


ZERTIFIKAT

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|----------------------------|---|
| Zertifikatinhaber | Rotex Heating Systems GmbH Postfach 30 74361 Güglingen DEUTSCHLAND |
| Herstellwerk | Güglingen |
| Produkt | Sonnenkollektoren |
| Typ, Modell | V26P, H26P, V21P |
| Prüfgrundlage(n) | DIN EN 12975-1:2011-01 DIN EN ISO 9806:2018-04 SOLAR KEYMARK Programmregeln (2019-03) |
| Konformitätszeichen |  |
| Registernummer | 011-7S924 F |
| Gültig bis | 2024-11-30 |
| Nutzungsrecht | Dieses Zertifikat berechtigt zum Führen des oben stehenden Konformitätszeichens in Verbindung mit der genannten Registernummer. Weitere Angaben siehe Anhang. |

ANHANG

Seite 1 von 1

Zertifikat

011-7S924 F von 2020-01-07

Technische Angaben

Siehe Datenblatt für den Prüfbericht von 2019-11-27

Bemerkung(en):


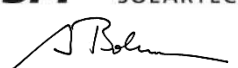
- Die Prüfung der Frostbeständigkeit nach DIN EN ISO 9806, Abschnitt 15 ist nicht erforderlich. Laut Herstellerangabe dürfen die zertifizierten Kollektoren in frostgefährdeten Gebieten nur unter Verwendung geeigneter Frostschutzmittel oder geeigneter Frostschutz-Regeleinrichtung betrieben werden.

**Prüflaboratorium/
Überwachungsstelle**

Institut für Solartechnik SPF
Hochschule für Technik
Oberseestraße 10
8640 Rapperswil
SCHWEIZ

Prüfbericht(e)

Nr. C1796ISO, Nr. C1797ISO, Nr. C1798ISO von 2019-11-27

| | | | | | | | | | | | | | | |
|--|--|----------------------|--|--|---|----------------------|------------------------------------|----------------------|--|----------------------|--|------------------------------------|------------------------------------|----------------|
| Annex to Solar Keymark Certificate | | | | | | Licence Number | | 011-7S1016 F | | | | | | |
| | | | | | | Date issued | | 2019-12-20 | | | | | | |
| | | | | | | Issued by | | DIN CERTCO | | | | | | |
| Licence holder | | Daikin Europe N.V. | | | | Country | | Belgium | | | | | | |
| Brand (optional) | | - | | | | Web | | www.daikin.eu | | | | | | |
| Street, Number | | Zandvoordestraat 300 | | | | E-mail | | - | | | | | | |
| Postcode, City | | BE-8400 Oostende | | | | Tel | | +32 59 55 81 11 | | | | | | |
| Collector Type | | | | | | Flat plate collector | | | | | | | | |
| Collector name | | | | | Gross area (A _G) m ² | Gross length mm | Gross width mm | Gross height mm | Power output per collector G _b = 850 W/m ² , G _d = 150 W/m ² & u = 1.3 m/s θ _m - θ _a | | | | | |
| | | | | | | | | | 0 K W | 10 K W | 30 K | 50 K | 70 K | 120 K |
| V21P | | | | | 2.01 | 2'000 | 1'006 | 85 | 1'426 | 1'338 | 1'156 | 963 | 762 | 215 |
| V26P | | | | | 2.60 | 2'000 | 1'300 | 85 | 1'844 | 1'731 | 1'495 | 1'246 | 985 | 278 |
| H26P | | | | | 2.60 | 1'300 | 2'000 | 85 | 1'844 | 1'731 | 1'495 | 1'246 | 985 | 278 |
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| Power output per m ² gross area | | | | | | | | 709 | 666 | 575 | 479 | 379 | 107 | |
| Performance parameters test method | | | | | Steady state - outdoor | | | | | | | | | |
| Performance parameters (related to A _G) | | | | | η ₀ , b | a ₁ | a ₂ | a ₃ | a ₄ | a ₅ | a ₆ | a ₇ | a ₈ | K _d |
| Units | | | | | - | W/(m ² K) | W/(m ² K ²) | J/(m ³ K) | - | J/(m ² K) | s/m | W/(m ² K ⁴) | W/(m ² K ⁴) | - |
| Test results | | | | | 0.719 | 4.30 | 0.006 | 0.000 | 0.00 | 0 | 0.000 | 0.00 | 0.0E+00 | 0.91 |
| Incidence angle modifier test method | | | | | Steady state - outdoor | | | | | | | | | |
| Incidence angle modifier | | | | | Angle | 10° | 20° | 30° | 40° | 50° | 60° | 70° | 80° | 90° |
| Transversal | | | | | K _{θT, coll} | 1.00 | 0.99 | 0.99 | 0.98 | 0.95 | 0.89 | 0.69 | 0.37 | 0.00 |
| Longitudinal | | | | | K _{θL, coll} | 1.00 | 1.00 | 1.00 | 0.99 | 0.97 | 0.93 | 0.82 | 0.57 | 0.00 |
| Heat transfer medium for testing | | | | | Water-Glycole | | | | | | | | | |
| Flow rate for testing (per gross area, A _G) | | | | | dm/dt | | 0.023 | | kg/(sm ²) | | | | | |
| Maximum temperature difference during thermal performance test | | | | | (θ _m -θ _a) _{max} | | 90 | | K | | | | | |
| Standard stagnation temperature (G = 1000 W/m ² ; θ _a = 30 °C) | | | | | θ _{stg} | | 200 | | °C | | | | | |
| Maximum operating temperature | | | | | θ _{max op} | | 98 | | °C | | | | | |
| Maximum operating pressure | | | | | p _{max, op} | | 600 | | kPa | | | | | |
| Testing laboratory | | | | | SPF Testing, CH-8640 Rapperswil, Switzerland | | | | www.spf.ch | | | | | |
| Test report(s) | | | | | C1796ISO C1797ISO C1798ISO | | | | Dated | | 27.11.2019 27.11.2019 27.11.2019 | | | |
| Comments of testing laboratory | | | | | Datasheet version: 6.1, 2019-09-26 | | | | | | | | | |
| | | | | |  INSTITUT FÜR SOLARTECHNIK  | | | | | | | | | |
| DIN CERTCO • Alboinstraße 56 • 12103 Berlin, Germany Tel: +49 30 7562-1131 • Fax: +49 30 7562-1141 • E-Mail: info@dincertco.de • www.dincertco.de | | | | | | | | | | | | | | |

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| Annex to Solar Keymark Certificate Supplementary Information | | | | | | | Licence Number | | | 011-7S1016 F | | | |
| | | | | | | | Issued | | | 2019-12-20 | | | |
| Annual collector output in kWh/collector at mean fluid temperature ϑ_m | | | | | | | | | | | | | |
| Standard Locations | | Athens | | | Davos | | | Stockholm | | | Würzburg | | |
| Collector name | ϑ_m | 25°C | 50°C | 75°C | 25°C | 50°C | 75°C | 25°C | 50°C | 75°C | 25°C | 50°C | 75°C |
| V21P | | 2'264 | 1'505 | 922 | 1'653 | 1'080 | 643 | 1'222 | 747 | 426 | 1'336 | 805 | 453 |
| V26P | | 2'929 | 1'946 | 1'193 | 2'139 | 1'396 | 832 | 1'581 | 966 | 551 | 1'729 | 1'042 | 586 |
| H26P | | 2'929 | 1'946 | 1'193 | 2'139 | 1'396 | 832 | 1'581 | 966 | 551 | 1'729 | 1'042 | 586 |
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