



1500V High Capacity Input Disconnect Combiners

ConnectPV High Capacity Input (HCI) Disconnect Combiners are based on the same high quality product architecture as the standard 1500V Disconnect Combiners with the integration of larger 35A-60A input fuses in touch safe fuse holders. These higher capacity combiner inputs support more strings per fused input, enabling a single combiner input per tracker, or significantly reducing total home run wire in fixed-tilt applications.

Referencing Image 1 below - a typical single-axis tracker application uses ConnectPV's UL9703 Certified 1500V 3-string Overmolded Wire Harnesses (Crystalline Modules), 1 per SAT, coupled with a single pair of 8 AWG (10mm²) Home Runs to a 50A or 60A fuse in the combiner - (8) harnesses, (8) home run pairs, and (1) 400A combiner per subarray (some modules may allow up to 9 inputs per 400A combiner).

Standard Product Features

- ETL Certified to IEC & UL 62109-1 (successor to UL 1741)
- 250A, 320A, and 400A Manual Disconnects
- Lock-Out/Tag-Out on Disconnect Handle
- 4-16 Inputs, #8-#4AWG (10mm² - 25mm²) Wire Range
- 35A, 40A, 45A, 50A, 55A, 60A Fuses Available
- Tin Plated C11000 Copper Busbars
- Non-Fused Inputs land on the DC Common Terminal
- 1/2" or M12 Studs provided for double hole output lugs
- Internal Dead Front Cover over all live components
- Class 2, Type 2, 40kA Surge Protective Device
- Powder Coated Steel or Fiberglass Enclosures
 - NEMA 4 or 4X (IP65/66(1m/1h)) Rated
- Unistrut Mounting Brackets installed
- Padlock Latch for Door
- Unique Serial number per unit
- Labeling to meet AS or NEC Requirements
- 5 Year Warranty

Product Options

- MC4, Evo2, or H4 connector Whips
- Breather Vents for High Temperature/Humidity Locations
- Internal or External Voltage Test Points
- Upsized Enclosures for Larger Output Wires
- Extended Warranty

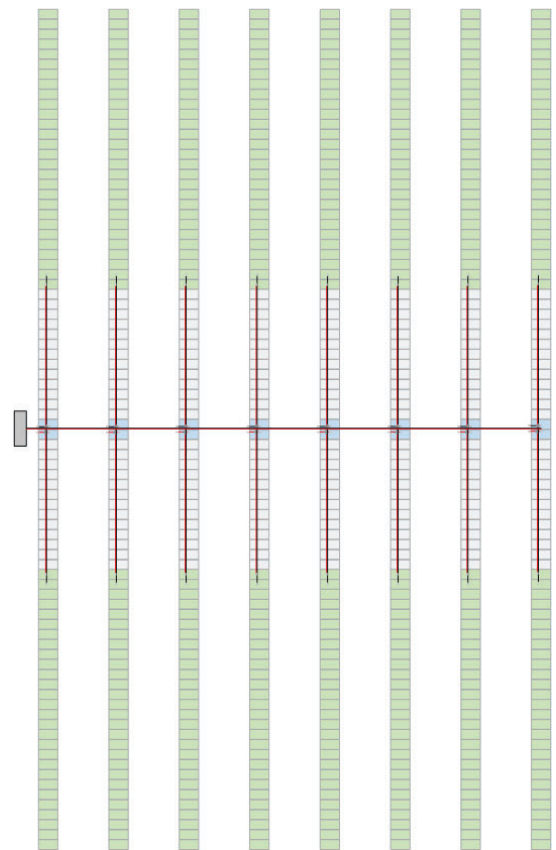


Image 1: Typical 8 Tracker 400A Subarray using 3-string harnesses with 50A-60A Combiner Fusing



Certified Manufacturing



Certified to IEC 62109-1 and UL 62109-1 by ETL/Intertek





ConnectPV reduces electrical BOS project costs by simplifying:

► Configuration

Design Engineers easily configure our products to meet the project's requirements - *Simplifying design and specification*

► Regulation

AHJ Inspectors quickly review and approve our products because we have designed for 100% compliance with the IEC and UL Standards - *Reducing project inspection and approval time*

► Installation

Field Installers quickly install our products because they provide ample wiring room - *Reducing installation time and labor cost*

► Operations

O&M Personnel reduce field service time because our products use high quality components and are designed for a 30 year life expectancy - *Maximizing system revenue generation*

Example Input Characteristics			Typical Enclosure Sizes	
Disconnect Rating	Fuse Size	# of Inputs Possible	Carbon Steel (in)	Fiberglass (in)
250	40A	7	24x24x8	24x24x8
	60A	5	24x24x8	24x24x8
320	40A	8	30x24x8	30x24x8
	60A	6	30x24x8	30x24x8
400	40A	12	30x24x8	30x24x8
	60A	8	30x24x8	30x24x8

More Efficient Use of Inputs:

The High Capacity Inputs support larger preparallel wire harnesses - *using US 1.56 Fuse Derate Rules:*

- Crystalline: 3-string up to 12.8A Isc each
- FS4 - up to 16 strings on one input
- FS6 - up to 13 strings on one input

IEC Fuse derate of 1.25 may allow "larger" harnesses per input fuse.

Multiple size fuses, .e.g. 40A and 60A, can be installed within the same combiner with the condition that the total Sum(Isc) is less than the total rating of the unit with the appropriate derate factors applied.

Model Numbers are derived from the following template: CBXVFG-###D(S)-FFAA-EE

VV Voltage	### Disconnect Rating	FF String Count	AA Fuse Rating	EE Enclosure Type
15 = 1500V	250, 320, 400	4-16 1 string increments	35A, 40A, 45A, 50A, 55A, 60A	N4 (IP65) = Carbon Steel 4X (IP66) = Fiberglass*

Additional Options and Accessories Available

**Stainless Steel Available*

ABOUT CONNECTPV INC.

Based in San Diego, CA, ConnectPV Inc. delivers expertise and experience. We bring over 10 years of Solar PV industry experience in electrical Balance of System products coupled with more than 25 years of high quality, ISO9001:2008 certified, manufacturing expertise. We actively work with our customers to deliver innovative, high quality, and cost effective solutions.

