charging Configurations Section 1 - AC Charge Point for Light Electric Vehicle
4	IS 17017 (Part 23) : 2021 ISO/IEC 11160-1:1996	Electric Vehicle Conductive Charging Systems Part 23 dc Electric Vehicle Supply Equipment
5	IS 17017 (Part 25) : 2021 ISO 6658 : 2017	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM Part 25 DC EV supply equipment where protection relies on electrical separation