



Technical Services Bulletin

ReadyWatt™ Combiner Box for PV Installations Four Circuit High Voltage Sub-Combiner

- Intended Use
- Provided Components
- Code Compliant Installation

Intended Use

The ETL listed ReadyWatt™ Four Circuit Sub-Combiner Box is intended to provide a secure, economical and code compliant method of combining the outputs of up to four combiner boxes into a single source circuit output. A configuration using four combiner boxes and one sub-combiner box can combine up to 48 separate PV arrays.

EO Part#: 600ENCL3CKTSBCB

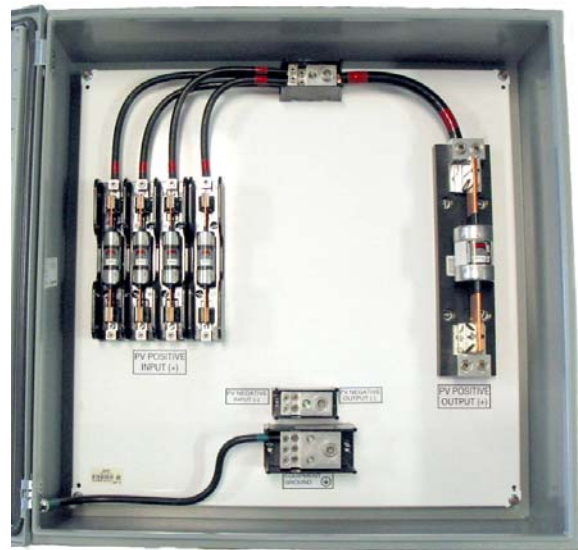
Components

Includes the following components:

- NEMA 3R 32" x 32" enclosure (grounded)
- (1) 3 pole class R/100A fuse holder
- (1) 1 pole class R/100A fuse holder
- (1) 1 pole class R/400A fuse holder
- (1) 4 to 1 positive terminal block
- (1) 4 to 1 negative terminal block
- (1) 6 to 1 ground terminal block

Optional components specified at purchase:

- PV positive input fuses – 50A to 100A
- PV positive output fuse – 350A to 400A



Special Features

The ReadyWatt™ Sub-Combiner Box is an elegant, professional solution to the need for combining and staging your photovoltaic array wire runs. It features:

- Extra heavy duty enclosure
- Quality stainless steel fasteners
- Easy wire terminations
- ETL listed to UL 508A standard

Applicable Code Sections

The ReadyWatt™ Sub-Combiner Box complies with NEC requirements including but not limited to: 690.8, 314.40 and 690.9.

Code Compliant Installation

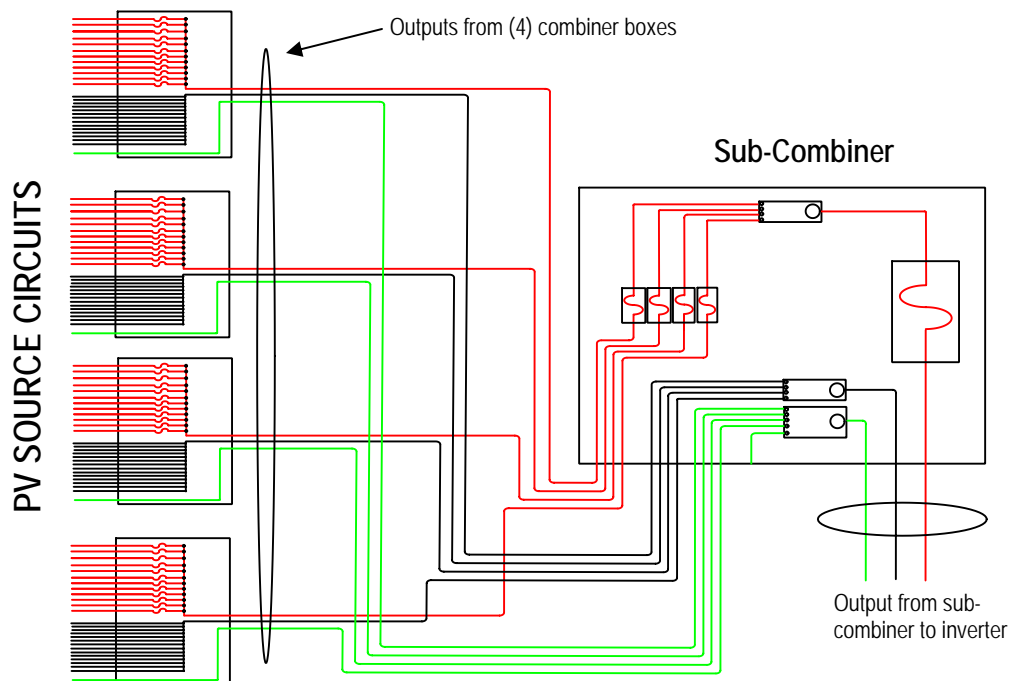
The PV combiner NEMA 3R enclosure must be mounted in an upright orientation since a 1/4" weep hole is pre-drilled in the bottom to drain any moisture that may accumulate inside. Mount the combiner on a flat wall, strut frame or on the side-of-pole.

Remove the appropriate knockouts on the bottom of the enclosure and install conduit fittings. Insert the conductors into the box and strip back enough insulation for proper contact with the terminals. Connect the positive conductors to the bottom side of the fuse holders, as labeled. Connect the negative conductors to the negative terminal block marked PV NEGATIVE INPUT. Connect the ground conductors to the ground terminal block.

Connect the output conductors to the output side of the negative terminal block and to the output side of the positive output fuse block. The maximum conductor cable size is #500kcmil.

Use the torque table below to correctly torque all connections.

Terminal Torque Specs	
Input fuse blocks	120 in-lbs
Output fuse blocks	275 in-lbs
Terminal blocks, small lug, small wire (#14-#8 AWG)	50 in-lbs
Terminal blocks, small lug, large wire (#6-#2/0 AWG)	120 in-lbs
Terminal blocks, large lug	500 in-lbs



Up to (48) PV array source circuits are combined in four (12) circuit combiner boxes. The four new source circuits are combined in the sub-combiner.