

3-PH TRANSFORMERLESS STRING INVERTERS

PVI 14TL
PVI 20TL
PVI 23TL
PVI 28TL
PVI 36TL

FEATURES

- 600 or 1000 VDC
- Best-in-class efficiency
- Touch-safe fuses
- Quick and easy installation
- Dual MPP tracking zones
- Wide MPPT range
- Lightweight, compact design
- Modbus communications
- User-interactive LCD
- Integrated DC fused string combiner
- DC arc-fault protection

OPTIONS

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



3-PH TRANSFORMERLESS STRING INVERTERS

Solectria's PVI 14TL, PVI 20TL, 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 8-position 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.



Built for the real world

SPECIFICATIONS	PVI 14TL	PVI 20TL	PVI 23TL	PVI 28TL	PVI 36TL
DC Input					
Absolute Maximum Open Circuit Voltage	600 VDC		1000 VDC		
Operating Voltage Range (MPPT)	180-580 VDC	260-580 VDC	300-900 VDC		280-950 VDC
Max Power Input Voltage Range (MPPT)	300-540 VDC	300-550 VDC	480-800 VDC	500-800 VDC	520-800 VDC
MPP Trackers	2 with 4-fused inputs per tracker				
Maximum Operating Input Current	25 A per MPPT (50 A)	35 A per MPPT (70 A)	25 A per MPPT (50 A)	29 A per MPPT (58 A)	34 A per MPPT (68 A)
Maximum Short Circuit Current	45 A per MPPT (90 A)	45.5 A per MPPT (91 A)	41 A per MPPT (82 A)	48 A per MPPT (96 A)	60 A per MPPT (120 A)
Maximum PV Power (per MPPT)	9.5 kW	13.5 kW	15.5 kW	19 kW	27 kW
Strike Voltage	300 V		330 V		
AC Output					
Nominal Output Voltage	208 VAC, 3-Ph	480 VAC, 3-Ph			
AC Voltage Range (Standard)	-12%/+10%				
Continuous Output Power (VAC)	14 kW	20 kW	23 kW	28 kW	36 kW
Maximum Output Current (VAC)	39 A	25.5 A	27.7 A	33.7 A	43.3 A
Maximum Backfeed Current	0 A				
Nominal Output Frequency	60 Hz				
Output Frequency Range	59.3-60.5 Hz (adjustable 55-65 Hz)				57-63 Hz
Power Factor	Unity, >0.99 (±0.8 adjustable)	Unity, >0.99 (±0.9 adjustable)	Unity, >0.99 (±0.8 adjustable)		
Total Harmonic Distortion (THD) @ Rated Load	< 3%				
Grid Connection Type	3Ø+N/GND				
Efficiency					
Peak Efficiency	96.9%	97.4%	98.6%	98.5%	
CEC Efficiency	96.0%	97.0%	98.0%		
Tare Loss	4 W	2 W	1 W		
Integrated String Combiner					
8 Fused Positions (4 positions per MPPT)	15 A (fuse by-pass available)				15 or 30 A (30 A only for combined inputs)
Temperature					
Ambient Temperature Range	-13°F to +140°F (-25°C to +60°C) Derating occurs over +50°C		-13°F to +140°F (-25°C to +60°C) Derating occurs over +45°C		
Storage Temperature Range	-22°F to +158°F (-30°C to +70°C)				-58°F to +158°F (-40°C to +70°C)
Relative Humidity (non-condensing)	0-95%				
Operating Altitude	13,123 ft/4000 m (derating from 6,562 ft/2000 m)				
Data Monitoring					
Optional SolrenView Web-based Monitoring	Integrated				
Optional Revenue Grade Monitoring	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				
Testing Agency	ETL				
Warranty					
Standard	10 year				
Optional	15, 20 year; extended service agreement				
Enclosure					
dB(A) (Decibel) Rating	< 50 dBA @ 3 m				
AC/DC Disconnect	Standard, fully-integrated				
Dimensions (H x W x D)	41.6 in. x 21.4 in. x 8.5 in. (1057 mm x 544 mm x 216 mm)		39.4 in. x 23.6 in. x 9.1 in. (1001 mm x 600 mm x 232 mm)		
Weight	141 lbs (64 kg)	132 lbs (60 kg)	104 lbs (47.2 kg)		124.5 lbs (56.5kg)
Enclosure Rating	Type 4				
Enclosure Finish	Polyester powder coated aluminum				