



**International
Standard**

ISO 24194

**Solar energy — Collector fields —
Check of performance**

AMENDMENT 1

*Energie solaire — Champs de capteurs — Vérification de la
performance*

AMENDEMENT 1

**First edition
2022-05**

**AMENDMENT 1
2024-03**

STANDARDSISO.COM : Click to view the full PDF of ISO 24194:2022/Amd 1:2024

STANDARDSISO.COM : Click to view the full PDF of ISO 24194:2022/Amd 1:2024



COPYRIGHT PROTECTED DOCUMENT

© ISO 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 180, *Solar energy*, Subcommittee SC 4, *Systems - Thermal performance, reliability and durability*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 312, *Thermal solar systems and components*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

STANDARDSISO.COM : Click to view the full PDF of ISO 24194:2022/Amd 1:2024

Solar energy — Collector fields — Check of performance

AMENDMENT 1

4 Symbols

Replace $a_{1,\Delta Q}$ - with

a_1

Replace $T_{\Delta Q}$ - with

a_2

Replace $v_{\Delta Q}$ - with

a_3

Replace T_S - with

a_4

Replace v - with

a_6

Replace v_{IR} - with

a_7

Replace I_{DN} - with

G_{bn}

Replace I_L - with

E_L

Replace $G_{hem,tot}$ - with

H_{hem}

Replace the unit W/m of q_{1-pipe} - with

W/(m·K)

5.2.1 General

Replace symbol $a_{1,\Delta Q}$ - with

a_1

Replace symbol $T_{\Delta Q}$ - with

a_2

5.2.2 *Non-concentrating collectors – Formula (1)*

Replace symbol $a_{1,\Delta Q}$ – with

$$a_1$$

Replace symbol $T_{\Delta Q}$ – with

$$a_2$$

5.2.3 *Non-or low-focussing collectors – Formula (2)*

Replace symbol $a_{1,\Delta Q}$ – with

$$a_1$$

Replace symbol $T_{\Delta Q}$ – with

$$a_2$$

5.5.1 *Shadows on fixed collectors in rows*

Replace symbol G_{DN} in figure 1– with

$$G_d$$

5.7 *Example of setting up an equation for calculating performance estimate*

Replace symbol $a_{1,\Delta Q}$ both in the listing and the formula– with

$$a_1$$

Replace symbol $T_{\Delta Q}$ – with

$$a_2$$

6.2.1 *General*

Replace symbol $a_{1,\Delta Q}$ – with

$$a_1$$

Replace symbol $T_{\Delta Q}$ – with

$$a_2$$

6.2.2 *Non-tracking and non-concentrating collectors – Formula (20)*

Replace symbol $a_{1,\Delta Q}$ – with

$$a_1$$

Replace symbol $T_{\Delta Q}$ – with