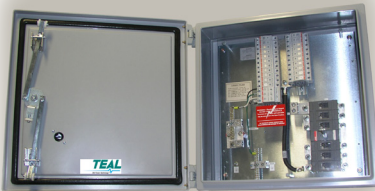


TEALSOLAR™ COMBINER BOX

CONFIGURABLE STRING ARRAY COMBINER BOXES FOR COMMERCIAL & INDUSTRIAL SCALE SOLAR PV SYSTEMS - INCLUDES INTEGRATED DC DISCONNECT & TVSS



TEALSOLAR CONFIGURABLE
COMBINER BOX -
EXAMPLE OF 20-STRING COMBINER
WITH INTEGRATED DISCONNECT
& TVSS IN A NEMA 4X FIBERGLASS
ENCLOSURE

THE TEALSOLAR™ CONFIGURABLE COMBINER BOX:

The TEAL Electronics Configurable Combiner Boxes are designed for Solar Photovoltaic (PV) installations to combine the output of multiple strings of PV modules for connection to the inverter.

In a large PV array, multiple PV modules are connected in series in a string to build the voltage up to proper levels for the inverter. Multiple strings of PV modules are then combined together to multiply the string output currents to higher levels for input into the inverter. In multiple string systems, each string must be protected from over-current (fused typically) before being paralleled and connected to an inverter.

The TEALSolar™ Configurable Combiner Box is available in configurations supporting from 8 strings to 36 strings. The TEALSolar™ Configurable Combiner is certified to 600VDC for 600VDC rated fuses. Available fuse sizes can be 8A, 10A, 12A, 15A, 20A, 25A, or 30A. Typically, the fuse size you chose is at least 1.56 x the short circuit current rating (Isc) of the PV module (or string) that the fuse protects.

The TEALSolar™ Configurable Combiner is available in NEMA 3R (Painted Steel), NEMA 4 (Painted Steel or Stainless Steel), or NEMA 4X (Fiberglass or Stainless Steel) enclosures for outdoor use. The TEALSolar™ Configurable Combiner was designed to be easy to mount and connect on-site.

TEALSOLAR™ COMBINER BOX FEATURES INCLUDE:

- Listed to UL 1741 for 600VDC applications
- Designed to meet IEC60146-1-1 and CSA C22.2 No. 107.1 (Sept. 2001) @ 1000V
- Configurable in the following wall-mount outdoor enclosure types:
 - Painted Steel (NEMA type 3R or 4)
 - Fiberglass (NEMA type 4X)
 - Stainless Steel (NEMA type 4 or 4X)
- Configurable in the following enclosure sizes (not all sizes available in all types):
 - 16”h x 16”w x 6”d - Some 8 string configurable units
 - 24”h x 16”w x 8”d - Some 8, 12 & 16 string configurable units
 - 24”h x 24”w x 8”d - Some 12, 16 & 20 string configurable units
 - 30”h x 24”w x 8”d - Some 16, 20, 24, 28, 32, & 36 string configurable units
 - 36”h x 30”w x 8”d - Some 24, 28, 32, & 36 string configurable units
 - 36”h x 30”w x 12”d - Some 28, 32, & 36 string configurable units
- Simplified input and output wiring with working room for easy connection and maintenance
- Designed for conduit feed from the bottom, with top feed capability (Note: proper feed-through connectors are required to maintain NEMA 4 and 4X rating)

SPECIFICATIONS - TEALSOLAR™ CONFIGURABLE COMBINER BOX

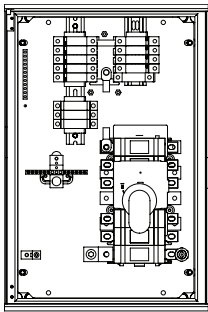
TEALSOLAR™ CONFIGURABLE COMBINER BOX FEATURES INCLUDE (CONTINUED):

- Designed and rated for -25C to +50C ambient temperatures with terminals rated for 90C wire ratings
- Proprietary bus-work for combined high current conductors in discrete sizes of:
 1. ≤160A, with a single output connection for wire sizes of 6AWG to 350MCM
 2. 161A to 250A, with either a single output connection for wire sizes of 6AWG to 350MCM or a dual output connection for wire sizes of 6AWG to 350MCM
 3. 251A to 315A, with either a single output connection for wire sizes of 4AWG to 500MCM or a dual output connection for wire sizes of 6AWG to 350MCM
 4. 316A to 400A, with a dual output connection for wire sizes of 6AWG to 350MCM

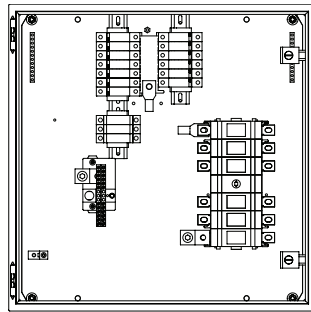
NOTE: The bus current rating is calculated by multiplying the short circuit current rating of the string module by the number of strings and by 1.25 [Isc x (# of strings) x 1.25 = bus current]

- Includes as standard the optional integrated DC Disconnect switch, rated at the appropriate bus current rating
- Includes as standard the optional integrated Transient Voltage Surge Suppression (TVSS) device

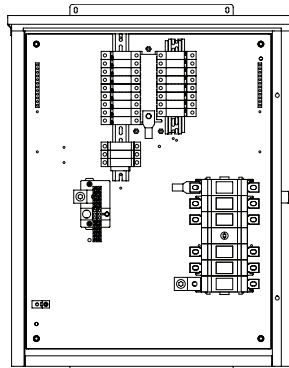
PHYSICAL SPECIFICATIONS EXAMPLES:



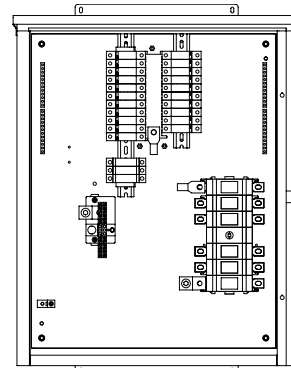
8-STRING
WITH
DISCONNECT
& TVSS



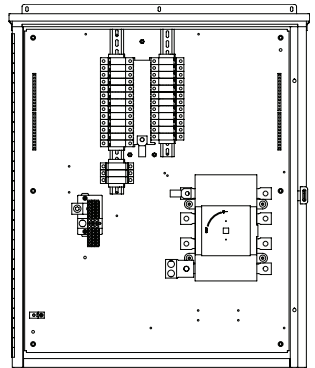
12-STRING
WITH
DISCONNECT
& TVSS



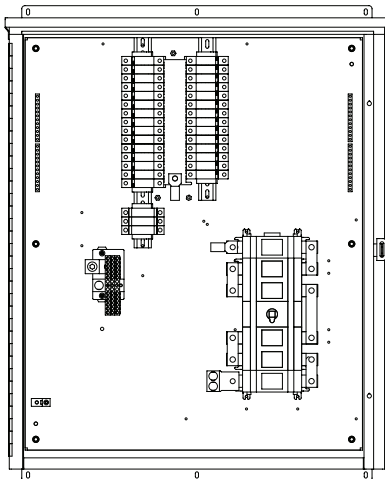
16-STRING WITH
DISCONNECT & TVSS



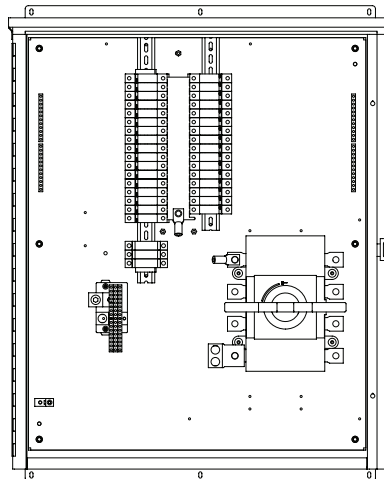
20-STRING WITH
DISCONNECT & TVSS



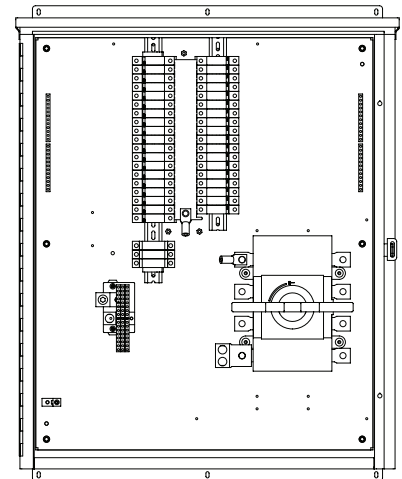
24-STRING WITH
DISCONNECT & TVSS



28-STRING WITH
DISCONNECT & TVSS



32-STRING WITH
DISCONNECT & TVSS



36-STRING WITH
DISCONNECT & TVSS

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