

SOLECTRIA® PVI-36TL-480-V2

3-PHASE TRANSFORMERLESS COMMERCIAL STRING INVERTERS

FEATURES

- Wirebox models with built-in SunSpec compliant transmitters for Module-Level Rapid Shutdown for simple, safe NEC compliance
- UL Listed as PV Rapid Shutdown Systems with APsmart, Northern Electric Power (NEP), and Tigo Energy
- Integrated UL-listed Arc-Fault protection
- 15 - 90° mounting angle allows low-profile rooftop installations
- 3 MPPTs with 5 fused inputs each for PV array flexibility
- Industry-leading DC/AC ratio of 1.5
- Integrated AC and DC disconnects
- Remote firmware upgrades and diagnostics
- NEMA 4X outdoor rated enclosure, with proven performance
- Certified to IEEE 1547-2018 and UL 1741SB
- 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.

New



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 (MLRSS) wirebox models provide PV Rapid Shutdown System (PVRSS) compliance and include a built-in SunSpec compliant powerline communication transmitter.

One wirebox model is Tigo Enhanced for rapid shutdown and the other two wirebox models are compatible with APsmart or NEP rapid shutdown devices.

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
- 3 models for compatibility with APsmart, NEP and Tigo module-level rapid shutdown devices



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PVI-36TL-480-V2 TECHNICAL DATA

SPECIFICATIONS

Inverter Model		PVI-36TL-480-V2
DC Input	Maximum PV Power	54 kW (18 kW per MPPT)
	Maximum Input Voltage	1000 VDC
	DC Voltage Ranges: Operating/Max. Power (MPPT)	200-950 VDC / 400-840 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 (Isc x 1.25)	122.4 A (40.8 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)
	AC Surge Protection	Type II MOV, 1500 V _C , 15 kA I _{TM} (8/20 μs)
Efficiency	Peak Efficiency	98.8%
	CEC Efficiency	98.5%
	Tare Loss	< 1 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 Ed. 2, UL1741-SB, UL1699B, CSA-C22.2 NO.107.1-01, IEEE1547a-2018; FCC PART15
	Selectable Grid Standards	IEEE 1547a-2018, CA Rule 21, ISO-NE
	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)



* Shade cover accessory required for installation of 75° or less

