

# Konduktive opladningssystemer til elkøretøjer – Del 1: Generelle krav

Electric vehicle conductive charging system –  
Part 1: General requirements

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Electric vehicle conductive charging system - Part 1:  
General requirements  
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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.



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modification.

INTERNATIONAL ELECTROTECHNICAL COMMISSION  
 COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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**IEC 61851-1**  
 Edition 3.0 2017-02

**ELECTRIC VEHICLE CONDUCTIVE CHARGING  
 SYSTEM –**

**Part 1: General requirements**

**IEC 61851-1**  
 Édition 3.0 2017-02

**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  $(40 \pm 3)$  °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  $(40 \pm 3)$  °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).

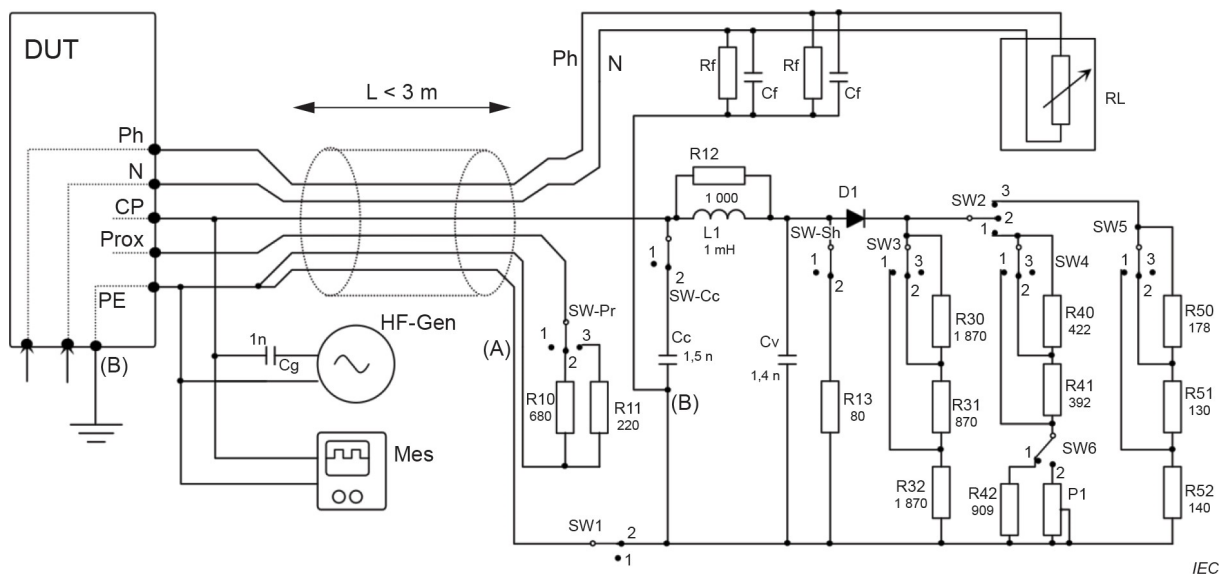
**A.4.9 Test of short-circuit values of the voltage**

Replace the second paragraph with the following:

The test shall be initiated with  $R_{2\_test}$  and  $R_{3\_test}$  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 R13, R31 and R32 as follows:



Replace, in NOTE 2, the description of resistance R3 with the following:

The resistance R3 in Figure A.1 is simulated by SW3 and resistors R30 (1 870 Ω), R31 (870 Ω) and R32 (1 870 Ω) as follows:

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

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- 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  $\Omega$  is switched to connect the control pilot conductor and the protective conductor.