

ferroamp



Solar String Optimizer Installation manual

Warning

- Read the manual before installation
- The EnergyHub may not be opened by unauthorized personnel. Contact Ferroamp for instructions.
- The electrical installation shall be performed by an authorized electrician in accordance with electrical standards and safety precautions
- The warranty is not applicable if the products has been modified.
- Observe, the EnergyHub equalizes imbalance between the phase conductors and uses the systems neutral conductor. Large imbalance causes large currents in the neutral conductor.
- The DC contact shall not be connected when the EnergyHub is powered up.

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Solar String Optimizer

1. Products

SSO 6 kW	 A black, rectangular solar string optimizer with a heat sink design. The brand name 'ferroamp' is visible on the front. It has two mounting tabs on the right side and two electrical terminals at the bottom.
Sunclix-contact PV+	 A blue and black Sunclix PV+ connector, featuring a cylindrical body with a locking mechanism and a central pin.
Sunclix-contact PV-	 A black Sunclix PV- connector, featuring a cylindrical body with a locking mechanism and a central pin.
3 pole DC contact	 A black 3-pole DC contact connector, featuring a cylindrical body with a locking mechanism and three electrical pins.

2. Location of the SSO

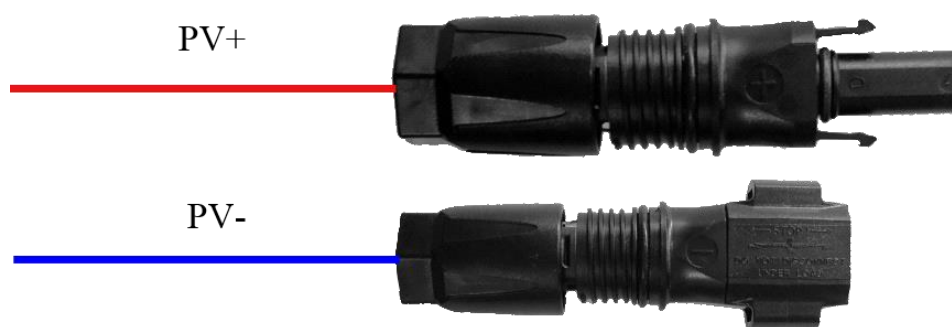
- Make sure there is enough space around the SSO to enable a safe installation and steady airflow.
- The SSO should not be located in direct sunlight.
- It is recommended that the SSO are mounted close to the PV-Panels.

Advantages:

- Increased safety since the SSO can disconnect the PV-panels from the DC-link if a failure occurs.
- The cables from each SSO can be merged together through a distribution board so less cables are needed between the SSO and the inverter.

3. PV connection

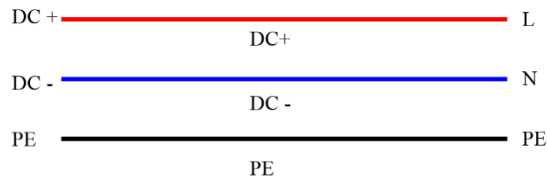
- Connect the Sunclix-contacts to the cables. The one marked with a + to the PV+ cable and the one marked with – to the PV- cable.



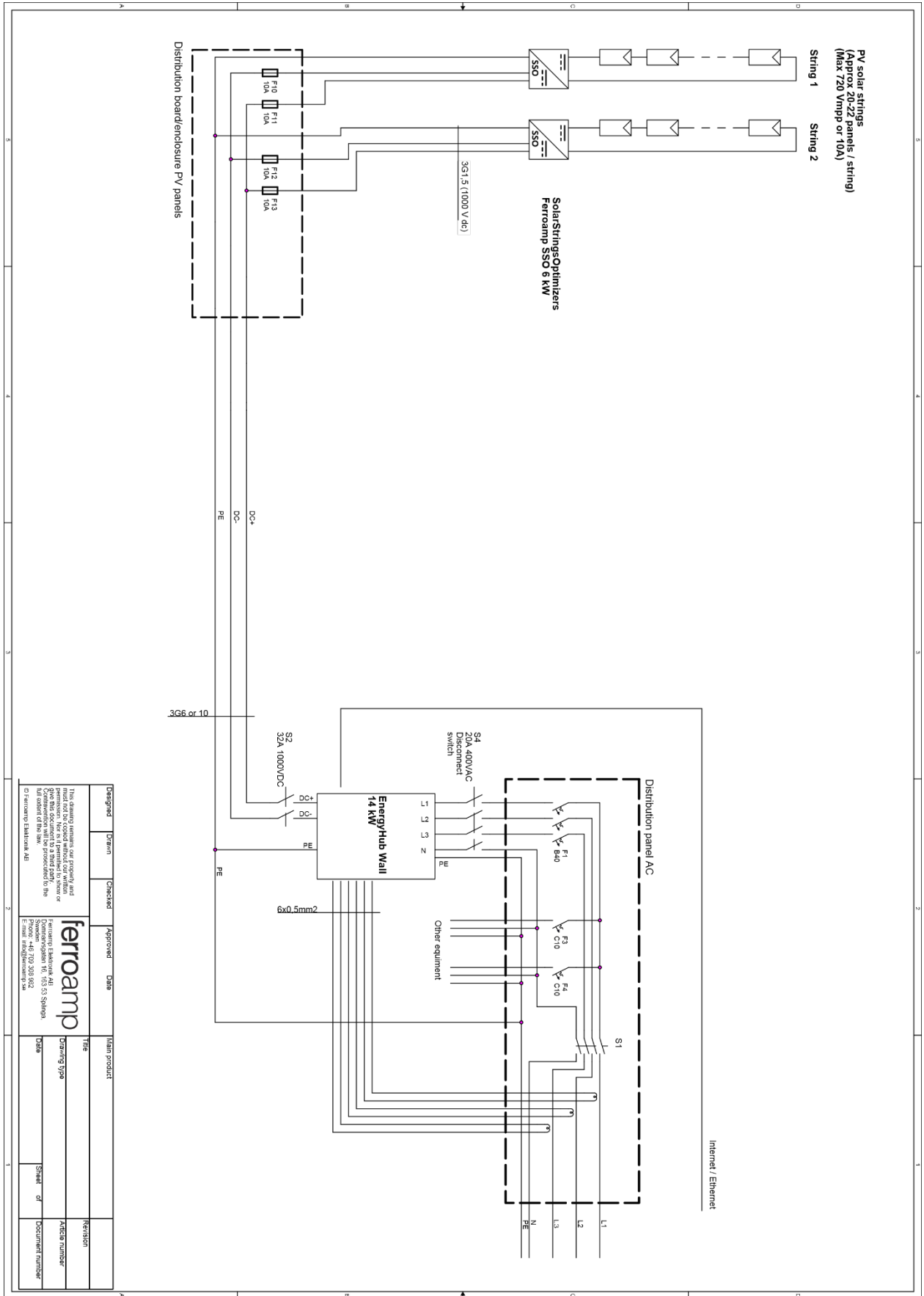
- Connect the Sunclix-cables to the SSO

4. DC connection

- Ensure that the EnergyHub is turned off. Do not connect the DC grid contact if the EnergyHub is powered on.
- Connect the cables to the 3-pole DC contact as shown below. Please note the order of the cables.
- Connect the cables to the 4-pole DC grid contact. Note that the Neutral (N) is not used for the DC grid contact on the EnergyHub.



5. Schematic Wiring diagram



Designed	Drawn	Checked	Approved	Date	Main product
					Fire
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