



800V AC Combiners & Recombiners

ConnectPV AC Combiner products are based on a core product architecture optimized for utility and commercial scale solar projects, simplifying design and specification. Options and accessories allow the designer to optimize the products for each project – reducing installation labor costs. The following Combiners and Recombiners have been optimized for use with ABB PVS-175-TL inverters.

ConnectPV products incorporate “best-in-class” components combined with rugged mechanical designs to maximize reliability over the projected life of the project. Circuit breaker based products are fitted with efficient, passive air cooling enclosure accessories to reduce internal temperature rise.

Example Combiner:

Model AC-CBX8G-400-02150-3R
400A rated with 100% Rated 150A CB's
Input: up to 300MCM
Output: up to 750MCM
30"x30"x8" NEMA 3R Enclosure
Dead Front Cover not shown



Standard Product Family Features

- UL489B Certified 100% Rated 25kAIC Circuit Breakers
 - 80A, 100A, 125A, 150A, 300A
- Lock-Out/Tag-Out on Circuit Breaker Handles
- Certified to 50C Ambient Temperature, Tested to 60C Ambient
- Equipped with (2) AUX Breakers rated at 56A
- Accommodate 90C Cu/Al Mechanical or Compression Lugs
- Internal Safety Cover over all live components
- NEMA 3R Enclosures with Passive Air Flow Cooling
- Padlock Latch for Door
- Unique Serial number per unit
- Labeling per UL & NEC Requirements
- NRTL Certification to UL1741, 50C ambient
- 5 Year Warranty

Optional Features

- NEMA 4X Fiberglass and Stainless Steel Enclosures
- Active Air Cooling Fans and Filters
- Shade Cover Kits for AC Combiners
- Main Breaker of “Fuse + Switch” Section Options
- Busbar “throat” to transformer



Example Recombiner:

Model AC-RCBX8G-3000-08300-3R
3000A rated with 100% Rated 300A CB's
Inputs are 750MCM capable
Output to Transformer via wire, braid, or busbar
79"x71"x32" NEMA 3R Enclosure - Typical
Dead Front Cover and Doors not shown

Certified
Manufacturing





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 NEC 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*

► Operation

O&M Personnel reduce field service time because our products use high quality components and are designed for a 20 year life expectancy - *Maximizing system revenue generation*

Inverters	kW	Combiner Inputs	Recombiner Inputs	Enclosure (HxWxD - in.)	Weight (lbs)	Rated Current	Corresponding Transformer
2	350	2x 150A*	n/a	30x30x8	95	400A	350kw
4	700	n/a	2x 300A	48x36x10 (wall mount)	435	1000A	1.0MW
6	1050		3x 300A				
8	1400		4x 300A	79x47x32	1060	1600A	2.0MW
10	1750		5x 300A				
12	2100		6x 300A	79x71x32	1450	2500A	2.5MW
14	2450		7x 300A**				
16	2800		8x 300A**				2.8MW

* High Ambient Temperature locations may require 200A circuit breakers in the Combiners and active cooling in the Recombiners.

** Some projects may require Optional Main Breaker add on Cabinet Section for >6 Inputs per NEC 230.71(A) or when the available fault current from the MV transformer is greater than the 35kAIC rating of the 300A Circuit Breakers.

Specifications Subject to Change

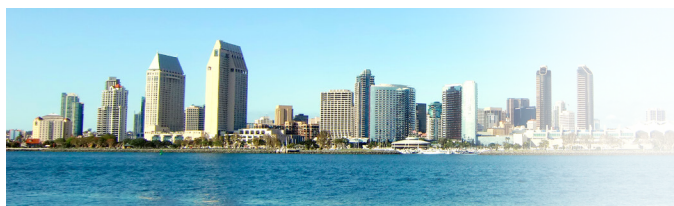
Model Numbers are derived from the following template: AC-(R)CBXVVT-####-FFAA-EE

VV Voltage	T Topology	#### Current Rating	FF Input Count	AAA CB Rating	EE Enclosure Type
8 = 800V	G=Grounded	400A - 3000A	02-08	80A - 300A	N3 = Carbon Steel

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.