

(18)

SYNOPSIS

IS and Title:

IS 17017(Part 2/Sec 2):2020

Electric Vehicle Conductive 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.

SCOPE:

This section of IS 17017(Part 2) covers requirements of plugs, socket-outlets, vehicle connectors and vehicle inlets with pins and contact-tubes of standardized configurations, herein referred to as accessories, with nominal rated operating voltage not exceeding 415 V a.c., 50 Hz and a rated current not exceeding 63 A three-phase or 70 A single phase, for use in conductive charging of electric vehicles.

This section of IS 17017(Part 2) covers the basic interface accessories for vehicle supply as specified in IS 17017(Part 2/Sec 1), and intended for use in conductive charging systems for circuits specified in IS 17017(Part 1):2018.

NOTES:

- 1 Electric road vehicles (EV) implies all road vehicles, including plug-in hybrid road vehicles (PHEV), that derive all or part of their energy from RESS.
- 2 These accessories 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 (ELV) and communication signals.
- 3 These accessories may be used for bidirectional power transfer (under consideration).
- 4 This standard applies to accessories to be used in an ambient temperature between -25°C outdoor to +55°C.
- 5 These accessories are intended to be connected only to cables with copper or copper-alloy conductors.
- 6 Vehicle inlet and vehicle connector to this standard are intended to be used for charging in modes 1, 2, and 3, cases B and C. The socket-outlets and plugs covered by this standard are intended to be used for charging mode 3 only, case A and B.
- 7 The modes and permissible connections are specified in IS 17017(Part 2/Sec 1).