



PV ARRAY COMBINER BOX with HIGH VOLTAGE INPUTS

ACB5X250 Combiner Box

180 Volt maximum PV open circuit voltage

The 250 volt circuit breakers provide the perfect input device for the Apollo Solar T80HV High Voltage Charge Controllers.

Circuit Breakers for inputs from 5 PV Strings

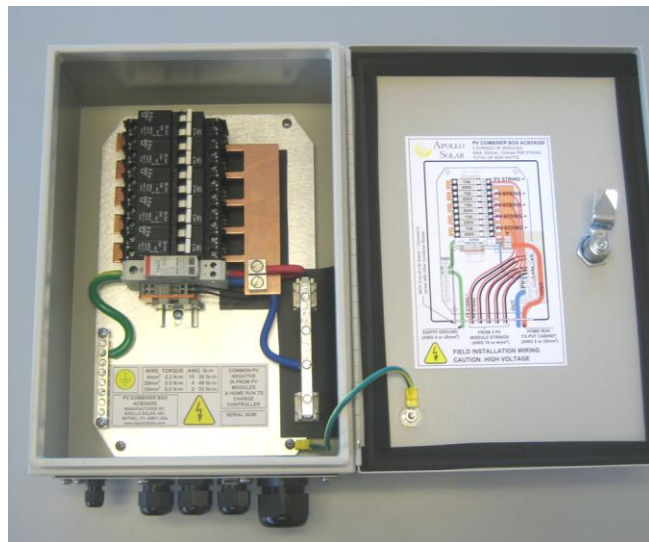
With up to 5 inputs, the ACB5X250 can combine enough PV modules for 4200 watts of power.

Internal Surge Protection

MOVs provide surge protection where it belongs, before it gets out of the Combiner Box. The MOV module has remote signaling when it reaches end of life and the MOV module is plug replaceable.

Maximum Environmental Protection IP66

The IP66 / NEMA 4 rating allows the ACB5X250 to be mounted anywhere. The quarter turn lock provides safety and security against non-authorized opening.

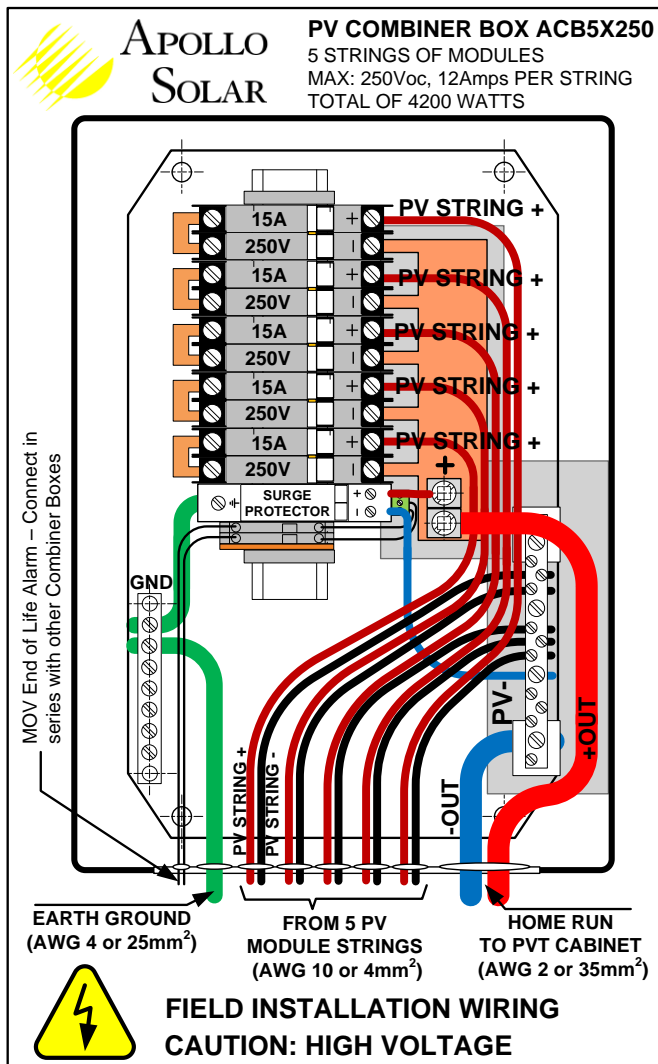


Designed for 180 Voc T80HV High Voltage Charge Controllers

Circuit Breakers for 5 Strings

MOV Surge Protection

IP66 (NEMA 4) rated enclosure



Bottom View showing Glands for watertight wire entry

- Large gland for output cable to Charge Controller
- 5 medium glands for PV inputs
- 1 medium gland for Earth Ground wire
- 1 small gland for MOV signal wires



ACB5X250 COMBINER BOX SPECIFICATIONS

Max PV input current	12 Amps per string, 5 strings = 60 Amps total Maximum
Max Combined output current	60 Amps total
Absolute Max input voltage	250 VDC
Maximum PV input voltage (Voc) ...	180VDC Maximum Open Circuit Voltage (Voc), 160VDC Max Operating (Vmp)
Max PV array power	5120 Watts into the T80HV when equalizing a 48v battery to 64v at 80 Amps 4200 Watts maximum during average continuous conditions.
Circuit Breakers	Magnetic Hydraulic type rated for 250 VDC at 15 Amps IEC / EN 60947-2 Listed
Surge Protection	High Energy Varistors (MOVs) from both positive and negative outputs to earth ground. Intl: IEC 61643-1, USA: UL1449, CSA C22.2 No. 8-M1986, France: NF EN 61643-11 Maximum operating voltage = 180 VDC, Max discharge current on 8/20 uS surge =40kA, Protection level at 20kA = 620 V. Remote signaling at MOV end of life. Replaceable MOV module for easy and fast maintenance.
PV Input Connections	Input via Cable Glands for appropriate wire sizes meet IP66 (NEMA 4) rating. Optional Gland Plate with MC Connectors to minimize field installation time.
Output Connectors	Power lugs accept 35mm ² (AWG No.2) wire
Ground Connector	Bus Bar accepts 25mm ² (AWG No.4) wire
Unit dimensions	35.6cm X 25.4cm X 15.3cm (14" X 10" X 6") Length X Width X Depth plus glands
Shipping dimensions	45cm X 30.5cm X 20.3cm (18" X 12" X 8")
Weight	Unit: 6.1 kg (13.2 lbs) Shipping weight: 6.7 kg (14.8 lbs)
Warranty	5-year Limited Warranty
Environmental rating	Ambient Temperature: -40°C to +60°C; Storage Temperature: -55°C to +100°C; Humidity: 100% non-condensing; Enclosure: Outdoor IP66 (NEMA 4)



IIAN TECH CO., LTD.

www.iian.kr, iian@iian.kr