



Arc Fault Detection Disconnect Combiners

ConnectPV has partnered with Sensata Technologies to deliver best in class Arc Fault Detection and Circuit Interruption from the leader in Arc Fault Technology. Leveraging its leading expertise in aerospace AFD products, Sensata developed an accurate and reliable family of arc detection modules for the Solar PV industry, validated through extensive testing with a broad variety of inverters. ConnectPV's Arc Fault Detection (AFD) Disconnect Combiners integrate Sensata's PVA-F Modules that signal the high-reliability load break rated contactors to open the output circuit in the event of an Arc Fault.

This AFD functionality is built into ConnectPV's Contactor Combiner Product Family, adding to the remote ON/OFF control functionality for rooftop or ground mount projects. AFD Disconnect Combiners can be linked to Emergency Power Off and/or Maintenance Power Management Control Circuits to improve safety and serviceability for projects and to comply with Rapid Shut Down requirements per NEC 2014 690.12.

Compatible with positively or negatively grounded systems without DC Optimizers, grounded or ungrounded (floating).

Standard Product Features

- 1000V DC @ 200A or 400A with Mechanical Disconnect
- Lock-Out/Tag-Out on Control Circuit Handle
- 8-32 Fused Inputs, #14-#4 AWG Wire Range
- Individually Serviceable Touch Safe Fuse-holders
- 15A Fuse Typical, 30A Maximum – user specified
- Accommodates 90C Cu/Al Mechanical or Compression Lugs
- M8 or M12 Studs provided for single or double hole lugs
- Internal Safety Cover over all live components
- NEMA 4 and 4X Enclosures
- Padlock Latch for Door and NEMA 4 Condensate Drain
- Unique serial number per unit
- Labeling to meet NEC Requirements
- 2 Year Warranty



Example: 1000V 400A 16-Circuit NEMA 4X Enclosure, Model CBX10G-400ADS-1630W-4X

Product Options

- AC Control or DC Bus powered
- Mechanical Lugs Installed or Compression Lugs Included
- Breather Vents for High Humidity Locations
- H4 or MC4 Bulkhead or Whip Connectors Installed
- Upsized Enclosures for Larger Output Wires
- Mounting Brackets Installed
- Extended Warranty



Certified Manufacturing



UL 1699B & 1741





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*

► Installation

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

► 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*

► 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*

Inputs			Contactor Ampacity	Grounded		Ungrounded	
Input Circuits	Input Wire Size	Input Fuses (A)	1000V Rating	NEMA 4 Steel (inches)	NEMA 4X Fiberglass (inches)	NEMA 4 Steel (inches)	NEMA 4X Fiberglass (inches)
8	#14 - #4 AWG Copper	2A - 30A* 15A is standard	200	24x24x8	24x24x8	24x24x8	24x24x8
12			200	30x24x8	30x24x8	30x24x8	30x24x8
16			200	30x24x8	30x24x8	30x24x8	30x24x8
20			400	30x30x8	36x30x8	30x30x8	36x30x8
24			400	30x30x8	36x30x8	30x30x8	36x30x8
28			400	30x30x8	36x30x8	30x30x8	36x30x8
32			400	30x30x8	36x30x8	30x30x8	36x30x8

* 30A Input Fuses available for pre-parallel String Inputs. Maximum input I_{sc} for each circuit is $30A / 1.56 = 19.23A$ with commensurate reduction in fuse holders; i.e., 24x 15A input fuses is the same total power as 12x 30A input fuses. Sensata Arc Fault Detectors are rated for maximum 20A Imp continuous current per input circuit which supports paralleled input strings as stated above.

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

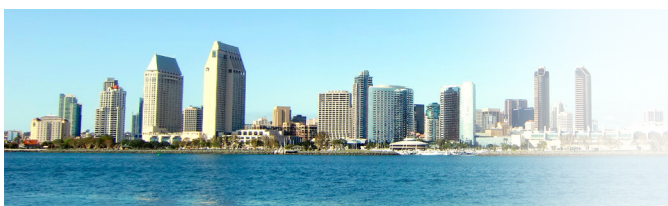
Specifications Subject to Change

VV Voltage	### Contactor Rating	FF String Count	AA Fuse Rating	EE Enclosure Type
10 = 1000V	200A or 400A	08-32 4 string increments	02-30 15A Typical	N4 = Carbon Steel 4X = 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.