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## SYNOPSIS

### **IS and Title:**

**IS 17017(Part 2/Sec 1):2020**

Electric Vehicle Conductive Charging System

Part 2: Plugs, Socket-Outlets, VehicleConnectors, and Vehicle intlets

Section 1: General Requirements.

### **SCOPE:**

This section of IS 17017(Part 2) is applicable to plugs, socket-outlets, vehicle connectors, vehicle inlets and cable assemblies for electric vehicles, herein referred to as "accessories", intended for use in conductive charging systems which incorporate control means, with a rated operating voltage not exceeding:

- 690 V a.c. 50 Hz, at a rated current not exceeding 250 A: and
- 1 500 V d.c. at a rated current not exceeding 200 A.

These accessories are intended to be installed by instructed persons or skilled persons only.

These accessories and cable assemblies are intended to be used for circuits specified in IS 17017(Part 1):2018 which operate at different voltages and frequencies and which may include extra-low voltage and communication signals.

These accessories and cable assemblies are to be used at an ambient temperature between -25°C and 55°C.

These accessories are intended to be connected only to cables with copper or copper-alloy conductors.

The accessories covered by this section of IS 17017(Part 2) are for use in certain modes of charging electric vehicles. These modes are defined in IS 17017(Part 1):2018. These definitions and a description of the types of connection (Cases A, B and C), are described in 3.1.10, 3.1.11 and 3.1.12 of IS 17017(Part 1):2018.

This section of IS 17017(Part 2) does not apply to those standardised accessories used in charging systems where the use of such accessories constructed to the requirements of other standards is permitted (e.g. in mode 1 and mode 2). Such standardized accessories may be used for those situations (Mode and Case) identified in IS 17017(Part 1):2018.

This section of IS 17017(Part 2) may be used as a guide for accessories with a lesser number of contacts and lower ratings for use with light duty vehicles.