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SCB-2000A-480.277-4IN-5MCCB-N3R

2000A Solar Combiner Box - 480Y/277V, 50/60 Hz - (4) Inputs, (5) MCCB - N3R

Product ID: 306696

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

SCB-2000A-480.277-4IN-5MCCB-N3R Solar Combiner Box

Dimensions: 39.77” W x 81.73” H x 11.51” D

Weight: -

Number of Inputs: (4)

Max. Voltage in Open Circuit: 1500V

Max. Input Current in Short Circuit: 2000A

Max. Input Current in Short Circuit @ STC: 500A

Output (DC): 200A

Max. Output Current in Short Circuit: 2000A
Max. Output Current in Short Circuit @ SCT: 1500A
Max. Output Current in Operation: 1500A
AC Supply Voltage at 50/60 Hz : 480Y/277V
Frequency: 50/60 Hz

AC Breaker: (1) 2000A MCCB, (4) 500A MCCB

Operating Temperature: -25 °C up to +60 °C

Enclosure: NEMA 3R (NEMA 4, NEMA 4X Available)

Connection: Mechanical Terminal Lug (for Al and Cu cables)

Ratings/Approvals

NEMA 3R Enclosure

Special Orders - Special Requirements

Contact us for special requirements

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The SCB-2000A-480.277-4IN-5MCCB-N3R Solar Combiner Box from Larson Electronics is designed for power distribution for solar systems. The combiner box features 480Y/277V 50/60 Hz AC supply and four inputs. Equipped with one 2000-amp and four 500 amp molded case circuit breakers, this unit is protected by a NEMA 3R heavy-duty enclosure for protection from outdoor elements.

A combiner box is a critical component in photovoltaic (PV) solar power systems. It is designed to combine the output of multiple solar strings, typically from individual solar panels, into a single DC output that can be fed into an inverter. The Combiner Box accepts AC power from multiple inverters or other sources and combines the AC inputs into one or more outputs to feed into the main AC distribution panel or grid connection.

Each AC input is protected by a circuit breaker to prevent overcurrent conditions. The electrical components are housed in a weatherproof NEMA 3R (NEMA 4, or NEMA 4X available) or indoor-rated enclosure, depending on the installation environment.

The Combiner Box is designed to handle specific voltage and current levels, typically matching the output of the connected inverters and used to consolidate AC outputs from multiple inverters before feeding into the main distribution panel or utility grid. They are typically installed close to the inverters to streamline wiring and minimize power losses.

When selecting an AC combiner box, consider the following factors: Does the box accommodate the number of AC circuits from your inverters or sources. The

Combiner Box must match the specifications of your inverters and overall system. Choose an enclosure rating suitable for your installation environment, whether indoor or outdoor. Determine if integrated monitoring and remote control features are necessary for your application. Current and Voltage monitoring is available along with remote control monitoring.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

Frequently Asked Questions (FAQ)