



SOLAR CONVERTER (SOLADIN)

Model Soladin 600

Grid connected converter

The sun as power station

This technique makes it possible for us to use durable power sources such as the sun to an increasing degree. With the development of the Soladin, Mastervolt has made it possible for even smaller sun stations, made up of only a few panels, to contribute to a durable energy provision. The Soladin is the most important connection between the solar panel and the electricity grid.

How does the Soladin work?

The most important function of the Soladin is converting direct current, generated by the solar panels, into a normal, usable 230V/50Hz home current. The Soladin uses the electricity grid as an energy reservoir to which generated energy is supplied back. Should the electricity provision be cut off, the Soladin will automatically shut down.

'Plug and play'

The Soladin converter is very compact and equipped with easily accessible 230V and DC connections. Multi-contact connections have been included for the positive and negative connection of the panel. The net plug can be connected to any available socket and in this way makes the system ready to use. A clear LED indication gives information about the energy produced, the status of the system and the Soladin converter.



Example of a solar station with four 120Wp solar panels, suitable for Soladin peak capacity: 480Wp. Energy saving, depending on usage, up to 12%.

Dynamic MPP tracker

Solar panels have a certain point at which they supply maximum energy: the so-called 'maximum power point' (MPP). This point differs in every make and kind of panel and is determined by a combination of voltage, current, incidence of light and temperature. The Soladin 600 is equipped with a dynamic MPP tracker, which makes it possible to reach extreme high MPP output under virtually all circumstances. The Soladin 600 therefore does not have any restrictions with regards to connecting any kind of solar panel (silicium, amorf, etc.) and always provides optimum performance of your solar system.

Delivery programme

In addition to the very successful Soladin 120, suitable for one panel or more panel systems if used in parallel, Mastervolt now also has the Soladin 600 available. You can connect maximum power of 600 Wp to the Soladin 600 converter. For example: five solar panels of 120 Wp. This is in accordance with the maximum legally permitted power that can be added to an existing consumer group without a registered installer. Please have a look at www.mastervoltsolar.com for the correct Soladin type, suitable for the panels used. Here you will find a programme that will help you to calculate which model converter you need.

Entry range

The Soladin 600 has a wide working area and this makes it possible to connect almost all systems up to 600 Wp. With a voltage range of 45 to 125V DC, configurations of 36, 54 as well as 72 cells can be connected to it. The power range goes from 0 to 8A so the Soladin 600 is also suitable for the latest high power panels.



- POWER FROM THE SUN AT HOME
- SAVE ON YOUR ELECTRICITY BILL
- SIMPLE PLUG & PLAY CONCEPT FOR INSTALLING YOURSELF
- SUITABLE FOR EVERY TYPE OF SOLAR PANEL

Version no. EN180406.
Article no. 500004223.



TECHNICAL SPECIFICATIONS AND DELIVERY PROGRAMME

Model Soladin 600

General

Article number	130000600
Work temperature	-20°C to 40°C
Storage temperature	-20°C to 70°C
Relative humidity	max. 95% not condensating
Protection degree	IP23
Safety class	class II
Dimensions	365 x 143 x 76 mm
Weight	2 kg
Casing	plastic (ABS)

Input (DC)

Nominal power @ 25°C	535W
Maximum power @ 25°C	600W
PV power	160-700 Wp
MPP voltage	40-125V DC
MPP tracker	dynamic MPP tracker
Maximum voltage	155V DC
Nom. rated current	8A
Starting up power	1W DC @ 40V DC
DC connection	MultiContact 4mm

Output (AC)

Net voltage	230V (184-265V, programmable)
Maximum power	2.25A
Fuse	3.15A slow
Frequency	50 Hz (49,8-50,2 Hz)
Cos phi	0.99
Zero-Load	< 0.05W AC
European output	91%
Maximum output	93%
AC connection	cable of 1.80 meter with plug

Protections

Island protection	monitoring of voltage- and frequency frame, disconnects within 100ms.
Protection of peak capacity	automatic control, dependent on the temperature of the converter, by raising the Vmpp. It is impossible to damage the converter with too much power.
Temperature protection	bringing back the power in case of a higher temperature of the converter, will disconnect above 80°C
DC polarity protection	DC connection is protected (MC connectors can be damaged)

Read out function

Indicator	two LED's, yellow and red
Correct working	flashes yellow (speed of flashing is in relation to the power generated)
Malfunction net or inverter	red (6 different flashing codes)

Norms

CE	yes
EMC guideline	EMC 89/336/EEG
Emission	EN 50081-1
Harmonisation	EN 61000-3-2
Immunity	EN 50082-2
LV guideline	LV 73/23/EEC
Safety	EN 60950

- Standard warranty five year.