IEC 61800-5-2

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INTERNATIONAL STANDARD

AMENDMENT 1

Adjustable speed electrical power drive systems -
Part 5-2: Safety requirements - Functional

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IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Adjustable speed electrical power drive systems - Part 5-2: Safety requirements - Functional

AMENDMENT 1

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Amendment 1 to IEC 61800-5-2:2016 has been prepared by SC 22G: Adjustable speed electric power drive systems (PDS), of IEC technical committee 22: Power electronic systems and equipment.

The text of this Amendment is based on the following documents:

Draft	Report on voting
22G/532/CDV	22G/535/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

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– reconfirmed,
– withdrawn, or
– revised.

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1 Scope

Delete, in the seventh existing paragraph, the last bullet point item about the security aspects.

2 Normative references

Add the following new reference:

IEC TS 63074:2023, *Safety of machinery - Security aspects related to functional safety of safety-related control systems*

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Replace the existing references with the following new references:

IEC 60204-1:2016, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements*
IEC 60204-1:2016/AMD1:2021

IEC 61000-4-3:2020, *Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-6:2023, *Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields*

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

IEC 61800-1:2021, *Adjustable speed electrical power drive systems - Part 1: General requirements - Rating specifications for low voltage adjustable speed DC power drive systems*

IEC 61800-2:2021, *Adjustable speed electrical power drive systems - Part 2: General requirements - Rating specifications for adjustable speed AC power drive systems*

IEC 61800-3:2022, *Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods for PDS and machine tools*

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IEC 61800-5-1:2022, *Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy*

ISO 13849-1:2023, *Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design*

Replace the existing reference "IEC 61400-21:2008" with the following new reference:

IEC 61400-21-1:2019, *Wind energy generation systems - Part 21-1: Measurement and assessment of electrical characteristics - Wind turbines*

Delete the existing reference "IEC 61800-4".

3 Terms and definitions

Table 1 – Alphabetical list of terms and definitions

Add the following new row:

				3.34	security risk

3.1
basic drive module
BDM

*Replace, in the existing source, the reference "*IEC 61800-3:2004/AMD1:2011*" with "*IEC 61800-3:2022*".*

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3.2
category

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Replace the existing source with the following new source:

[SOURCE: ISO 13849-1:2023, 3.1.4, modified – "Subsystem" replaced with "safety-related parts of a PDS(SR)".]

3.3
complete drive module
CDM

Delete the existing note to entry.

*Replace, in the existing source, the reference "*IEC 61800-3:2004/AMD1:2011*" with "*IEC 61800-3:2022*".*

3.18
Performance Level
PL

Replace the existing source with the following new source:

[SOURCE: ISO 13849-1:2023, 3.1.5, modified – "*Safety function*" replaced with "*safety-subfunction*".]

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