

الهيئة السعودية للمواصفات والمقاييس والجودة
Saudi Standards, Metrology and Quality Org (SASO)

SASO/DS/IEC 61851-1:2018/AMD1:2022

نظام توصيل الشحن للمركبة الكهربائية – الجزء رقم (1): متطلبات عامة
Electric vehicle conductive charging system - Part 1: General
requirements

ICS: 43.120

THIS DOCUMENT IS A DRAFT AMENDMENT TO SAUDI STANDARD CIRCULATED FOR COMMENT. IT IS, THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED UNTIL APPROVED BY THE BOARD OF DIRECTORS.

Foreword

Saudi Standards, Metrology and Quality Organization (SASO) has adopted Standard No. (IEC 61851-1:2017) "Electric vehicle conductive charging system - Part 1: General requirements" issued by (IEC) in English. This standard has been approved as a Saudi Standard with national modifications.

Saudi Standards, Metrology and Quality Organization (SASO) has approved the Amendment of Standard No. (SASO/DS/IEC 61851-1:2018/AMD1:2022), (Electric vehicle conductive charging system - Part 1: General requirements). This amendment has been approved as a complementary part of the Saudi Standard No (SASO IEC 61851-1:2018). Standard has been varied as indicated to take account of Kingdom of Saudi Arabia conditions.

6. Charging modes and functions

6.2.1 Mode 1

Replace:

The rated values for current and voltage shall not exceed:

- 16 A and 250 V AC, single-phase,
- 16 A and 480 V AC, three-phase.

EV supply equipment intended for Mode 1 charging shall provide a protective earthing Conductor from the standard plug to the vehicle connector.

Current limitations are also subject to the standard socket-outlet ratings described in 9.2

By:

EV supply equipment intended for Mode 1 charging is not permitted in The Kingdom of Saudi Arabia and is not allowed to be imported.

6.2.2 Mode 2

Replace:

Mode 2 is a method for the connection of an EV to a standard socket-outlet of an AC supply network utilizing an AC EV supply equipment with a cable and plug, with a control pilot function and system for personal protection against electric shock placed between the standard plug and the EV.

The rated values for current and voltage shall not exceed:

- 32 A and 250 V AC single-phase;
- 32 A and 480 V AC three-phase.

Current limitations are also subject to the standard socket-outlet ratings described in 9.2.

EV supply equipment intended for Mode 2 charging shall provide a protective earthing conductor from the standard plug to the vehicle connector.

Mode 2 equipment that is destined to be mounted on a wall but is detachable by the user, or to be used in a shock resistant enclosure shall use protection equipment as required by IEC 62752.

By:

Mode 2 is a method for the connection of an EV to a socket-outlet of an AC supply network utilizing an AC EV supply equipment with a cable and plug, with a control pilot function and system for personal protection against electric shock placed between the plug and the EV.

Using EV supply equipment intended for Mode 2 charging is prohibited in public areas and allowed to be used in private areas under the following conditions:

- EV supply equipment equipped with a plug for household and similar use shall be as per SASO IEC 60309 (Series).
- The socket-outlet shall be provided with protection from earth leakage current.
- The socket-outlet shall be as per SASO IEC 60309 (Series).
- The rated values for current and voltage shall be:
 - 16 A and 230 V AC single-phase;

Mode 2 equipment that is destined to be mounted on a wall but is detachable by the user, or to be used in a shock resistant enclosure shall use protection equipment as required by IEC 62752.