



HeatSmart / CoolSmart PLUS

Touchscreen Heat-Exchanger Controller — HeatSmart & CoolSmart PLUS

Installation, Operating & Maintenance Manual

Series codes: 203.11.71 – 203.11.74



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1. Safety Warnings

The **Heatsmart / Koolsmart PLUS** is a touchscreen pool heating controller manufactured in England. Read and follow these instructions for proper installation, use and maintenance. **Incorrect installation will affect your warranty.** Retain this manual for future reference.

ELECTRICAL CONNECTION BY A QUALIFIED ELECTRICIAN ONLY

Electrical connection may be carried out **only by a qualified electrician**. The access cover may be opened only with the unit **de-energised** and secured against unintentional switching on.

DRY LOCATION, OUT OF DIRECT SUNLIGHT

Screw-mount the Heatsmart / Koolsmart PLUS on a **dry, weatherproof wall, out of direct sunlight**. It must be sited **no more than 1 metre** from the flow sensor and temperature sensor on the heat exchanger.

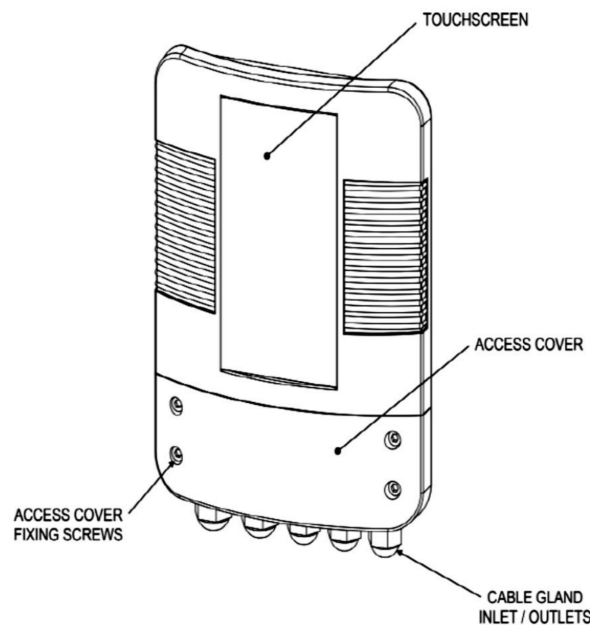
NOT INTENDED FOR CHILDREN

The appliance is not to be used by children or by people with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

2. Models & Product Codes

The **Heatsmart PLUS** and **Koolsmart PLUS** are touchscreen controllers for Electro **heat exchangers** (G2 and SST), manufactured in England. **Heatsmart** controls pool **heating**, **Koolsmart** controls **cooling**. Both measure temperature with an **NTC** sensor, confirm flow with a **flow sensor** and drive the circulation pump. A version with an integrated **Grundfos 90 W booster pump** is also available.

Oxygen code	Model	Description
203.11.71	PSPC-HE	Heating — touchscreen, 1 m flow switch, 1 m temperature sensor · 10 W
203.11.72	PSPC-HE-GP	Heating — as above + Grundfos 90 W booster pump
203.11.73	KSPC-HE	Cooling — touchscreen, 1 m flow switch, 1 m temperature sensor · 10 W
203.11.74	KSPC-HE-GP	Cooling — as above + Grundfos 90 W booster pump



HeatSmart / CoolSmart components

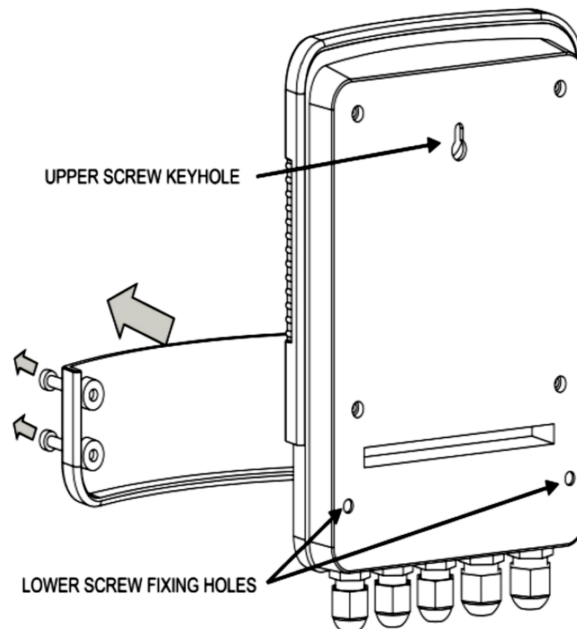
Key: touchscreen · access cover · access cover fixing screws · cable gland inlet / outlets · upper screw keyhole · lower screw fixing holes.

3. Technical Data

Type	digital touchscreen heating controller
Compatibility	Electro G2 and SST heat exchangers
Sensors	NTC temperature + flow, within 1 m
Temperature increment	0.1 °C
Differential	0.6 °C
Start delay	2 minutes
Modes	Normal · Timer · Priority · Installation · Standby
Communication	MODBUS (baud rate, address, parity) for BMS connection
Mounting	wall, dry location out of direct sunlight
Country of manufacture	England

4. Mounting

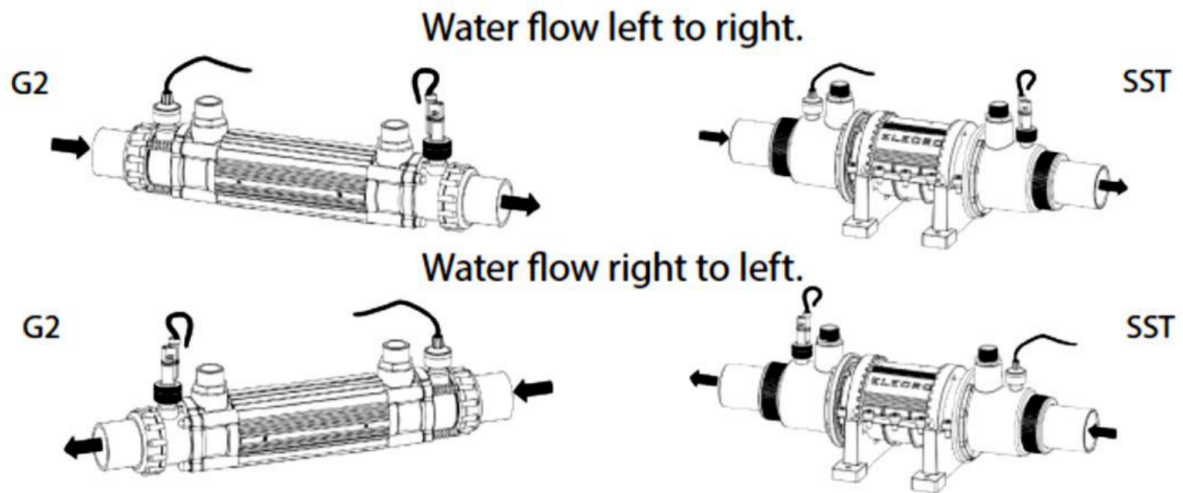
- Screw-mount it on a **dry wall**, weatherproof and **out of direct sunlight**.
- The distance to the sensors on the heat exchanger must not exceed **1 metre**.
- The rear face has an **upper keyhole screw hook** and **two lower screw holes**.
- The lower holes are accessed after removing the **4 screws** retaining the lower access cover.



Wall mounting — upper keyhole and two lower screws

5. Sensors on the Heat Exchanger

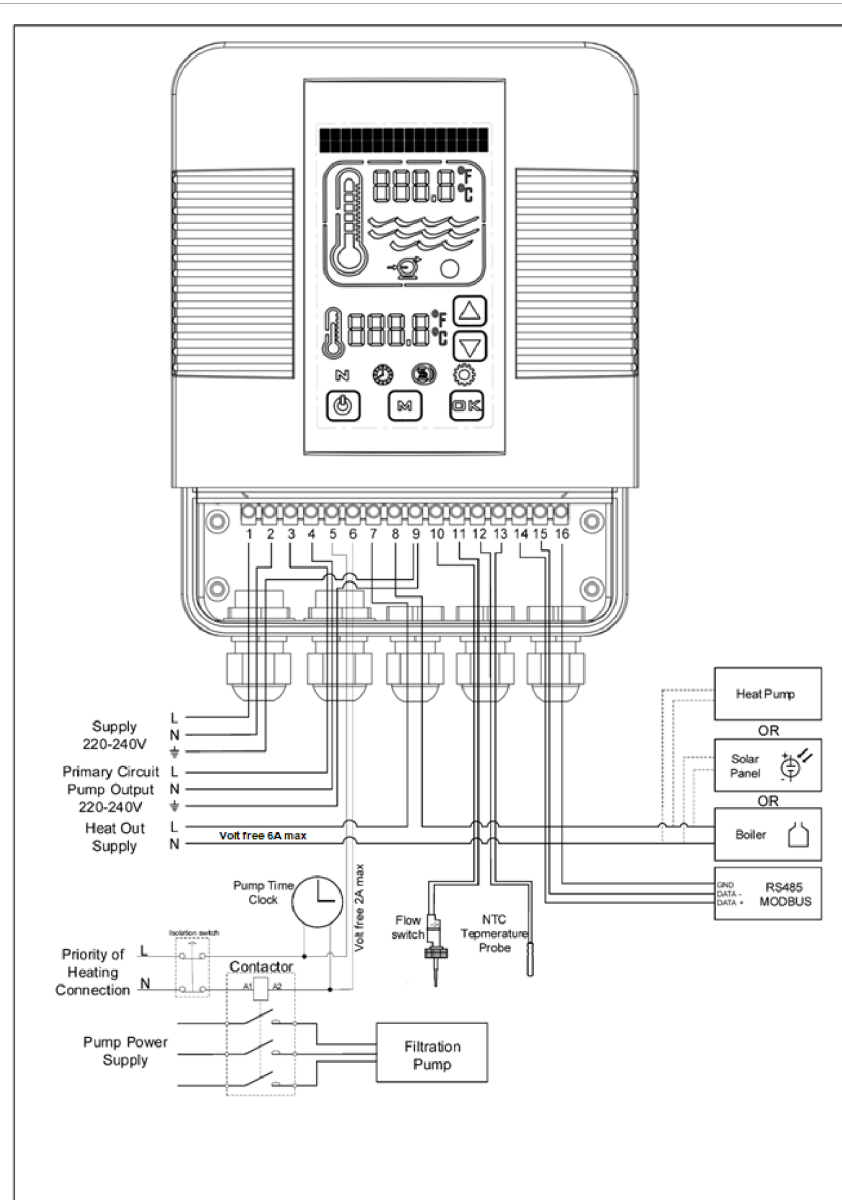
- Elecro **G2** and **SST** heat exchangers have **common ports on both sides** for the NTC temperature sensor or the flow sensor.
- The **NTC temperature sensor** must be positioned on the **water entry side** of the heat exchanger.
- The **flow sensor** goes on the opposite side.
- Which side is which depends on the **flow direction** — see the figure for left-to-right and right-to-left flow.



Sensor positions on G2 and SST — top: water flow left to right, bottom: right to left

6. Electrical Connection

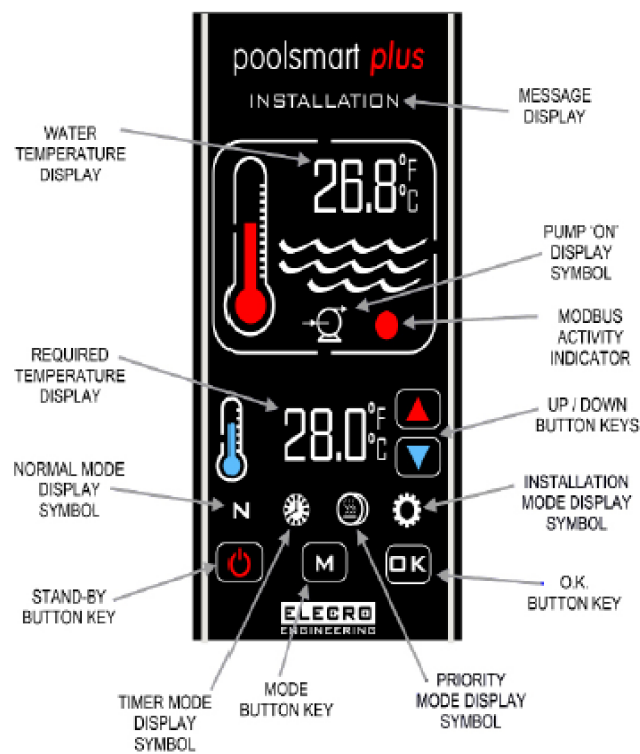
- The power supply must be fitted with a **30 mA RCD**. The electrician may replace the supplied cable gland with a larger size if required.
- Remove the **access cover** to connect the power supply cable.
- Make sure all terminal-block connections match **the label inside the heater** and are tight.
- Protect the cable from **sharp edges, hot surfaces and crush hazards**; fix it so it is not a trip hazard.



HeatSmart / CoolSmart PLUS wiring diagram

7. Operation & Touchscreen

- The heater switches on **only** when the pump is running above the minimum flow **and** the required temperature is higher than the actual one.
- While heating, the display shows **NORMAL** and the red thermometer is animated.
- The required temperature is set with the **UP / DOWN** keys in **0.1 °C** increments.
- **Priority of Heating:** the heater monitors the water temperature and **starts both the circulation pump and the heating** whenever necessary.
- **HEATER DELAY:** two minutes before starting, to prevent overheating of the switch components from frequent cycling.
- **Differential:** heating restarts once the water has fallen **0.6 °C** below the required temperature.
- **Five modes** via the "M" key: Normal · Timer · Priority · Installation · Standby.
- In **Installation** mode the heater and pump are **turned off immediately** and cannot be turned on while you remain in the setup menus.



The touchscreen and its symbols

Display key: water temperature display · required temperature display · message display · pump 'ON' symbol · MODBUS activity indicator · UP / DOWN button keys · mode button key (M) · O.K. button key · stand-by button key.

Installation menu	What it sets
LANGUAGE	Language — English, French, German, Spanish, Russian
UNITS	Temperature units — Centigrade or Fahrenheit
CLOCK	Current time
TIMER	Four on/off time settings for the heating
PROBE CAL	Temperature probe calibration
MODBUS	Baud rate, address and parity for BMS connection
FACTORY	Factory settings — access restricted
EXIT	Exit; returns to Normal

8. Maintenance

- **Before any maintenance, isolate the unit from the mains.**
- Check terminal tightness and cable-gland sealing annually.
- Clean the screen with a **dry soft cloth** — no solvents.
- Check that the sensors remain correctly fitted on the heat exchanger.
- Dispose of electrical and electronic equipment in accordance with the applicable regulations.

9. Warranty & Contact

- Guaranteed for **two years within Europe** and one year outside, from the date of purchase, against faulty workmanship and materials.
- The manufacturer will, at its discretion, **replace or repair** faulty units or components returned for inspection. Proof of purchase may be required.
- Not covered: **incorrect installation**, inappropriate use or neglect, **failure to connect the Safety Circuit**, moisture in the enclosure, water outside the quality limits, frost damage.
- Shipping damage must be reported **within 48 hours** of receipt; later claims are not covered.
- **Consumables** (glass parts, seals, water connections) are excluded.

Contact Information

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ISO Certifications

ISO 9001:2015 Quality Management <i>EUROCERT</i>	ISO 14001:2015 Environmental Management <i>BQV</i>	ISO 45001:2018 Occupational Health & Safety <i>BQV</i>
ISO 22301:2019 Business Continuity <i>EUROCERT</i>	ISO 46001:2019 Water Efficiency <i>BQV</i>	

Recycling of materials must be carried out in accordance with applicable regulations.