
ICS 43.120

English Version

**Electric vehicle conductive charging system - Part 1: General
requirements
(IEC 61851-1:2017/COR1:2023)**

Système de charge conductive pour véhicules électriques -
Partie 1: Exigences générales
(IEC 61851-1:2017/COR1:2023)

Konduktive Ladesysteme für Elektrofahrzeuge - Teil 1:
Allgemeine Anforderungen
(IEC 61851-1:2017/COR1:2023)

This corrigendum becomes effective on 8 December 2023 for incorporation in the English language version of the EN.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Endorsement notice

The text of the corrigendum IEC 61851-1:2017/COR1:2023 was approved by CENELEC as EN IEC 61851-1:2019/AC:2023-12 without any modification.

INTERNATIONAL ELECTROTECHNICAL COMMISSION
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

IEC 61851-1
Edition 3.0 2017-02

IEC 61851-1
Édition 3.0 2017-02

**ELECTRIC VEHICLE CONDUCTIVE CHARGING
SYSTEM –**

Part 1: General requirements

**SYSTÈME DE CHARGE CONDUCTIVE POUR
VÉHICULES ÉLECTRIQUES –**

Partie 1: Exigences générales

CORRIGENDUM 1

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

4 General requirements

Replace the eighth paragraph with the following:

Assemblies for EV supply equipment shall comply with IEC TS 61439-7 with the exceptions or additions as indicated in Clause 12.

12.9 Damp heat functional test

Replace the second paragraph with the following:

Conditioning:

- for indoor units, 6 cycles of 24 h each to a damp heat cycling test according to IEC 60068-2-30 (Test Db) at $(40 \pm 3)^\circ\text{C}$ and relative humidity of 95 %;
- for outdoor units, two 5-day periods, with each period consisting of 5 cycles of 24 h each to a damp heat cycling test according to IEC 60068-2-30 (Test Db) at $(40 \pm 3)^\circ\text{C}$ and relative humidity of 95 %.

12.11 Mechanical strength

Replace, in the second paragraph, the first dashed item with the following:

- the IP degree according to 12.4 is not impaired;

Table A.6 – List of sequences

Replace, in sequence 2.1 Unplug at state Bx, in the “Conditions” column, the text for (19) and (20) with the following:

(19) EV connected to the EV supply equipment in state B

(20) Plug disconnected from the EV supply equipment or vehicle connector disconnected from the vehicle inlet

The EV supply equipment shall allow removal of the plug automatically, at a maximum of 5 s, when entering state A (case A or B) unless the locking was initiated through user interaction (e.g. authorization). Then unlatching / unlocking can be done only by using the adequate user interaction or both.

In case A, EV with attached cable, a switch may be added on the control pilot circuit, on the EV side (cable, plug, vehicle), to simulate the EV disconnection (state A).

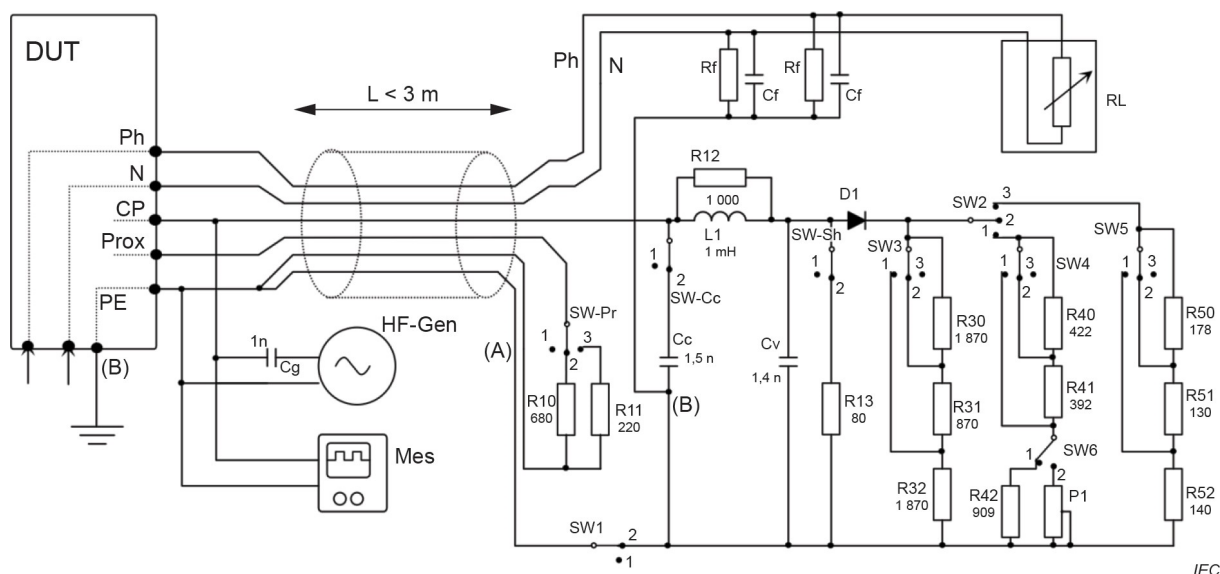
A.4.9 Test of short-circuit values of the voltage

Replace the second paragraph with the following:

The test shall be initiated with $R_{2\text{test}}$ and $R_{3\text{test}}$ at the nominal value. When state C or D has been attained for at least 5 s, a supplementary resistance of 80 Ω is switched to connect between the control pilot conductor and the protective conductor.

Figure A.8 – Example of a test circuit (EV simulator)

In the figure, replace the resistor values for R_{13} , R_{31} and R_{32} as follows:



Replace, in NOTE 2, the description of resistance R_3 with the following:

The resistance R_3 in Figure A.1 is simulated by SW3 and resistors R_{30} (1 870 Ω), R_{31} (870 Ω) and R_{32} (1 870 Ω) as follows:

- Position 2: $R_{3\text{test}}$ has its nominal value;

- Position 1: $R3_{\text{test}}$ has the minimum test value;
- Position 3: $R3_{\text{test}}$ has the maximum test value.

C.2 Circuits diagrams for Mode 1, Mode 2 and Mode 3, using a basic single phase vehicle coupler

Delete Figure C.3.

Replace the first paragraph with the following:

Figures C.1, C.2 and C.4 below show the application of a single phase basic interface fitted with a switch on the proximity circuits.

Replace the fourth paragraph with the following:

Figures C.1, C.2 and C.4 can also be realized with a connector that lacks a switch provided the switch S3 is not required.

Replace the ninth paragraph with the following:

Both Mode 2 diagram shown in Figure C.2 and Mode 3 diagram shown in Figure C.4 have been drawn with a hard wired control pilot functions as described in Annex A. The basic functions described in Annex A are represented by R1, R2, R3, D and S2 (see Figure A.1). The values indicated in Annex A should be used (see Table A.3).

D.10.6 Test of short circuit between the control pilot conductor and the protective conductor

Replace the third paragraph with the following:

A supplementary resistance of 80 Ω is switched to connect the control pilot conductor and the protective conductor.