

INTRODUCTION

The batteries for plug-in hybrid verhicles can be recharged externally, just like those of electric vehicles. TE Connectivity has developed a charging cable that meets requirements of the international charging standard IEC61851-1/-22.

This defines the on-board vehicle type 1 interfaces for the US and Japan, as well as type 2 for Europe.

The latter provides for two charging modes: With mode 2 charging can take place wherever there is no special charging infrastructure available – at home, for example.

If there is a high-performance charging station available, the mode 3 charging cable can be used.

AMP+ Charging Cable Mode 2 Type 1 US

Technical Features

Conductor Cross-Sections:

0.5 mm² / 2.50 mm²

Voltage Range:

99-121V (single phase)

Operation Temperature:

-30 °C and +50 °C

Current Carrying Capacity:

15A

IP Rating:

IP55 ICCB

IP44 connectors plugged to inlet

Norms & Standards:

IEC 61851-1; SAE J 1772

Versions Domestic Plug:

NEMA 5-15

Temperature Sensor Domestic Plug:

Yes



AMP+ Charging Cable Mode 2 Type 1 Japan

Technical Features

Conductor Cross-Sections:

0.5 mm² / 2.50 mm²

Voltage Range:

180-220V

Operation Temperature:

-30°C and +50°C

Current Carrying Capacity:

15A

IP Rating:

IP55 ICCB

IP44 connectors plugged to inlet

Norms & Standards:

IEC 61851-1; SAE J 1772

Versions Domestic Plug: JIS C 8303 A.16

Temperature Sensor

Domestic Plug:

Yes



AMP+ Charging Cable Mode 2 Type 2 Europe

Technical Features

Conductor Cross-sections:

 $0.5 \text{ mm}^2 / 2.50 \text{ mm}^2$

Voltage Range:

195-260V (single phase)

Operation Temperature:

-30 °C and +50 °C

Current Carrying Capacity:

15A

IP Rating:

IP55 ICCB

IP44 connectors plugged to inlet

Norms & Standards:

IEC 61851-1

Versions domestic plug:

- -CEE7/7 90°
- -CEE7/7 180°
- -CEI 23-16/VII
- -BS 1363
- -SEV 1011
- -AFSNIT 107-2-D1

Temperature sensor domestic plug:

Yes



AMP+ Charging Cable Mode 3 Type 2 / Type 3

Technical Features

Conductor Cross-sections:

0.5 mm² / 2.50 mm²

Voltage Range:

160-240V (single phase)

Operation Temperature:

-30 °C and +50 °C

Current Carrying Capacity:

Type 2 Mode 3: 20A Type 3 Mode 3: 16A

IP Rating:

IP44 connectors plugged to inlet or station

Norms & Standards:

IEC 61851-1

