# Keymark Certificate

078/000427

AENOR certifies that the organization

## BDR THERMEA GROUP B.V.

| | |
|---|---|
| registered office | KANAAL ZUID, 106 7332 BD APELDOORN (Países Bajos) |
| supplies | **Factory made thermal solar heating systems** |
| in compliance with | UNE-EN 12976-1:2020 (EN 12976-1:2017) |
| Trade Mark | BAXI STS+ 150 2.0, BAXI STS+ 200 2.0, BAXI STS+ 200 2.5, BAXI STS+ 300 2.0, BAXI STS+ 300 2.5 |
| Technical information | Specified in Annexes to the Certificate |
| Production site | CL MANGANÈS, 2 08755 CASTELLBISBAL (Barcelona - España) |
| Certification scheme | In order to grant this Certificate, AENOR has tested the product and has verified the quality system implemented for its manufacture. AENOR performs these tasks periodically while the Certificate has not been cancelled, in accordance with Specific Rules RP 078.02.<br><br>This certificate supersedes 078/000427, dated 2025-02-17 |
| First issued on | 2025-02-17 |
| Modified on | 2025-02-28 |
| Validity | 2030-02-17 |

Rafael GARCÍA MEIRO
CEO

ENAC
CERTIFICACIÓN
ISO 17065
Nº1 / C-PR271

**AENOR CONFÍA S.A.U.**
Génova, 6. 28004 Madrid. España
Tel. 91 432 60 00.- www.aenor.com

| Summary of | EN12976-2 | SOLAR SYSTEM test results | Licence Number | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

| | | | | | |
|---|---|---|---|---|---|
| Company | BDR THERMEA GROUP B.V. | | Country | NETHERLANDS | |
| Brand (optional) | BAXI | | Website | http://www.bdrthermea.com | |
| Street | KANAAL ZUID, 106 | | E-mail | oscar.mongro@BDRThermea.com | |
| Postal Code | 7332 BD | APELDOORN (Güeldres) | Tel. / Fax | +34 | 936.828.040 |

| System classification | |
|---|---|
| Application(s) | Hot water |
| Solar loop, circulation principle | Thermosyphon |
| Direct solar loop / heat exchanger | Heat exchanger |
| Open, vented or closed solar loop | Closed |
| Drain back/down | Always filled (no drain) |
| Store location | Outdoor |
| Store orientation (of main axis) | Other |
| Type of auxiliary heating (internal back-up heat) | None |
| If other auxiliary/internal back-up heating, please specifiy: | |
| Solar+supplementary OR Solar-only / Solar pre-heat | Solar only / Solar preheat |

| Collector(s) | | | | Heat store(s) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Company | BAXI | | | Company | BAXI | | | | | |
| *Keymark lic.no. if available* | 078/000423 | | | *Keymark lic.no. if available* | - | | | | | |
| Collector name | Per module | | | Store name | Total nominal volume | Gross height | Gross width | Gross depth | Auxiliary heated volume | Electrical aux. heating power |
| | Gross Area (AG) | Gross length | Gross width | | | | | | | |
| | m² | mm | mm | | litres | mm | mm | mm | litres | kW |
| BAXI SLIM NEO 2.0 | 2,02 | 1757 | 1151 | STS+ 150L | 145 | 1005 | 580 | 580 | - | - |
| BAXI SLIM NEO 2.5 | 2,52 | 2191 | 1151 | STS+ 200L | 190 | 1255 | 580 | 580 | - | - |
| | | | | STS+ 300L | 270 | 1725 | 580 | 580 | - | - |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Solar loop controller | | | Solar loop fluid | | |
|---|---|---|---|---|---|
| *Keymark lic.no. if available* | + | | Recommended/required | Required | |
| Company | + | | Company | - | |
| Name | | | Name | Propylen-glycol solution | |
| Solar loop pump - power range | - W | to - W | Freezing point | * | °C |

System family overview

| Collector name | Number of collectors in each configuration for each store | | |
|---|---|---|---|
| | Store name | | |
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |

| Comments of test lab |
|---|
| * The required concentration is between 0...45% according to local climate. |

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

| | | | | | |
|---|---|---|---|---|---|
| Company | BDR THERMEA GROUP B.V. | | Country | NETHERLANDS | |
| Brand (optional) | BAXI | | Website | http://www.bdrthermea.com | |
| Street | KANAAL ZUID, 106 | | E-mail | oscar.mongro@BDRThermea.com | |
| Postal Code | 7332 BD | APELDOORN (Güeldres) | Tel. / Fax | +34 | 936828040 |

**Parameters for systems extrapolation (Annex D)**

| Collector of measured system | | Storage tank of measured system | |
|---|---|---|---|
| $A_{ref}$ [$m^2$] | 1,92 | Volume [l] | 152 |
| $\eta_0$ | 0,667 | $A_{hx}$ [$m^2$] | 0,84 |
| $a_1$ [$W/Km^2$] | 3,335 | Piping | |
| $a_2$ [$W/Km^2$] | 0,025 | | |
| IAM (50º) | 0,940 | $U_{loop,p}$ | 0,77 |

**System parameters**

| Name of System Configuration | Tested/Extrapol | $A_c$* [$m^2$] | $u_c$* [$W/Km^2$] | $U_s$ [W/K] | $C_s$ [MJ/K] | $S_c$ [-] | $D_L$ [-] | $f_{aux}$ [-] |
|---|---|---|---|---|---|---|---|---|
| **BAXI STS+ 150 2.0** | ▼ | 1,162 | 7,682 | 2,510 | 0,640 | 0,205 | 0,038 | 0,00 |
| BAXI STS+ 200 2.0 | ▼ | 1,172 | 7,691 | 2,995 | 0,834 | 0,205 | 0,038 | 0,00 |
| BAXI STS+ 200 2.5 | ▼ | 1,455 | 7,620 | 2,995 | 0,834 | 0,205 | 0,038 | 0,00 |
| BAXI STS+ 300 2.0 | ▼ | 2,321 | 7,460 | 3,906 | 1,187 | 0,205 | 0,038 | 0,00 |
| BAXI STS+ 300 2.5 | ▼ | 2,876 | 7,362 | 3,906 | 1,187 | 0,205 | 0,038 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |
| | ▼ | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 | 0,00 |

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ISO 9459-5 (DST) |

| Comments of test lab |
|---|
| No comments |

*All values are subject to some uncertainty; e.g. the uncertainty on system output is typically in the range of ± 5 % to ± 15 %*

*Version 4.5, 2017-10-24*

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

| | | | |
|---|---|---|---|
| Company | BDR THERMEA GROUP B.V. | Country | NETHERLANDS |
| Brand (optional) | BAXI | Website | http://www.bdrthermea.com |
| Street | KANAAL ZUID, 106 | E-mail | oscar.mongro@BDRThermea.com |
| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

| Name of system configuration | | | | | BAXI STS+ 150 2.0 | |
|---|---|---|---|---|---|---|
| Collector name | BAXI SLIM NEO 2.0 | No. Collectors | 1 | Storage name | STS+ 150L | |

**Calculated annual results for "solar-only / preheat system"**

| Location | Qd,sh | Daily drawoff 140 l | | | | Daily drawoff 170 l | | | | Daily drawoff 200 l | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol |
| | MJ/y | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % |
| Stockholm SE | - | 7821 | 3469 | - | 44 | 9492 | 3721 | - | 39 | 11164 | 3847 | - | 34 |
| WürzburgDE | - | 7506 | 3595 | - | 48 | 9114 | 3942 | - | 43 | 10691 | 4068 | - | 38 |
| Davos CH | - | 8483 | 5046 | - | 59 | 10281 | 5361 | - | 52 | 12110 | 5456 | - | 45 |
| Athens GR | - | 5834 | 4510 | - | 77 | 7064 | 5077 | - | 72 | 8326 | 5424 | - | 65 |

**Perf. indicators for the table above**

| | | |
|---|---|---|
| Qd,sh | MJ/y | **Not relevant for solar domestic hot water system** |
| Qd | MJ/y | **Annual heat demand for domestic hot water** |
| QL | MJ/y | **Annual heat energy delivered by the solar system** |
| Qpar | MJ/y | **Annual parasitic energy: (electricity for pumps/controllers)** |
| $f_{sol}=Q_L/Q_d$ | - | **Solar fraction** |

| Ref. conditions | | Stockholm SE | Würzburg DE | Davos CH | Athens GR |
|---|---|---|---|---|---|
| | G | 1.157 | 1.230 | 1.684 | 1.736 |
| | Ta,ave | 7,5 | 9,0 | 3,2 | 18,5 |
| | Tc,ave | 8,5 | 10,0 | 5,4 | 17,8 |
| | ± ΔTc | 6,4 | 3,0 | 0,8 | 7,4 |

| | | |
|---|---|---|
| G | kWh/m² | **Annual irradiation South, 45°** |
| Ta,ave | °C | **Annual average outdoor air temperature** |
| Tc,ave | °C | **Annual average mains cold water temp.** |
| ΔTc | K | **Seasonal variation of Tc** |
| Th | 45 °C | **Desired hot water temperature (mixing valve temperature).** |

| Max. operating press. - collector side | 250 | kPa | Max. operating press. - tank side | 800 | kPa |
|---|---|---|---|---|---|

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ISO 9459-5 (DST) |

**Comments of test lab**

No comments

*All values are subject to some uncertainty; e.g. the uncertainty on system output is typically in the range of ± 5 % to ± 15 %*

*Version 4.5, 2017-10-24*

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

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| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

| Name of system configuration | | | | | |
|---|---|---|---|---|---|
| | | | | BAXI STS+ 200 2.0 | |
| Collector name | BAXI SLIM NEO 2.0 | No. Collectors | 1 | Storage name | STS+ 200L |

**Calculated annual results for "solar-only / preheat system"**

| Location | Qd,sh | Daily drawoff 170 l | | | | Daily drawoff 200 l | | | | Daily drawoff 250 l | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol |
| | MJ/y | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % |
| Stockholm SE | - | 9492 | 3753 | - | 40 | 11164 | 3974 | - | 36 | 13939 | 4131 | - | 30 |
| WürzburgDE | - | 9114 | 3974 | - | 44 | 10691 | 4226 | - | 40 | 13371 | 4415 | - | 33 |
| Davos CH | - | 10281 | 5361 | - | 52 | 12110 | 5645 | - | 47 | 15137 | 5803 | - | 38 |
| Athens GR | - | 7064 | 5109 | - | 72 | 8326 | 5582 | - | 67 | 10407 | 6118 | - | 59 |

**Perf. indicators for the table above**

| | | |
|---|---|---|
| Qd,sh | MJ/y | **Not relevant for solar domestic hot water system** |
| Qd | MJ/y | **Annual heat demand for domestic hot water** |
| QL | MJ/y | **Annual heat energy delivered by the solar system** |
| Qpar | MJ/y | **Annual parasitic energy: (electricity for pumps/controllers)** |
| $f_{sol}=Q_L/Q_d$ | - | **Solar fraction** |

| Ref. conditions | | Stockholm SE | Würzburg DE | Davos CH | Athens GR |
|---|---|---|---|---|---|
| | G | 1.157 | 1.230 | 1.684 | 1.736 |
| | Ta,ave | 7,5 | 9,0 | 3,2 | 18,5 |
| | Tc,ave | 8,5 | 10,0 | 5,4 | 17,8 |
| | ± ΔTc | 6,4 | 3,0 | 0,8 | 7,4 |

| | | |
|---|---|---|
| G | kWh/m² | **Annual irradiation South, 45°** |
| Ta,ave | °C | **Annual average outdoor air temperature** |
| Tc,ave | °C | **Annual average mains cold water temp.** |
| ΔTc | K | **Seasonal variation of Tc** |
| Th | 45 °C | **Desired hot water temperature (mixing valve temperature).** |

| | | | | |
|---|---|---|---|---|
| Max. operating press. - collector side | 250 | kPa | Max. operating press. - tank side | 800 kPa |

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ISO 9459-5 (DST) |

| Comments of test lab |
|---|
| No comments |

*All values are subject to some uncertainty; e.g. the uncertainty on system output is typically in the range of ± 5 % to ± 15 %*

*Version 4.5, 2017-10-24*

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

| | | | |
|---|---|---|---|
| Company | BDR THERMEA GROUP B.V. | Country | NETHERLANDS |
| Brand (optional) | BAXI | Website | http://www.bdrthermea.com |
| Street | KANAAL ZUID, 106 | E-mail | oscar.mongro@BDRThermea.com |
| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

| Name of system configuration | | | | | BAXI STS+ 200 2.5 | |
|---|---|---|---|---|---|---|
| Collector name | BAXI SLIM NEO 2.5 | No. Collectors | 1 | Storage name | STS+ 200L | |

**Calculated annual results for "solar-only / preheat system"**

| Location | Qd,sh | Daily drawoff 170 l | | | | Daily drawoff 200 l | | | | Daily drawoff 250 l | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol |
| | MJ/y | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % |
| Stockholm SE | - | 9492 | 4320 | - | 46 | 11164 | 4636 | - | 42 | 13939 | 4888 | - | 35 |
| WürzburgDE | - | 9114 | 4478 | - | 49 | 10691 | 4857 | - | 45 | 13371 | 5172 | - | 39 |
| Davos CH | - | 10281 | 6276 | - | 61 | 12110 | 6686 | - | 55 | 15137 | 6938 | - | 46 |
| Athens GR | - | 7064 | 5550 | - | 79 | 8326 | 6181 | - | 74 | 10407 | 6875 | - | 66 |

**Perf. indicators for the table above**

| | | |
|---|---|---|
| Qd,sh | MJ/y | **Not relevant for solar domestic hot water system** |
| Qd | MJ/y | **Annual heat demand for domestic hot water** |
| QL | MJ/y | **Annual heat energy delivered by the solar system** |
| Qpar | MJ/y | **Annual parasitic energy: (electricity for pumps/controllers)** |
| $f_{sol}=Q_L/Q_d$ | - | **Solar fraction** |

| Ref. conditions | | Stockholm SE | Würzburg DE | Davos CH | Athens GR |
|---|---|---|---|---|---|
| | G | 1.157 | 1.230 | 1.684 | 1.736 |
| | Ta,ave | 7,5 | 9,0 | 3,2 | 18,5 |
| | Tc,ave | 8,5 | 10,0 | 5,4 | 17,8 |
| | ± ΔTc | 6,4 | 3,0 | 0,8 | 7,4 |

| | | |
|---|---|---|
| G | kWh/m² | **Annual irradiation South, 45°** |
| Ta,ave | °C | **Annual average outdoor air temperature** |
| Tc,ave | °C | **Annual average mains cold water temp.** |
| ΔTc | K | **Seasonal variation of Tc** |
| Th | 45 °C | **Desired hot water temperature (mixing valve temperature).** |

| Max. operating press. - collector side | 250 | kPa | Max. operating press. - tank side | 800 | kPa |
|---|---|---|---|---|---|

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ISO 9459-5 (DST) |

**Comments of test lab**

No comments

*All values are subject to some uncertainty; e.g. the uncertainty on system output is typically in the range of ± 5 % to ± 15 %*

*Version 4.5, 2017-10-24*

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
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| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

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| Company | BDR THERMEA GROUP B.V. | Country | NETHERLANDS |
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| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

| Name of system configuration | | | | | |
|---|---|---|---|---|---|
| | | | | BAXI STS+ 300 2.0 | |
| Collector name | BAXI SLIM NEO 2.0 | No. Collectors | 2 | Storage name | STS+ 300L |

**Calculated annual results for "solar-only / preheat system"**

| Location | Qd,sh | Daily drawoff 250 l | | | | Daily drawoff 300 l | | | | Daily drawoff 400 l | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol |
| | MJ/y | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % |
| Stockholm SE | - | 13939 | 6749 | - | 48 | 16746 | 7285 | - | 44 | 22327 | 7726 | - | 35 |
| WürzburgDE | - | 13371 | 6906 | - | 52 | 16052 | 7600 | - | 47 | 21413 | 8168 | - | 38 |
| Davos CH | - | 15137 | 9871 | - | 65 | 18165 | 10596 | - | 58 | 24220 | 11006 | - | 45 |
| Athens GR | - | 10407 | 8452 | - | 81 | 12488 | 9524 | - | 76 | 16651 | 10911 | - | 66 |

**Perf. indicators for the table above**

| | | |
|---|---|---|
| Qd,sh | MJ/y | **Not relevant for solar domestic hot water system** |
| Qd | MJ/y | **Annual heat demand for domestic hot water** |
| QL | MJ/y | **Annual heat energy delivered by the solar system** |
| Qpar | MJ/y | **Annual parasitic energy: (electricity for pumps/controllers)** |
| $f_{sol}=Q_L/Q_d$ | - | **Solar fraction** |

| Ref. conditions | | Stockholm SE | Würzburg DE | Davos CH | Athens GR |
|---|---|---|---|---|---|
| | G | 1.157 | 1.230 | 1.684 | 1.736 |
| | Ta,ave | 7,5 | 9,0 | 3,2 | 18,5 |
| | Tc,ave | 8,5 | 10,0 | 5,4 | 17,8 |
| | ± ΔTc | 6,4 | 3,0 | 0,8 | 7,4 |

| | | |
|---|---|---|
| G | kWh/m² | **Annual irradiation South, 45°** |
| Ta,ave | °C | **Annual average outdoor air temperature** |
| Tc,ave | °C | **Annual average mains cold water temp.** |
| ΔTc | K | **Seasonal variation of Tc** |
| Th | 45 °C | **Desired hot water temperature (mixing valve temperature).** |

| Max. operating press. - collector side | 250 | kPa | Max. operating press. - tank side | 800 | kPa |
|---|---|---|---|---|---|

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
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**Comments of test lab**

No comments

*All values are subject to some uncertainty; e.g. the uncertainty on system output is typically in the range of ± 5 % to ± 15 %*

*Version 4.5, 2017-10-24*

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

| | | | |
|---|---|---|---|
| Company | BDR THERMEA GROUP B.V. | Country | NETHERLANDS |
| Brand (optional) | BAXI | Website | http://www.bdrthermea.com |
| Street | KANAAL ZUID, 106 | E-mail | oscar.mongro@BDRThermea.com |
| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

| Name of system configuration | | | | | |
|---|---|---|---|---|---|
| | | | | BAXI STS+ 300 2.5 | |
| Collector name | BAXI SLIM NEO 2.5 | No. Collectors | 2 | Storage name | STS+ 300L |

**Calculated annual results for "solar-only / preheat system"**

| Location | Qd,sh | Daily drawoff 250 l | | | | Daily drawoff 300 l | | | | Daily drawoff 400 l | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol | Qd,hw | QL | Qpar | fsol |
| | MJ/y | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % | MJ/y | MJ/y | MJ/y | % |
| Stockholm SE | - | 13939 | 7442 | - | 53 | 16746 | 8168 | - | 49 | 22327 | 8956 | - | 40 |
| WürzburgDE | - | 13371 | 7506 | - | 56 | 16052 | 8389 | - | 52 | 21413 | 9366 | - | 44 |
| Davos CH | - | 15137 | 11006 | - | 73 | 18165 | 12078 | - | 67 | 24220 | 12898 | - | 53 |
| Athens GR | - | 10407 | 8956 | - | 86 | 12488 | 10218 | - | 82 | 16651 | 12015 | - | 72 |

**Perf. indicators for the table above**

| | | |
|---|---|---|
| Qd,sh | MJ/y | **Not relevant for solar domestic hot water system** |
| Qd | MJ/y | **Annual heat demand for domestic hot water** |
| QL | MJ/y | **Annual heat energy delivered by the solar system** |
| Qpar | MJ/y | **Annual parasitic energy: (electricity for pumps/controllers)** |
| $f_{sol}=Q_L/Q_d$ | - | **Solar fraction** |

| Ref. conditions | | Stockholm SE | Würzburg DE | Davos CH | Athens GR |
|---|---|---|---|---|---|
| | G | 1.157 | 1.230 | 1.684 | 1.736 |
| | Ta,ave | 7,5 | 9,0 | 3,2 | 18,5 |
| | Tc,ave | 8,5 | 10,0 | 5,4 | 17,8 |
| | ± ΔTc | 6,4 | 3,0 | 0,8 | 7,4 |

| | | |
|---|---|---|
| G | kWh/m² | **Annual irradiation South, 45°** |
| Ta,ave | °C | **Annual average outdoor air temperature** |
| Tc,ave | °C | **Annual average mains cold water temp.** |
| ΔTc | K | **Seasonal variation of Tc** |
| Th | 45 °C | **Desired hot water temperature (mixing valve temperature).** |

| Max. operating press. - collector side | 250 | kPa | Max. operating press. - tank side | 800 | kPa |
|---|---|---|---|---|---|

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ISO 9459-5 (DST) |

**Comments of test lab**

No comments

*All values are subject to some uncertainty; e.g. the uncertainty on system output is typically in the range of ± 5 % to ± 15 %*

*Version 4.5, 2017-10-24*

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
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| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

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| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Name of system configuration | | | | | BAXI STS+ 150 2.0 |
|---|---|---|---|---|---|
| Collector name | BAXI SLIM NEO 2.0 | No. Collectors | 1 | Storage name | STS+ 150L |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Load profile | M | L | XL | XXL | |
|---|---|---|---|---|---|
| Annual heat demand (kWh) | 1523 | 2799 | 4427 | 5626 | |
| Auxiliary heat contribution | | Qnonsol | | | section 5.9.3.6, see note 1 |
| Average climate (kWh) | 530 | 1464 | 2916 | 4089 | Strasbourg |
| Cold climate (kWh) | 788 | 1824 | 3320 | 4493 | Helsinki |
| Hot climate (kWh) | 197 | 893 | 2231 | 3377 | Athens |
| Qaux (kWh) | - | - | - | - | section 5.9.3.4, see note 1 |
| Comply to the load profile (Yes/No) | - | - | - | - | section 5.10.6 , see note 1 |
| ηwh_nonsol (%) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qelec (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qfuel (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| V40, measured (l) | - | - | - | - | section 5.10.7, see note 1 |

| Auxiliary thermostat setting | - | ºC | Effective power of auxiliary heater | - | kW |
|---|---|---|---|---|---|

Note 1: Clause of EN 12976-2:2019

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ▼ |

| Comments of test lab |
|---|
| No comments |

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

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| Street | KANAAL ZUID, 106 | E-mail | oscar.mongro@BDRThermea.com |
| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Name of system configuration | | | | | BAXI STS+ 200 2.0 |
|---|---|---|---|---|---|
| Collector name | BAXI SLIM NEO 2.0 | No. Collectors | 1 | Storage name | STS+ 200L |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Load profile | M | L | XL | XXL | |
|---|---|---|---|---|---|
| Annual heat demand (kWh) | 1523 | 2799 | 4427 | 5626 | |
| Auxiliary heat contribution | | Qnonsol | | | section 5.9.3.6, see note 1 |
| Average climate (kWh) | 539 | 1428 | 2855 | 4010 | Strasbourg |
| Cold climate (kWh) | 796 | 1806 | 3276 | 4440 | Helsinki |
| Hot climate (kWh) | 205 | 831 | 2126 | 3254 | Athens |
| Qaux (kWh) | - | - | - | - | section 5.9.3.4, see note 1 |
| Comply to the load profile (Yes/No) | - | - | - | - | section 5.10.6 , see note 1 |
| ηwh_nonsol (%) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qelec (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qfuel (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| V40, measured (l) | - | - | - | - | section 5.10.7, see note 1 |

| Auxiliary thermostat setting | - | ºC | Effective power of auxiliary heater | - | kW |
|---|---|---|---|---|---|

Note 1: Clause of EN 12976-2:2019

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ▼ |

| Comments of test lab |
|---|
| No comments |

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

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| Postal Code | 7332 BD APELDOORN (Güeldres) | Tel. / Fax | +34 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Name of system configuration | | | | | BAXI STS+ 200 2.5 |
|---|---|---|---|---|---|
| Collector name | BAXI SLIM NEO 2.5 | No. Collectors | 1 | Storage name | STS+ 200L |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Load profile | M | L | XL | XXL | |
|---|---|---|---|---|---|
| Annual heat demand (kWh) | 1523 | 2799 | 4427 | 5626 | |
| Auxiliary heat contribution | | Qnonsol | | | section 5.9.3.6, see note 1 |
| Average climate (kWh) | 460 | 1244 | 2591 | 3729 | Strasbourg |
| Cold climate (kWh) | 729 | 1657 | 3083 | 4229 | Helsinki |
| Hot climate (kWh) | 135 | 638 | 1783 | 2877 | Athens |
| Qaux (kWh) | - | - | - | - | section 5.9.3.4, see note 1 |
| Comply to the load profile (Yes/No) | - | - | - | - | section 5.10.6 , see note 1 |
| ηwh_nonsol (%) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qelec (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qfuel (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| V40, measured (l) | - | - | - | - | section 5.10.7, see note 1 |

| Auxiliary thermostat setting | - | ºC | Effective power of auxiliary heater | - | kW |
|---|---|---|---|---|---|

Note 1: Clause of EN 12976-2:2019

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ▼ |

| Comments of test lab |
|---|
| No comments |

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

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| Postal Code | 7332 BD | APELDOORN (Güeldres) | Tel. / Fax | +34 | 936828040 |

**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Name of system configuration | | | | Storage name | |
|---|---|---|---|---|---|
| | BAXI STS+ 300 2.0 | | | | |
| Collector name | BAXI SLIM NEO 2.0 | No. Collectors | 2 | Storage name | STS+ 300L |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Load profile | M | L | XL | XXL | |
|---|---|---|---|---|---|
| Annual heat demand (kWh) | 1523 | 2799 | 4427 | 5626 | |
| Auxiliary heat contribution | | Qnonsol | | | section 5.9.3.6, see note 1 |
| Average climate (kWh) | 346 | 901 | 1897 | 2877 | Strasbourg |
| Cold climate (kWh) | 627 | 1376 | 2556 | 3597 | Helsinki |
| Hot climate (kWh) | 47 | 313 | 940 | 1735 | Athens |
| Qaux (kWh) | - | - | - | - | section 5.9.3.4, see note 1 |
| Comply to the load profile (Yes/No) | - | - | - | - | section 5.10.6 , see note 1 |
| ηwh_nonsol (%) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qelec (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qfuel (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| V40, measured (l) | - | - | - | - | section 5.10.7, see note 1 |

| Auxiliary thermostat setting | - | ºC | Effective power of auxiliary heater | - | kW |
|---|---|---|---|---|---|

Note 1: Clause of EN 12976-2:2019

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ▼ |

| Comments of test lab |
|---|
| No comments |

*Version 4.5, 2017-10-24*

| Summary of | EN12976-2 | test results | Certification No. | 078/000427 |
|---|---|---|---|---|
| Annex to Solar KEYMARK Certificate | | | Issued | 2025-02-28 |

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**System family overview**

| Collector name | For each storage and collector size, give number of collectors | | |
|---|---|---|---|
| | STS+ 150L | STS+ 200L | STS+ 300L |
| BAXI SLIM NEO 2.0 | 1 | 1 | 2 |
| BAXI SLIM NEO 2.5 | | 1 | 2 |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Name of system configuration | | | | | BAXI STS+ 300 2.5 |
|---|---|---|---|---|---|
| Collector name | BAXI SLIM NEO 2.5 | No. Collectors | 2 | Storage name | STS+ 300L |

**Annual performance parameters in the frame of the EU regulation CDR 811, 812 and 813 dated 2013**

| Load profile | M | L | XL | XXL | |
|---|---|---|---|---|---|
| Annual heat demand (kWh) | 1523 | 2799 | 4427 | 5626 | |
| Auxiliary heat contribution | | Qnonsol | | | section 5.9.3.6, see note 1 |
| Average climate (kWh) | 293 | 770 | 1643 | 2525 | Strasbourg |
| Cold climate (kWh) | 574 | 1262 | 2345 | 3325 | Helsinki |
| Hot climate (kWh) | 21 | 216 | 694 | 1340 | Athens |
| Qaux (kWh) | - | - | - | - | section 5.9.3.4, see note 1 |
| Comply to the load profile (Yes/No) | - | - | - | - | section 5.10.6 , see note 1 |
| ηwh_nonsol (%) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qelec (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| Qfuel (kWh) | - | - | - | - | section 5.9.3.5 , see note 1 |
| V40, measured (l) | - | - | - | - | section 5.10.7, see note 1 |

| Auxiliary thermostat setting | - | ºC | Effective power of auxiliary heater | - | kW |
|---|---|---|---|---|---|

Note 1: Clause of EN 12976-2:2019

| | |
|---|---|
| Testing Laboratory | TÜV Rheinland Solar GmbH |
| Website | www.tuv.com/solar |
| Test report id. number | DE25J05Z 002 |
| Date of test report | 2025-02-13 |
| Test method | ▼ |

| Comments of test lab |
|---|
| No comments |

*Version 4.5, 2017-10-24*