

SOLECTRIA® PVI-36TL-480-V2

3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTERS

FEATURES

- Certified to IEEE 1547-2018 and UL 1741SB
- Wirebox models with built-in SunSpec compliant transmitters for Module-Level Rapid Shutdown for simple, safe NEC compliance
- UL Listed as a PV Rapid Shutdown System with APsmart
- Integrated UL-listed Arc-Fault protection
- 15-90° mounting angle allows low-profile rooftop installations
- 3 MPPT's with 5 inputs each for PV array flexibility
- Industry-leading DC/AC ratio of 1.7
- Integrated AC and DC disconnects
- Remote firmware upgrades and diagnostics
- NEMA 4X outdoor rated enclosure with proven performance
- Copper and Aluminum compatible AC connections
- Compatible with Bifacial PV Modules

OPTIONS

- Shade cover
- DC fuse bypass
- Web-based monitoring

Yaskawa Solectria Solar's PVI-36TL-480-V2 are transformerless 3-phase inverters, ideal for rooftops, carports and ground-mount PV systems.



The PVI-36TL-480-V2 is the new generation of 36kW transformerless inverters from Yaskawa Solectria Solar that are IEEE 1547-2018 compliant. It comes standard with AC and DC disconnects, three MPPTs, and a wiring box with 15 fuse positions.

This updated inverter is improved for rooftop PV systems. Module-Level Rapid shutdown (MLRSD) wirebox models provide PV Rapid Shutdown System (PVRSS) compliance and include a built-in SunSpec compliant powerline communication transmitter.

Rapid-shutdown-ready wireboxes provide compatibility with APsmart rapid shutdown products.

Yaskawa Solectria Solar's PVI-36TL-480-V2 inverters, including standard wireboxes and the rapid-shutdown ready wirebox models, provides flexibility and convenience unmatched in the industry.

Standard Wirebox

- 20A fuses, both polarities
- No built-in PVRSS transmitter



Module-Level Rapid Shutdown Wireboxes

- 20A fuses; positive polarity only
- Built-in PVRSS transmitter
- Compatible with APsmart module-level rapid shutdown devices



PVI-36TL-480-V2 TECHNICAL DATA

SPECIFICATIONS

Inverter Model		PVI-36TL-480-V2
DC Input	Maximum PV Power	61.2 kW (22.4 kW per MPPT)
	Maximum Input Voltage	1000 VDC
	DC Voltage Ranges: Operating/Max. Power (MPPT)	200-950 VDC / 400-850 VDC
	Start-up DC Input Voltage/Power	330 V / 80 W
	Number of MPPT Trackers/Inputs	3 Trackers / 5 Fused-inputs each
	Maximum Available PV Current (I _{sc} x 1.25)	204 A (68 A per MPPT)
	DC Surge Protection	Type II MOV, 2800 V _c , 20 kA I _{TM} (8/20 μs)
AC Output	Rated AC Real Power/Apparent Power/Output Current	36 kW / 36 kVA / 43.5 A
	Nominal Output Voltage/Range	480 VAC / -12% to +10%
	Nominal Output Frequency/Range	60 Hz / 57-63 Hz
	Power Factor	Unity, > 0.99 (Adjustable 0.8 leading to 0.8 lagging)
	Fault Current Contribution (1 Cycle RMS)	73.2 A (1.68 PU)
	Total Harmonic Distortion (THD) @ Rated Load	< 3%
	Grid Connection Type	3-Ph/PE/N (neutral conductor optional)
	Maximum OCPD Device	125 A
	AC Surge Protection	Type II MOV, 1500 V _c , 15 kA I _{TM} (8/20 μs)
	Efficiency	Peak Efficiency
CEC Efficiency		97.5%
Tare Loss		< 3 W
Environment	Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C)
	Storage Temperature Range	No low temp minimum to +158°F (+70°C)
	Relative Humidity (non-condensing)	0-100%
	Operating Altitude	13,123.4 ft (4,000 m) Derating occurs from 9,842.5 ft (3,000 m)
Communications	Modbus Protocol	Proprietary / SunSpec
	SolrenView Web-Based Monitoring Service	Optional
	Revenue Grade Metering	Optional, External
	Communication Interface	RS-485 Modbus RTU
	Remote Firmware Upgrades	Ethernet Network Card required
	Remote Diagnostics	Ethernet Network Card required
Safety	Certifications and Standards	UL1741-SA/SB Ed. 3, UL1699B, CSA-C22.2 NO.107.1-01, IEEE1547-2018; FCC PART15, UL 1998
	Selectable Grid Standards	IEEE 1547-2014, IEEE 1547a-2018, CA Rule 21, ISO-NE, HECO
	Smart Grid Features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt
Warranty	Standard Limited Warranty	10 Years
Mechanical	Acoustic Noise Rating	< 60 dBA @ 1 m and 25°C
	AC/DC Disconnect	Standard, fully-integrated, load break rated
	Mounting Angle*	15° - 90° from horizontal
	Weight	Inverter: 123.5 lbs (56 kg); Wiring Box: 33 lbs (15 kg)
	Enclosure Rating and Finish	NEMA Type 4X; Polyester Powder Coated Aluminum
	Dimensions (H x W x D)	Power Head: 22.7" x 23.6" x 10.24" (576 mm x 600 mm x 260 mm) Wirebox: 16.7" x 23.6" x 10.24" (424 mm x 600 mm x 260 mm) Overall: 39.4" x 23.6" x 10.24" (1000 mm x 600 mm x 260 mm)

Wirebox Specifications

Wirebox	Fused Inputs	15 Fused Positions (5 Positions per MPPT) 20 A Included (25, 30 A accepted)**
Wirebox Versions	Standard	PVI-36-50-60-WB-S (both polarities fused) No MLRSD transmitter included
	APsmart Transmitter Built-in	PVI-36-50-60-WB-AP (only positive polarity fused) MLRSD compatibility: APsmart RSD-S and RSD-D



* Shade cover accessory required for installation of 75° or less
** Yaskawa Solectria Solar does not supply optional fuses sizes

