



PVI 14TL PVI 20TL PVI 23TL PVI 28TL PVI 36TL 3-PH TRANSFORMERLESS

FEATURES

- 600 or 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 HECO and Rule 21 compliant

OPTIONS

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

3-PH TRANSFORMERLESS STRING INVERTERS

Yaskawa - Solectria Solar'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.





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	180-580 VDC	260-580 VDC	300-90	00 VDC	200-950 VDC
Max Power Input Voltage Range (MPPT)	300-540 VDC	300-550 VDC	480-800 VDC	500-800 VDC	540-800 VDC
MPP Trackers		2 w	ith 4-fused inputs per tra	cker	
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)	35 A per MPPT (70 A
Maximum Available PV Current (Isc x 1.25)	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)	53.5 A per MPPT (107 A)
Maximum PV Power (per MPPT)	9.5 kW	13.5 kW	15.5 kW	19 kW	27 kW
Strike Voltage	30	0 V		330 V	
AC Output					
Nominal Output Voltage	208 VAC, 3-Ph		480 VA	C, 3-Ph	
AC Voltage Range (Standard)			-12%/+10%		
Continuous Output Power	14 kW	20 kW	23 kW	28 kW	36 kW
Maximum Output Current	39 A	25.5 A	27.7 A	33.7 A	43.5 A
Maximum Backfeed Current			0 A		
Nominal Output Frequency	60 Hz				
Output Frequency Range		59.3-60.5 Hz (adj	ustable 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)	
Fault Current Contribution (1 Cycle RMS)	70.4 A	43.3 A	69.	6 A	73.2 A
Total Harmonic Distortion (THD) @ Rated Load			< 3%		
Grid Connection Type	3ø+/N/GND (4-wire)				
Efficiency					
Peak Efficiency	96.9%	97.4%	98.6%	98	.4%
CEC Efficiency	96.0%	97.0%		98.0%	
Tare Loss	4 W		2	W	
Integrated String Combiner	15 A (fuse by-pass available)			4.5 00.4	
8 Fused Positions (4 positions per MPPT)		15 A (fuse by-	pass available)		15 or 30 A (30 A only for combined inputs)
					(30 A only for combined inputs)
8 Fused Positions (4 positions per MPPT) Temperature Ambient Temperature Range	-13°F to +140°F Derating occu	(-25°C to +60°C) Irs over +50°C	-13°	°F to +140°F (-25°C to +6 erating occurs over +45°	(30 A only for combined inputs)
Temperature Ambient Temperature Range		(-25°C to +60°C) Irs over +50°C -22°F to	-13 ^s D +158°F		(30 A only for combined inputs) 0°C) -40°F to +158°F
Temperature Ambient Temperature Range Storage Temperature Range		(-25°C to +60°C) Irs over +50°C -22°F to	-13° D) +158°F o +70°C)		(30 A only for combined inputs)
Temperature	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t	-13 ^s D +158°F	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Temperature Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t	-13° D +158°F o +70°C) 0-95%	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Temperature Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t	-13° D +158°F o +70°C) 0-95%	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t	-138°F 0 +158°F 0 +70°C) 0-95% ng from 6,562 ft/2,000 n	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t	-138°F 0 +158°F 0 +70°C) 0-95% Ing from 6,562 ft/2,000 n	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Temperature Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t	-13° D 0+158° F 0+70° C) 0-95% ng from 6,562 ft/2,000 n Integrated External	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Temperature Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Testing & Certifications	Derating occu	(-25°C to +60°C) trs over +50°C -22°F tc (-30°C t	-13° D 0+158° F 0+70° C) 0-95% ng from 6,562 ft/2,000 n Integrated External	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Testing & Certifications Safety Listings & Certifications	Derating occu	(-25°C to +60°C) trs over +50°C -22°F tc (-30°C t	-13% D +158°F o +70°C) 0-95% ng from 6,562 ft/2,000 n Integrated External RS-485 Modbus RTU	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Testing & Certifications Gafety Listings & Certifications Festing Agency	Derating occu	(-25°C to +60°C) trs over +50°C -22°F to (-30°C t 3,123 ft/4,000 m (derati	-13% D +158°F o +70°C) 0-95% ng from 6,562 ft/2,000 n Integrated External RS-485 Modbus RTU	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Temperature Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Testing & Certifications Safety Listings & Certifications Testing Agency Warranty	Derating occu	(-25°C to +60°C) trs over +50°C -22°F to (-30°C t 3,123 ft/4,000 m (derati	-138°F o +158°F o +70°C) O-95% ng from 6,562 ft/2,000 n Integrated External RS-485 Modbus RTU	erating occurs over +45°	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Departing Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Festing & Certifications Safety Listings & Certifications Festing Agency Warranty Standard	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t 3,123 ft/4,000 m (derati	-138°F o +158°F o +70°C) O-95% Ing from 6,562 ft/2,000 m Integrated External RS-485 Modbus RTU	FCC part 15 B CSA	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Festing & Certifications Gafety Listings & Certifications Festing Agency Warranty Standard Optional	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t 3,123 ft/4,000 m (derati	-138°F o +158°F o +70°C) O-95% ng from 6,562 ft/2,000 n Integrated External RS-485 Modbus RTU	FCC part 15 B CSA	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Festing & Certifications Safety Listings & Certifications Testing Agency Warranty Standard Optional Enclosure	Derating occu	(-25°C to +60°C) Irs over +50°C -22°F to (-30°C t 3,123 ft/4,000 m (derati	-13% D +158°F O +70°C) O-95% Integrated External RS-485 Modbus RTU 1547, CSA C22.2#107.1, 10 year ear; extended service ag	FCC part 15 B CSA	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Testing & Certifications Gafety Listings & Certifications Testing Agency Warranty Standard Optional Enclosure dBA (Decibel) Rating	Derating occu	(-25°C to +60°C) Irs over +50°C -22°Ftc (-30°C t 3,123 ft/4,000 m (derati	-13% D 0+158°F 0+70°C) 0-95% ng from 6,562 ft/2,000 n Integrated External RS-485 Modbus RTU 1547, CSA C22.2#107.1, 10 year rear; extended service ag	FCC part 15 B CSA	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Departing Altitude Data Monitoring Deptional SolrenView Web-based Monitoring Deptional Revenue Grade Monitoring External Communication Interface Festing & Certifications Safety Listings & Certifications Festing Agency Warranty Standard Deptional Enclosure JBBA (Decibel) Rating AC/DC Disconnect	Derating occu	(-25°C to +60°C) trs over +50°C -22°Ftc (-30°C t 3,123 ft/4,000 m (derati	-13% D 0+158°F 0+70°C) 0-95% Ing from 6,562 ft/2,000 m Integrated External RS-485 Modbus RTU 1547, CSA C22.2#107.1, 10 year ear; extended service ag < 50 dBA @ 3 m Standard, fully-integrated	FCC part 15 B CSA reement	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from 9,800 ft/3,000 m)
Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing) Operating Altitude Data Monitoring Optional SolrenView Web-based Monitoring Optional Revenue Grade Monitoring External Communication Interface Testing & Certifications Gafety Listings & Certifications Testing Agency Warranty Standard Optional Enclosure dBA (Decibel) Rating AC/DC Disconnect Dimensions (H x W x D)	Derating occu	(-25°C to +60°C) trs over +50°C -22°Ftc (-30°C t 3,123 ft/4,000 m (derati UL 1741/IEEE TL 15, 20 y 4 in. x 8.5 in. 4 mm x 216 mm)	-13% D 0+158°F 0+70°C) 0-95% Ing from 6,562 ft/2,000 m Integrated External RS-485 Modbus RTU 1547, CSA C22.2#107.1, 10 year ear; extended service ag < 50 dBA @ 3 m Standard, fully-integrated	FCC part 15 B CSA reement d 39.4 in. x 23.6 in. x 9.1 in 01 mm x 600 mm x 232 r	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from 9,800 ft/3,000 m)
Temperature Ambient Temperature Range Storage Temperature Range Relative Humidity (non-condensing)	Derating occu 1 1 41.6 in. x 21. (1057 mm x 544	(-25°C to +60°C) trs over +50°C -22°F to (-30°C t 3,123 ft/4,000 m (derati UL 1741/IEEE TL 15, 20 y 4 in. x 8.5 in. 4 mm x 216 mm) 132 lbs (60 kg)	-138°F o +70°C) 0-95% Integrated External RS-485 Modbus RTU 1547, CSA C22.2#107.1, 10 year rear; extended service ag < 50 dBA @ 3 m Standard, fully-integrated (10	FCC part 15 B CSA reement d 39.4 in. x 23.6 in. x 9.1 in 01 mm x 600 mm x 232 r	(30 A only for combined inputs) 0°C) -40°F to +158°F (-40°C to +70°C) 13,123 ft/4,000 m (derating from 9,800 ft/3,000 m)

