

STECA COOLCEPT FLEX XL

Coolcept fleX XL Steca grid connection inverters introduces the successor generation to the established coolcept-topology. Coolcept fleX XL offers a creative energy concept for any modern home.



StecaGrid Coolcept Flex XL



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Coolcept fleX XL offers a complete inverters family of grid connection inverters for the three phases on commercial applications.

What is coolcept?

Coolcept is Steca's new inverter topology that provides the highest peak efficiency. It is basically characterised by circuit simplicity combined with highest efficiency. The patented coolcept topology is a global innovation that is only available from Steca.

The advantages of coolcept

Coolcept is cool.

High peak efficiency means the lowest possible heat dissipation. This makes cooling elements unnecessary.

Coolcept is efficient.

Stable peak efficiency over the entire power range ensures maximum yields.

Coolcept is long-living.

Low heat dissipation and cool components

Low heat dissipation and cool components guarantee a long service life.

This incomparably affordable all-in one solution offers functions for very different applications and is even scalable in relation to the power requirement. Whether you need one or more MPP trackers, high-voltage or low-voltage storage, or a solution with or without an emergency power supply – everything is possible. Steca has already thought of and prepared for charging an electric vehicle straight from a PV generator. The new components and setting options enable the use in many countries.

Maximum efficiencies at all input voltages and reliable cooling concept

The maximum efficiencies of the state-of-the-art power electronics topology ensure minimal losses, thus guaranteeing a very long service life thanks to extremely low levels of self-heating.

SPECIFICATIONS

	StecaGrid 1511	StecaGrid 2011	StecaGrid 2511	StecaGrid 3011	StecaGrid 3011-2
DC Input side (PV generator)					
Maximum input voltage			1000 V		
Operating input voltage range			120 ... 720 V		
Number of MPPT tracker			2		
Maximum input current			13,0 A		
Maximum input power	4330 W	5670 W	7220 W	8760 W	10310 W
AC output side (Grid connection)					
Grid voltage	320 ... 460 V (depending on regional settings)				
Rated grid voltage	400 V				
Maximum output current	6,74 A	8,82 A	11,23 A	13,63 A	16,04 A
Maximum active power (cos phi = 1)	4200 W	5500 W	7000 W	8500 W	10000 W
Maximum apparent power	4200 VA	5500 VA	7000 VA	8500 VA	10000 VA
Rated power	4200 W	5500 W	7000 W	8500 W	10000 W
Rated frequency	50 Hz				
Frequency	47 ... 52,5 Hz (depending on regional settings)				
Night-time power loss	< 7,9 W				
Feeding phases	Three phases				
Total harmonic distortion (cos phi = 1)	< 3 %				
Power factor	0,8 capacitive ... 0,8 inductive				

cos phi

Performance

Max. Efficiency	97,1 %	97,1 %	97,2 %	97,2 %	97,2 %
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European efficiency	96,2 %	96,2 %	96,5 %	96,5 %	96,5 %
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Own consumption	< 7,9 W				
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Safety

Isolation principle	Yes				
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Grid monitoring	Yes, integrated				
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Residual current monitoring	Yes, Integrated (internal personal protection according to EN 62109-2, RCCB type B)				
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Protection class	RCCB type B				
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Operating conditions

Area of application	Outdoors & indoors				
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Ambient temperature	-20 °C ... 60 °C				
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Relative humidity	4 ... 100 %				
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Noise emission (typical)	42 dBA				
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Fitting and construction

Degree of protection	IP 65 / IP 55 (casting/fan)				
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Overvoltage category	III (AC), II (DC)				
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DC input side connection	Phoenix Contact SUNCLIX (connectors included)				
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AC input side connection	Spring-type terminal strip				
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Dimensions (X x Y x Z)	563 x 405 x 233				
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Weight	17,9 Kg	17,9 Kg	19,9 Kg	19,9 Kg	19,9 Kg
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Communication interface	Ethernet LAN (RJ45), 4 x digital inputs, USB 2.0, potential-free contact, Webserver				
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Integrated DC circuit breaker	Yes, Compliant with DIN VDE 0100-712				
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Cooling principle	Temperature controlled fan, variable speed, internal (dustproof)				
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Certificates	CE, GS, EN 62109-1, EN 62109-2, EN 60529, CEI 0-21, EN 50438*, G83/2, IEC 61727, IEC 62116, RD 1699, TOR D4, UNE 206006 IN, UNE 206007-1 IN, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105				
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