

PVI 23TL, PVI 28TL & PVI 36TL

3-Ph Transformerless Commercial String Inverters

Features

- 1000 VDC
- Best in class efficiency
- Touch-safe fuses
- Dual & wide MPP tracking zones
- Modbus communications
- Integrated DC fused string combiner
- DC arc-fault protection
- PVI 36TL - UL 1741SA listed

Options

- Web-based monitoring
- Shade cover
- DC/AC disconnect covers
- Roof mount array brackets
- DC combiners bypass



Yaskawa Solectria Solar's PVI 23TL, PVI 28TL, and PVI 36TL are compact, transformerless three-phase inverters with a dual MPP tracker. These inverters come standard with AC and DC disconnects, user-interactive LCD, and an integrated fused string combiner. Its small, lightweight design makes for quick and easy installation and maintenance. These inverters include an enhanced DSP control, comprehensive protection functions, and advanced thermal design enabling highest reliability and uptime. They also come with a standard 10 year warranty with options for 15 and 20 years. Options include web-based monitoring, shade cover, DC/AC disconnect covers, DC combiners bypass, and roof mount array bracket.

Specifications

	PVI 23TL	PVI 28TL	PVI 36TL
DC Input			
Absolute Maximum Input Voltage	1000 VDC	1000 VDC	1000 VDC
Maximum Power Input Voltage Range (MPPT)	480-800 VDC	500-800 VDC	540-800 VDC
Operating Voltage Range (MPPT)	240-950 VDC	240-950 VDC	240-950 VDC
MPP Trackers	2 with 4-fused inputs per tracker	2 with 4-fused inputs per tracker	2 with 5-fused inputs per tracker
Maximum Operating Input Current	25 A per MPPT (50 A)	29 A per MPPT (58 A)	35 A per MPPT (70 A)
Maximum Available PV Current (Isc x 1.25)	41 A per MPPT (82 A)	48 A per MPPT (96 A)	62.5 A per MPPT (125 A)
Maximum PV Power (per MPPT)	15.5 kW	19 kW	27 kW
Strike Voltage	330 V	330 V	330 V
AC Output			
Nominal Output Voltage	480 VAC, 3-Ph	480 VAC, 3-Ph	480 VAC, 3-Ph
AC Voltage Range	-12/+10%	-12/+10%	-12/+10%
Continuous Output Power	23 kW	28 kW	36 kW
Maximum Output Current	27.7 A	33.7 A	43.5 A
Maximum Backfeed Current	0 A	0 A	0 A
Nominal Output Frequency	60 Hz	60 Hz	60 Hz
Output Frequency Range	59.3-60.5 Hz (adjustable 55-65 Hz)	59.3-60.5 Hz (adjustable 55-65 Hz)	57-63 Hz
Power Factor	Unity, >0.99 (±0.8 adjustable)	Unity, >0.99 (±0.8 adjustable)	Unity, >0.99 (±0.8 adjustable)
Total Harmonic Distortion (THD) @ Rated Load	<3%	<3%	<3%
Grid Connection Type	3-Ph + N/GND (4-wire)	3-Ph + N/GND (4-wire)	3-Ph + N/GND (4-wire)
Efficiency			
Peak Efficiency	98.6%	98.6%	98.5%
CEC Efficiency	98.0%	98.0%	98.0%
Tare Loss	2 W	2 W	2 W
Integrated String Combiner			
Fused Positions	8 fused positions (4 positions per MPPT) 15 A (fuse by-pass available)		10 fused positions (5 positions per MPPT) 15 or 30 A (30 A only for combined inputs)
Temperature			
Ambient Temperature Range	-22°F to +140°F (-30°C to +60°C); Derating occurs over +45°C		
Storage Temperature Range	No low temp minimum to +158°F (+70°C)		
Relative Humidity (non-condensing)	0-95%		
Operating Altitude	13,123 ft (4,000 m); Derating occurs from 6,562 ft (2,000 m)		
Data Monitoring			
SolrenView Web-Based Monitoring	Optional, External		
Revenue Grade Monitoring	Optional, External		
External Communication Interface	RS-485 Modbus RTU		
Testing & Certifications			
Safety Listings & Certifications	UL 1741 / IEEE 1547, CSA C22.2#107.1, FCC part 15 B		
Advanced Grid Support Functionality	-		UL 1741SA
Testing Agency	CSA		
Warranty			
Standard and Options	10 Years Standard; Options for 15 and 20 Years		
Enclosure			
dB(A) (Decibel) Rating	< 50 dB(A) @ 3 m		
DC Disconnect	Standard, fully-integrated		
Mounting Angle/Installation Angle	15° to 90° measured from horizontal		
Dimensions (H x W x D)	39.4 in. x 23.6 in. x 9.1 in. (1001 x 600 x 232 mm)		
Weight	104 lbs (47.2 kg)	121 lbs (55 kg)	
Enclosure Rating	Type 4		Type 4X
Enclosure Finish	Polyester Powder Coated Aluminum		

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