

User instructions and quick-fit guide

Please retain for future reference

SOLiC 200
FREE HOT WATER FROM THE SUN

Boost
90min

Immersion Sensor Mains

Warning! Electric shock hazard!
Turn power off before opening

earthwise
Products Ltd



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WARNING! Electricity can kill. Normal operating voltage 230-240AC mains single phase 50HZ

For the SOLiC 200 to qualify for the 10-year return-to-base warranty, please complete and return the enclosed postcard within 28 days, signed by a qualified electrician at the time of installation.

Introduction and background

The purpose of the award-winning SOLiC 200 is to detect and offer your surplus generated power to a standard 3kW domestic immersion heater.

The SOLiC 200 works seamlessly with your photovoltaic panels, or other micro generation system, without the need for any user intervention.

The SOLiC 200 is a proportional controller: detecting when your house is exporting power back to the grid, and offering an equal amount of power to your immersion heater circuit.

For example; if your house is using 500W and the solar panels are generating 700W, the SOLiC 200 will automatically offer 200W to the immersion circuit. The SOLiC 200 checks export levels continuously, striving to keep this export amount at zero.

Boost function

To turn the immersion heater on manually – irrespective of whether solar power is being generated – press the boost button. The SOLiC 200 will offer full mains power to the immersion heater for 90 minutes. To manually resume automatic operation, press the boost button again during the 90 minutes. After 90 minutes the SOLiC 200 will resume automatic operation. When the SOLiC 200 boost is in operation, the “immersion light” will flash red.

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The diagram illustrates the control panel of the SOLiC 200. It features a large green sine wave graphic across the middle. Above the wave, the text 'SOLiC 200' is prominently displayed in green, with 'FREE HOT WATER FROM THE SUN' underneath in a smaller, underlined font. To the right of the wave, there is a large dark green circle labeled 'Boost 90min'. Below the wave, three indicator lights are shown: a red light labeled 'Immersion', a green light labeled 'Sensor', and another green light labeled 'Mains'. At the bottom left, a warning triangle with a lightning bolt is accompanied by the text 'Warning! Electric shock hazard! Turn power off before opening'. At the bottom right, the 'earthwise Products Ltd' logo is displayed, featuring a stylized orange sun rising over a green horizon line.

Quick fit installation guide

1. Find suitable mounting location close to the home consumer unit and supply meter
2. Ensure the immersion heater circuit isn't used to power any other appliances.
3. Turn off immersion circuit breaker on the consumer board
4. Screw SOLiC 200 to wall ensuring a 3cm clearance around the unit
5. Wire the SOLiC according to the wiring diagram inside the unit and arrange cables through the supplied rubber grommets
6. Clip the load sensor around the Neutral or Live mains tail as per diagram on page 7 so that it is able to detect if the house is importing or exporting power. The load sensor cable can be extended to 5m if needed.
7. Plug the sensor's 2.5mm jack plug into socket
8. Carefully insert the boost button stem into position
9. Replace cover by locating the lid on back lugs, ensure the boost button is positioned correctly and secure with the supplied screw
10. Turn immersion circuit back on
11. Commission SOLiC 200 as per page 5

Commissioning the SOLiC 200

1. Ensure the water in the immersion tank requires heating.
2. Ensure house is drawing at least 200W power
3. Ensure that the immersion electrical circuit is on
4. Turn off the solar inverter and turn on immersion circuit breaker
5. Allow 20 seconds for calibration:
 - The Mains light should be green and Sensor light should be red.
 - If three red lights show, take the sensor clip off the +ve or -ve mains tail, turn it over and clip it back on (so the electricity is running through it in the opposite direction), then return to step 1
 - If the Mains light turns red, refer to the troubleshooting guide on page 6
6. Turn the solar inverter on and wait three minutes
7. Check lights are showing correctly as per table on page 8

Troubleshooting

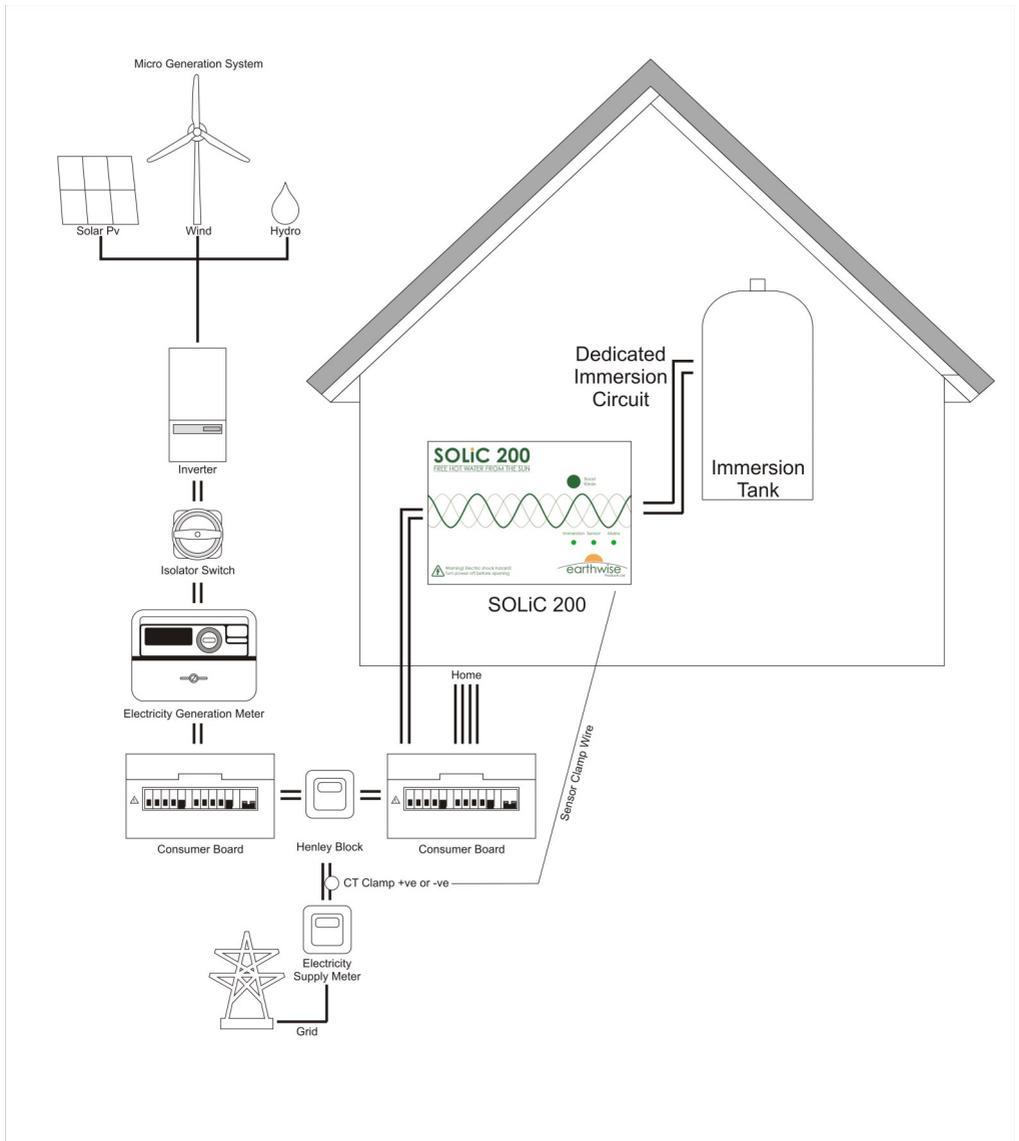
If there is a problem with the SOLiC 200, three red lights will show or only the Mains light will show or no lights will show.

If three lights show, turn the power to the SOLiC 200 off , then verify the following: The sensor is connected to the correct conductor The sensor plug is plugged into the circuit board The sensor is clean and securely closed The sensor has not been damaged The immersion heater is switched on The wiring to the immersion heater circuit is correct The immersion heater element works That the water in the immersion tank is not already hot Once these checks are complete, follow the commissioning process on page 5

If the Mains light is red a mains fault has been detected. Check the inverter for a DC leak.

If none of the lights are showing, please replace the internal fuse (500 mA slow blow fuse), investigate and rectify what caused the fuse to blow and follow the commissioning process on page 5.

SOLiC 200 wiring diagram



Lights table

Mains Light	
Green	Power is on
Red	The unit is in standby mode. Check troubleshooting suggestions.
Sensor light	
Green	Surplus power is available
Red	The house is drawing grid power
Flashing red/green	ALL available surplus power is being offered to the immersion heater circuit
Immersion light	
Green	Power is being offered to the immersion
Off	No power is being offered to the
Flashing red	Boost function is operating