

STECA SOLARIX PLI

5000-48 and 2400-24



The Steca Solarix PLI is the first product from Steca Elektronik to offer an all-in-one package. It allows users to supply consumers with 230 V AC power, charges the battery with an integrated MPPT charge controller, and at the same time permits connection to a generator or an available electricity grid. Everything in a single device.

This means that solar energy can be used as the top priority, for example. And if that isn't enough, a generator can be started or the supply can be switched to the public grid. At the same time, the battery can also be recharged by either the generator or the grid. Given its very quick switchover time of up to 10 ms and its flexible energy priority selection, the Solarix PLI also acts as an uninterruptible power supply.

Even difficult consumers, such as large AC motors, can be started reliably with dual overload capacity. The maximum power point tracker in the integrated charge controller ensures that, even in adverse weather conditions, the maximum output is obtained from the PV modules in order to optimally charge the battery and supply the consumers with power at the same time.

Product features

- True sine wave voltage
- High overload capacity
- Integrated MPP tracker
- Multi-stage charge technology
- Monthly equalising charging
- Auxiliary contact for starting a generator
- Adjustable charging end voltages
- Battery type: gel / liquid lead battery
- Lightweight construction
- Easy installation

Electronic protection functions

- Overload protection
- Reverse polarity protection of modules, for battery via fuse
- Deep discharge protection
- Short-circuit protection for load
- Reverse current protection at night
- Overtemperature and overload protection
- Acoustic alarm
- PE connection

Displays

- Graphic LC display and three LEDs show operating states

Operation

- Simple menu-guided operation
- Button-based programming

Interfaces

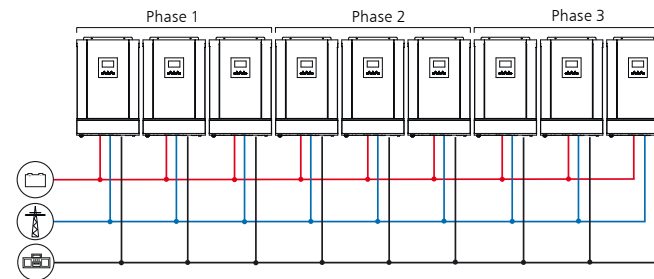
- Current data is output via RS-232

Options

- Interconnectable in parallel or in three phases (parallel kit required)

Certificates

- CE-compliant
- RoHS-compliant
- Manufactured under the terms of ISO 9001 and ISO 14001



Up to 9 inverters can be switched parallel and/or three-phase.



Belgium

	PLI 5000-48	PLI 2400-24
Characterisation of the operating performance		
System voltage	48 V	24 V
Continuous power	5 kW / 5 kVA	2.4 kW / 3 kVA
Power 5 sec.	10 kW / 10 kVA	4.8 kW / 6 kVA
Max. efficiency sine wave	> 93 %	> 91 %
Max. efficiency charge controller	> 98 %	
Own consumption standby / ON	< 15 W / < 50 W	< 14 W / < 45 W
AC input side		
Input voltage	90 V AC ... 280 V AC	
Input frequency	40 ... 65 Hz, 50 / 60 Hz (automatic detection)	
Max. current on transfer system	40 A	30 A
Transfer time	10 ms typical (UPS mode)	
AC output side		
Output voltage	230 V AC +/- 5 %	220 V AC ... 240 V AC +/- 5 %
Output frequency	50 / 60 Hz	
Battery side		
Battery voltage	38.4 V ... 66 V	20 V ... 30 V
Max. charge current of PV	80 A	40 A
Max. charge current of AC	60 A	
End of charge voltage	54.0 V	27.0 V
Boost charge voltage	56.4 V	28.2 V
Equalisation charge	60.0 V	29.2 V
Set battery type	liquid	
DC input side charge controller		
Min. MPP voltage	60 V	30 V
Max. MPP voltage	115 V	80 V
Min. open circuit voltage solar module (at minimum operating temperature)	72 V	36 V
Max. open circuit voltage solar module (at minimum operating temperature)	145 V	100 V
Max. module current	80 A	40 A
Nominal charge power	4800 W	1168 W
Own consumption controller	< 2 W	
Operating conditions		
Operating temperature	0 °C ... + 55 °C	
Storage temperature	- 15 °C ... + 60 °C	
Rel. humidity	< 95 %, non-condensing	
Maximum altitude	2000 m a.s.l	
Fitting and construction		
Terminal (AC - fine / single wire)	8 mm ² - AWG 8	8 mm ² - AWG 8
Terminal (PV - fine / single wire)	12 mm ² - AWG 6	8 mm ² - AWG 8
Battery connection (M6 ring terminal included)	35 mm ² ... 50 mm ² AWG 2 ... AWG 0	
Double throw signal contact	3 A / 250 V AC (max. 150 W), 3 A / 30 V DC	
Degree of protection	IP 21	
Dimensions (X x Y x Z)	298 x 469 x 130 mm	275 x 385 x 114 mm
Weight	11.5 kg	7.6 kg
Cooling principle	fan	

Technical data at 25 °C / 77 °F