MALAYSIAN STANDARD

MS IEC 61851-21-2:2021

Electric vehicle conductive charging system – Part 21-2: Electric vehicle requirements for conductive connection to an AC/DC supply – EMC requirements for off-board electric vehicle charging systems
(IEC 61851-21-2:2018, IDT)
(First revision)

ICS: 43.120

Descriptors: electric vehicle, EV, charging system, requirements

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

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Committee representation

The National Standards Committee on Generation, Transmission and Distribution of Energy (NSC E) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Department of Standards Malaysia (Secretariat)
Federation of Malaysian Manufacturers
Jabatan Kerja Raya
Malaysia Nuclear Power Corporation
Malaysian Cable Manufacturers Association
Malaysian Electrical Appliances and Distributors Association
Malaysian Green Technology and Climate Change Centre
Persatuan Kontraktor Elektrikal dan Mekanikal Melayu Malaysia
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SIRIM QAS International Sdn Bhd
Suruhanjaya Komunikasi dan Multimedia Malaysia
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Sustainable Energy Development Authority Malaysia
Tenaga Nasional Berhad
The Electrical and Electronics Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Malaya
Universiti Teknologi Malaysia

The Technical Committee on Electric Vehicle (EV) charging and Rechargeable Energy Storage System (RESS) (TC/E/12) which recommended the adoption of the IEC Standard as Malaysian Standard consists of representatives from the following organisations:

Department of Standards Malaysia (Secretariat)
Jabatan Kerja Raya
Malaysian Automotive Association
Malaysian Green Technology and Climate Change Centre (Chairman)
Perusahaan Otomobil Nasional Sdn Bhd
SIRIM QAS International Sdn Bhd
Suruhanjaya Komunikasi dan Multimedia Malaysia
Suruhanjaya Tenaga
Tenaga Nasional Berhad Research Sdn Bhd
The Electrical and Electronics Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Malaya

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National foreword

The adoption of the IEC Standard as a Malaysian Standard was recommended by the Technical Committee on Electric Vehicle (EV) charging and Rechargeable Energy Storage System (RESS) (TC/E/12) under the authority of the Generation, Transmission and Distribution of Energy (NSC E).

This Malaysian Standard is identical with IEC 61851-21-2:2018, *Electric vehicle conductive charging system – Part 21-2: Electric vehicle requirements for conductive connection to an AC/DC supply – EMC requirements for off-board electric vehicle charging systems*, published by the International Electrotechnical Commission (IEC). However, for the purposes of this Malaysian Standard, the following apply:

a) in the source text, "this International Standard " should read "this Malaysian Standard";

b) the comma which is used as a decimal sign (if any), to read as a point;

c) the basis IEC 61851-21-2 is printed in English language; and

d) reference to International Standards should be replaced by corresponding Malaysian Standards as follows:

Referenced International Standards	Corresponding Malaysian Standards
IEC 62053-21:2003, *Electricity metering equipment (a.c.) – Particular requirements – Part 21: Static meters for active energy (classes 1 and 2)*	MS 62053-21:2009, *Electricity metering equipment (a.c.) – Particular requirements – Part 21: Static meters for active energy (classes 1 and 2) (Second Revision)* (IEC 62053-21:2003, MOD)
IEC 61000-3-12:2011, *Electromagnetic compatibility (EMC) – Part 3-12 – Limits – Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and ≤ 75 A per phase*	MS IEC 61000-3-12:2012, *Electromagnetic compatibility (EMC) – Part 3-12 – Limits – Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and ≤ 75 A per phase* (IEC 61000-3-12:2011, IDT)
IEC 61000-4-11:2004, *Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests* IEC 61000-4-11:2004/AMD1:2017	MS 61000-4-11:2015, *Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests* (Second Revision) (IEC 61000-4-11:2004, MOD)
IEC 61000-4-34:2005, *Electromagnetic compatibility (EMC) – Part 4-34: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase* IEC 61000-4-34:2005/AMD1:2009	MS 61000-4-34:2014, *Electromagnetic compatibility (EMC) – Part 4-34: Testing and measurement techniques – V*oltage dips, short interruptions and voltage variations immunity tests for equipment with mains current more than 16A per phase (First Revision) (IEC 61000-4-34:2009, MOD)

This Malaysian Standard cancels and replaces MS IEC 61851-21:2013.

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, and wording (or is an identical translation) of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and structure although it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21-1.

