



Certificate of Compliance

Certificate: 80146608

Master Contract: 303226

Project: 80146608

Date Issued: 2023-04-28

Issued to: Kivanc Enerji Uretim Anonim Sirketi.
Ulucamii Mahallesi Abidinpasa Caddesi No:54/18 - Seyhan/ADANA,
TURKEY

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by: Qiang (Sean) Jiang
Qiang (Sean) Jiang

PRODUCTS

CLASS 5311 10 - POWER SUPPLIES - Photovoltaic Modules and Panels

CLASS 5311 90 - POWER SUPPLIES - Photovoltaic Modules and Panels - Certified to U.S. Standards

Photovoltaic modules with Fire Performance (USA) Type 4, maximum system voltage of 1500 V dc, model series: KVNC-xxxM-72H-GBF (xxx=520-560, in steps of 5), Fuse rating 25A.

Photovoltaic modules with Fire Performance (USA) Type 4, maximum system voltage of 1500 V dc, model series: KVNC-xxxM-66H-GBF (xxx=475-510, in steps of 5), Fuse rating 25A.

Photovoltaic modules with Fire Performance (USA) Type 4, maximum system voltage of 1500 V dc, model series: KVNC-xxxM-60H-GBF (xxx=435-465, in steps of 5), Fuse rating 25A.

Photovoltaic modules with Fire Performance (USA) Type 4, maximum system voltage of 1500 V dc, model series: KVNC-xxxM-54H-GBF (xxx=390-420, in steps of 5), Fuse rating 25A.

Notes:

1. The electrical characteristics are within ± 5 , ± 5 , ± 3 percent of the rated values of I_{sc} ($\pm 5\%$), V_{oc} ($\pm 5\%$), and P_{max} ($\pm 3\%$) under standard test conditions (irradiance of 1000 W/m², AM 1.5 spectrum, and a cell temperature of 25°C (77°F)).
2. The operating ambient temperature of these devices may exceed 40 °C at full load for all wire sizes if it is determined suitable in the field use application.



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| Model | Open Circuit Voltage at STC (V dc) | Short Circuit Current at STC (A dc) | Rated Voltage at STC (V dc) | Rated Current at STC (A dc) | Rated Maximum Power at STC (Watts) |
|--|------------------------------------|-------------------------------------|-----------------------------|-----------------------------|------------------------------------|
| KVNC-xxxM-72H-GBF (xxx=520-560, in steps of 5) | | | | | |
| KVNC-520M-72H-GBF | 48.90 | 13.60 | 40.90 | 12.71 | 520 |
| KVNC-525M-72H-GBF | 49.05 | 13.66 | 41.05 | 12.79 | 525 |
| KVNC-530M-72H-GBF | 49.20 | 13.72 | 41.20 | 12.86 | 530 |
| KVNC-535M-72H-GBF | 49.35 | 13.78 | 41.35 | 12.94 | 535 |
| KVNC-540M-72H-GBF | 49.50 | 13.85 | 41.50 | 13.01 | 540 |
| KVNC-545M-72H-GBF | 49.65 | 13.92 | 41.80 | 13.04 | 545 |
| KVNC-550M-72H-GBF | 49.80 | 13.98 | 41.95 | 13.11 | 550 |
| KVNC-555M-72H-GBF | 49.95 | 14.05 | 42.05 | 13.20 | 555 |
| KVNC-560M-72H-GBF | 50.10 | 14.12 | 42.30 | 13.24 | 560 |
| KVNC-xxxM-66H-GBF (xxx=475-510, in steps of 5) | | | | | |
| KVNC-475M-66H-GBF | 44.80 | 13.51 | 37.50 | 12.67 | 475 |
| KVNC-480M-66H-GBF | 44.95 | 13.59 | 37.62 | 12.76 | 480 |
| KVNC-485M-66H-GBF | 45.10 | 13.67 | 37.98 | 12.77 | 485 |
| KVNC-490M-66H-GBF | 45.25 | 13.74 | 38.16 | 12.84 | 490 |
| KVNC-495M-66H-GBF | 45.40 | 13.82 | 38.31 | 12.92 | 495 |
| KVNC-500M-66H-GBF | 45.55 | 13.90 | 38.43 | 13.01 | 500 |
| KVNC-505M-66H-GBF | 45.70 | 13.97 | 38.52 | 13.11 | 505 |
| KVNC-510M-66H-GBF | 45.85 | 14.04 | 38.61 | 13.21 | 510 |
| KVNC-xxxM-60H-GBF (xxx=435-465, in steps of 5) | | | | | |
| KVNC-435M-60H-GBF | 40.88 | 13.66 | 33.6 | 12.95 | 435 |
| KVNC-440M-60H-GBF | 41.00 | 13.72 | 33.8 | 13.02 | 440 |
| KVNC-445M-60H-GBF | 41.13 | 13.78 | 34.1 | 13.05 | 445 |
| KVNC-450M-60H-GBF | 41.25 | 13.85 | 34.3 | 13.12 | 450 |
| KVNC-455M-60H-GBF | 41.38 | 13.92 | 34.5 | 13.19 | 455 |
| KVNC-460M-60H-GBF | 41.51 | 13.99 | 34.7 | 13.26 | 460 |
| KVNC-465M-60H-GBF | 41.64 | 14.06 | 34.9 | 13.32 | 465 |
| KVNC-xxxM-54H-GBF (xxx=390-420, in steps of 5) | | | | | |
| KVNC-390M-54H-GBF | 36.66 | 13.65 | 30.5 | 12.79 | 390 |
| KVNC-395M-54H-GBF | 36.75 | 13.71 | 30.6 | 12.91 | 395 |
| KVNC-400M-54H-GBF | 36.84 | 13.77 | 30.9 | 12.94 | 400 |
| KVNC-405M-54H-GBF | 36.93 | 13.84 | 31.2 | 12.98 | 405 |
| KVNC-410M-54H-GBF | 37.02 | 13.91 | 31.5 | 13.02 | 410 |
| KVNC-415M-54H-GBF | 37.14 | 13.98 | 31.7 | 13.09 | 415 |
| KVNC-420M-54H-GBF | 37.26 | 14.05 | 31.9 | 13.17 | 420 |



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APPLICABLE REQUIREMENTS

CSA C22.2 No. 61730-1:19 Photovoltaic (PV) module safety qualification — Part 1: Requirements for construction, 2019-12.

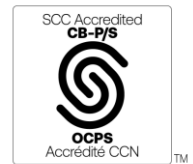
CSA C22.2 No. 61730-2:19 Photovoltaic (PV) module safety qualification — Part 2: Requirements for testing, 2019-12.

UL 61730-1 1st: Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, 2017-12-04, revision date 2020-04-30.

UL 61730-2 1st: Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing, 2017-12-04, revision date 2020-04-30.

Notes:

Products certified under Class C531110 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

| Project | Date | Description |
|----------------|-------------|---|
| 80146608 | 2023-04-28 | Original certificate for KVNC-xxxM-72H-GBF, KVNC-xxxM-66H-GBF, KVNC-xxxM-60H-GBF, KVNC-xxxM-54H-GBF series PV module. |