

Schneider Electric Conext™ TL Three Phase Grid Tie Inverter

> Easy-to-install Commercial Solar Solution

The new Conext TL 15 kW and Conext TL 20 kW grid tie solar inverters are suited for outdoor use and are the ideal solution for small commercial building rooftop and other applications. The inverters provide a wide Maximum Point Power Tracking (MPPT) voltage range, an EU Efficiency of 97.3%, fast ROI and high availability. The embedded Modbus communication card allows connectivity with a large range of Schneider Electric products. Backed by Schneider Electric's global service infrastructure, the Conext TL series are inverters you can rely on from a company you can count on.

Features

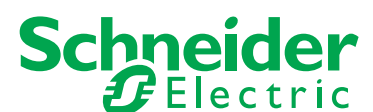
- Transformerless design with high peak and EU efficiency
- Wide MPPT voltage range
- Volt-ampere reactive (VAR) control and Low Voltage Ride Through (LVRT) functions
- Large Liquid Crystal display provides instantaneous information – power level, daily energy and lifetime production, system status, and installer customized screens
- Modbus communication protocol

Installation

- Lightweight and versatile mounting bracket
- Integrated DC switch
- AC wiring plug included for easy installation
- Rugged IP55 enclosure with integrated IP65 electronics compartment, allowing for outdoor installations

Serviceability

- Pluggable DC/AC connections for ease of service
- Five-year standard warranty



Device short name	TL15000 E	TL20000 E
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Electrical specifications

Input (DC)

Photovoltaic power	14 - 19 kW	18 - 25 kW
Input voltage range, MPPT	350 - 800 V	350 - 800 V
Number of MPPT	2	2
Max. input voltage, open circuit	1000 V	1000 V
Max. input current	23 A x 2	30 A x 2
Nominal input power for max. output	17 kW	22 kW

Output (AC)

Nominal output power	15 kVA	20 kVA
Output voltage	230 / 400 V, three-phase (N + PE)	230 / 400 V, three-phase (N + PE)
Frequency	50 Hz	50 Hz
Frequency range	50 +/- 3 Hz	50 +/- 3 Hz
Nominal output current	22 A	29 A
Harmonic distortion	< 3 %	< 3 %
Power Factor	0.85 leading to 0.85 lagging	0.85 leading to 0.85 lagging

Efficiency

Peak	98.05%	98.05 %
European	97.3 %	97.5 %

General specifications

Power consumption, night time	< 2 W	< 2 W
IP degree of protection	IP65 (electronics), IP55 (balance)	IP65 (electronics), IP55 (balance)
Enclosure material	Aluminium	Aluminium
Product weight	67.2 kg (148.2 lb)	67.2 kg (148.2 lb)
Shipping weight	122 kg (269 lb)	122 kg (269 lb)
Product dimensions (H x W x D)	96 x 61.2 x 27.2 cm (37.8 x 24.1 x 10.7 in)	96 x 61.2 x 27.8 cm (37.8 x 24.1 x 10.9 in)
Shipping dimensions (H x W x D)	115 x 79 x 48 cm (45.3 x 31.1 x 18.9 in)	115 x 79 x 48 cm (45.3 x 31.1 x 18.9 in)
Ambient air temperature for operation	-20 to 60°C (-4°F to 140°F)**	-20 to 60°C (-4°F to 140°F)**
Operating altitude	Up to 2000 m	Up to 2000 m
Relative humidity	5 - 95 % (non condensing)	5 - 95 % (non condensing)
Noise emission	< 55 dBA	< 55 dBA
Part number	PVSNVC15000	PVSNVC20000

Features and options

Embedded data logger	365 days	365 days
Communication protocol	Modbus (RS485)	Modbus (RS485)
Warranty	Five-year standard	Five-year standard

Regulatory approvals*

Electrical safety	CE marked for the Low Voltage Directive according to IEC 62109-1 / IEC 62109-2
Grid interconnection	VDE0126-1-1, VDE-AR-N-4105, RD1663, RD661, ENEL-Guida, UTE C15-712-1, G59/2
Environmental	RoHS
EMC	CE marked for the EMC directive 2004-108-EC according to: Emissions: EN 61000-6-3 (residential) Immunity: EN 61000-6-2 (industrial)

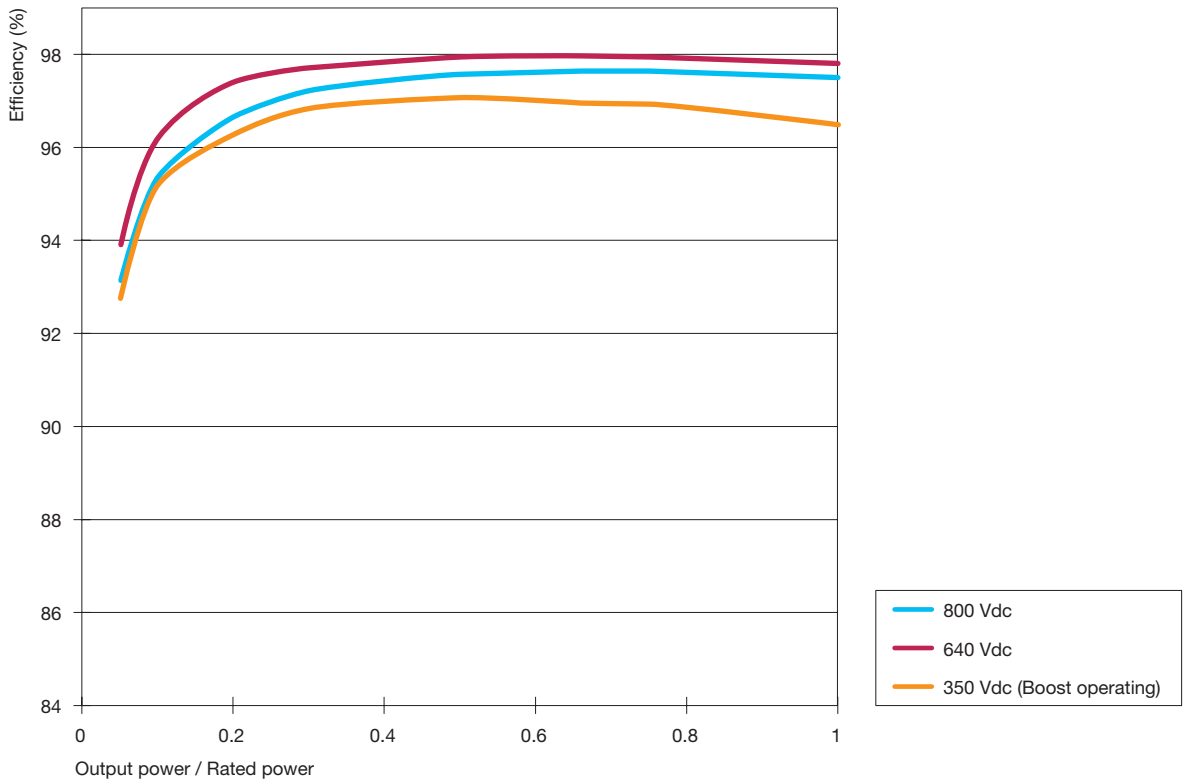
Specifications are subject to change without notice.

* More available upon request.

** -15°C cold start temperature. V_{pv} ≥ 500 V.

TL 15000 E

Efficiency graph

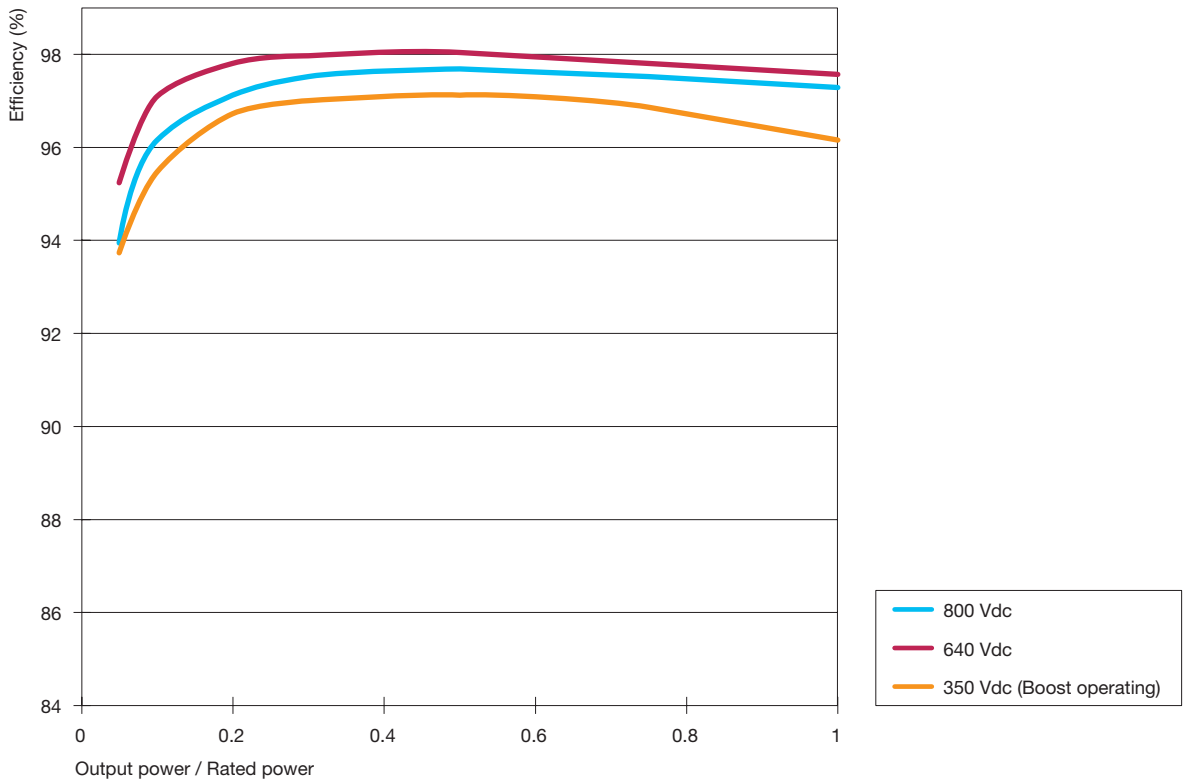


Efficiency profile

Output power	Efficiency		
	Minimum MPP voltage 350 Vdc (Boost operating)	Rated input voltage 640 Vdc	Maximum MPP voltage 800 Vdc
5%	92.77%	93.93%	93.16%
10%	95.22%	96.25%	95.41%
20%	96.31%	97.44%	96.70%
30%	96.87%	97.75%	97.26%
50%	97.10%	97.97%	97.61%
75%	96.96%	97.99%	97.67%
100%	96.52%	97.83%	97.52%

TL 20000 E

Efficiency graph



Efficiency profile

Output power	Efficiency		
	Minimum MPP voltage 350 Vdc (Boost operating)	Rated input voltage 640 Vdc	Maximum MPP voltage 800 Vdc
5%	93.73%	95.24%	93.94%
10%	95.47%	97.10%	96.14%
20%	96.71%	97.80%	97.10%
30%	96.99%	97.97%	97.51%
50%	97.12%	98.03%	97.67%
75%	96.86%	97.80%	97.51%
100%	96.14%	97.56%	97.27%