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BSI Standards Publication

Data sheet for photovoltaic inverters

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National foreword

This British Standard is the UK implementation of EN 50524:2021. It supersedes BS EN 50524:2009, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/82, Photovoltaic Energy Systems.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

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and corrigenda (if any)

English Version

Data sheet for photovoltaic inverters

Fiche technique pour les onduleurs photovoltaïques

Datenblattangaben für Photovoltaik-Wechselrichter

This European Standard was approved by CENELEC on 2021-07-26. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

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European foreword

This document (EN 50524:2021) has been prepared by CLC/TC 82 "Solar photovoltaic energy systems".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-07-26
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2024-07-26

This document supersedes EN 50524:2009 and all of its amendments and corrigenda (if any).

EN 50524:2021 includes the following significant technical changes with respect to EN 50524:2009:

- name plate requirements removed;
- revised list of electrical parameters to be indicated;
- information requirements for systems using external DC/DC converters included;
- maximum noise emission value harmonized with measuring method specified in EN 62109-1.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

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1 Scope

This document describes data sheet information for photovoltaic inverters in grid parallel operation.

The intent of this document is to provide minimum information required to configure a safe and optimal system with photovoltaic inverters.

In this context, data sheet information is a technical description separate from the photovoltaic inverter.

NOTE The name plate is a sign of durable construction at or in the photovoltaic inverter. Its content can be found in an earlier version of this standard. For the sake of unique definition, it is sufficient defined in EN 62109-1 and EN 62109-2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50530, *Overall efficiency of grid connected photovoltaic inverters*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

EN 60664-1, *Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests (IEC 60664-1)*

EN IEC 60721-3-3, *Classification of environmental conditions - Part 3-3: Classification of groups of environmental parameters and their severities - Stationary use at weatherprotected locations (IEC 60721-3-3)*

EN IEC 60721-3-4, *Classification of environmental conditions - Part 3-4: Classification of groups of environmental parameters and their severities - Stationary use at non-weatherprotected locations (IEC 60721-3-4)*

EN 61683, *Photovoltaic systems - Power conditioners - Procedure for measuring efficiency (IEC 61683)*

EN 62109-1, *Safety of power converters for use in photovoltaic power systems - Part 1: General requirements*

ISO 216, *Writing paper and certain classes of printed matter - Trimmed sizes - A and B series, and indication of machine direction*