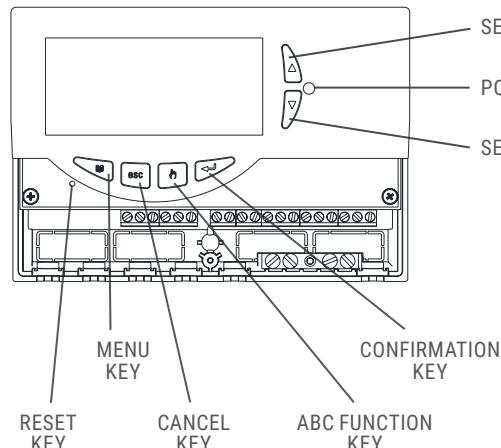


## TECHNICAL FEATURES

Power supply:	230 V~ ±10% 50 Hz	Protection grade:	IP40
Power absorption:	<2 VA	Type of action:	1
Sensors type:	3 x NTC 10 kOhm @ 25°C ±1%	Overshoot category:	II
Sensor operating range:	-50 °C .. +200 °C (collector) -50 °C .. +110 °C (boiler)	Pollution degree:	2
Temperature reading range:	-20 °C .. 180 °C	Tracking Index (PTI):	175
Accuracy:	±2 °C	Class of protection against electric shock:	II 
Resolution:	0,1 °C (-20 °C .. 144,9 °C) 1 °C (145 °C .. 180 °C)	Rated impulse voltage:	2500 V
Offset adjustment:	on S1: ±5.0 °C on S2: ±5.0 °C on S3: ±5.0 °C	Number of manual cycles:	50000
Installer Password:	0000 .. 9999 (default 0000)	Number of automatic cycles:	100000
Acoustic Signal:	On/Off (default Off)	Software class:	A
Backlight timing:	20 s from last keypress	EMC test voltage:	230 V~ 50 Hz
OUT2 Relay Logic:	NOR=N.O. REV=N.C. (default N.O.)	EMC test current:	34 mA
Contacts rating:		Distances tolerances fault mode 'short' exclusion:	±0,15 mm
OUT 1 relay:	2(1) A max 250 V~ (SPST) Voltage free	Ball pressure test temperature:	75 °C
OUT 2 relay:	8(1) A max 250 V~(SPST) Voltage free	Operating temp. range:	0 °C .. 40 °C
Alarm relay contacts rating:	4(1) A max 250 V~ (SPDT) Voltage free	Storage temp. range:	-10 °C .. +50 °C
Output Signal:		Humidity limits:	20% .. 80% RH
PWM:	Amplitude: 10 V ±15% Frequency: 1 kHz Current: 15 mA max.	Case: Material:	non-condensing ABS V0 self-extinguishing
0..10V:	Amplitude: 0 .. 10V ±10% @10 V Minimum load: 10 kOhm	Color:	Signal White (RAL 9003)
Max allowed PWM / 0 .. 10 V cable length:	< 3 m	Dimensions:	156 x 108 x 47 mm (W x H x D)
		Weight:	~672 g (version with probe) ~553 g (version without probe)
		Installation:	Wall-mount

## COMMANDS DESCRIPTION



### WARNING!

When the control unit is turned on it will carry out a diagnosis of the internal circuitry to verify its correct operation and the led will flash three times. **If the control unit reveals no anomalies the led will remain on**, otherwise it will continue to flash quickly and the display will show the type of error.

TDST24M300SE 044832 030425

## ELIOS MIDI DIGITAL CONTROL UNIT FOR THERMAL SOLAR SYSTEMS

 **seitron**  
Innovation Technology



### CONTACT US

customer.care@seitron.it



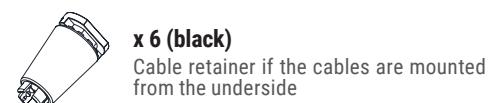
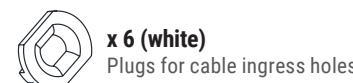
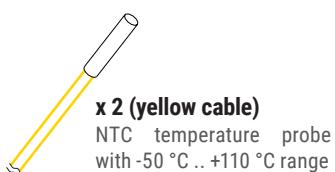
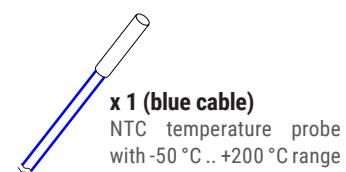
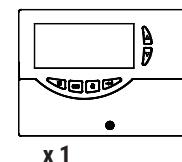
### WHATSAPP

+39 329 1444390



SCAN THE QR CODE AND DOWNLOAD THE  
COMPLETE USER MANUAL.

## WHAT'S IN THE PACKAGE



## WARRANTY

The user is guaranteed against the product's defects of conformity according to European Directive 2019/771 as well as the Seitron warranty terms, available online on the website [www.seitron.com](http://www.seitron.com). We invite the user to visit our website and check the latest version of technical documents, manuals and catalogs.

# INSTALLATION



## WARNING!

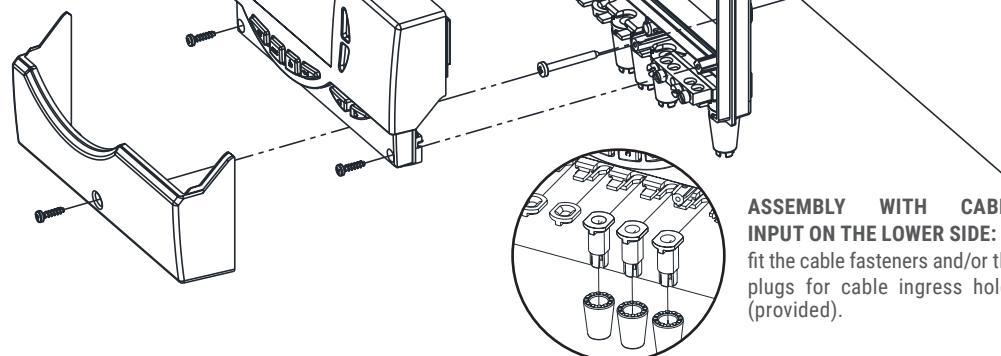
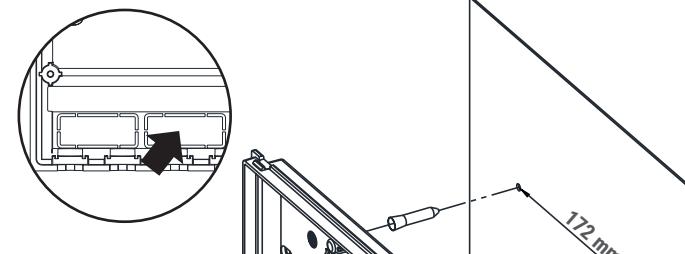


CAREFULLY READ THE COMPLETE INSTRUCTION MANUAL

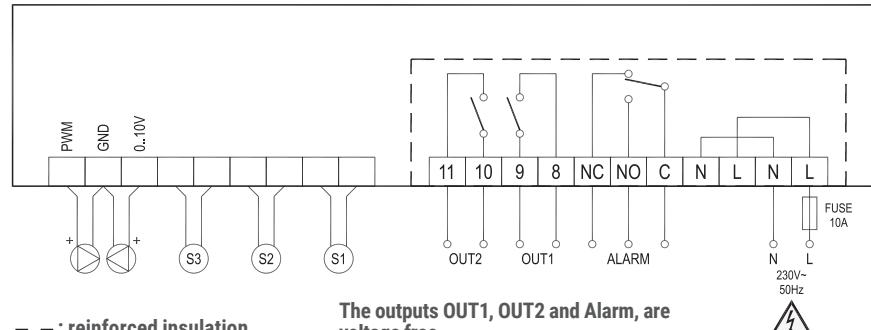
- The installation technician shall operate in full compliance with all the applicable technical standards in order to grant the unit safety.
- Before wiring the appliance make sure to turn the mains power off.
- Installation and electrical wirings of this appliance must be made by qualified technicians and in compliance with the current standards.
- When closing the unit please ensure that the removable wiring terminals have been inserted with the correct orientation (the terminals screws must be facing upward).

### ASSEMBLY WITH CABLE INPUT ON THE REAR PANEL:

if the cable fasteners (included with the unit) are not required for installation, use a screwdriver to remove the base blocks permitting the cables to pass through, and insert the plugs for cable ingress holes (provided).



## WIRING DIAGRAM



## WARNING!

It is advisable to fit a 10 A 250 V~ fuse on the power unit mains capable to intervene in case of short circuits on loads.

**OUT1: Circulation pump output**

**OUT2: Integrative source output**

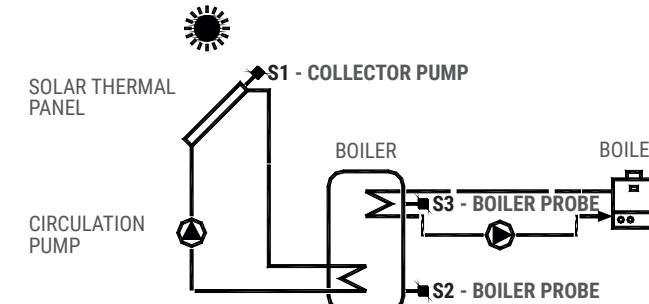
**TERMINAL BOARD GROUNDING:** On the base of the control unit case is located a brass terminal board for connecting the ground protection conductors of the load devices connected to the control unit.

**S1:** NTC temperature probe (**probe supplied with blue cable**), with -50 °C .. +200 °C range, to connect it to the collector.

**S2:** NTC temperature probe (**probe supplied with yellow cable**), with -50 °C .. +110 °C range, to connect it to the bottom of the boiler (cold zone).

**S3:** NTC temperature probe (**probe supplied with yellow cable**), with -50 °C .. +110 °C range, to connect it to the bottom of the boiler (cold zone).

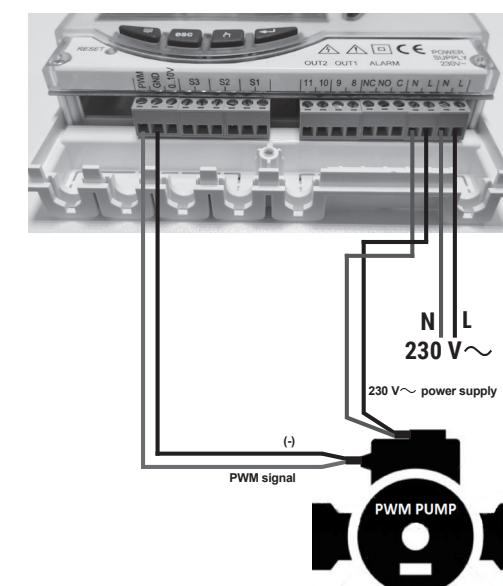
**Standard example for the placement of the three supplied probes:**



SEITRON IS THE MANUFACTURER OF THE UNIT.

CONSIDERED THE WIDE RANGE OF CIRCULATORS THAT CAN BE COMBINED, THE FOLLOWING DIAGRAMS ARE TO BE CONSIDERED AS INSTALLATION EXAMPLES. REFER TO THE CIRCULATOR MANUAL FOR CORRECT CONNECTION AND PARAMETER SETTING.

**WIRING EXAMPLE ONLY FOR SOLAR CIRCULATORS IN ACCORDANCE WITH DIRECTIVE ErP 2015 WITH EXTERNAL PWM SIGNAL.**



**EXAMPLE OF CONNECTION FOR 3-SPEED SOLAR CIRCULATORS WITH WET or "HIGH EFFICIENCY" ROTOR COMPLIANT WITH DIRECTIVE ErP 2015, WHICH DOES NOT REQUIRE AN EXTERNAL PWM SIGNAL (WITHOUT A CONNECTOR FOR PWM).**

