

Constant temperature controllers

SCC30 | SCC40

Presentation



The SCC controllers are intended for controlling a constant supply or return temperature. They are used for the control of the return temperature of solid fuel boilers as well as for the single- or two-stage loading of the storage tank.

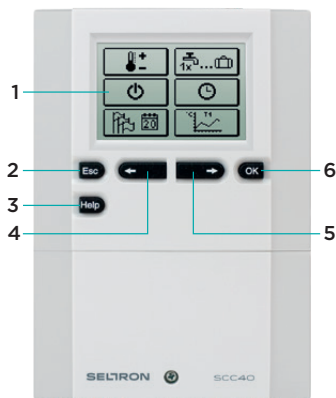
Typical application

- Storage tank heating.
- Single-stage storage tank loading.
- Two-stage storage tank loading.

Features

- Up to 6 preset hydraulic schemes.
- Option for controlling the mixing valve according to the temperature of the pipeline and the source.
- Pump control according to the temperature of the pipeline and the source.
- System operation simulation option.
- 4 mechanical relays.
- 2 solid state relays.
- 7 temperature sensor inputs.
- Option to freely programme up to 3 unused outputs.

Description of settings buttons



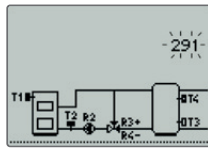
- 1 - Graphic display.
- 2 - **Esc** Move backwards key.
- 3 - **Help** Help key.
- 4 - **←** Move left or reduction key.
- 5 - **→** Move right or increase key.
- 6 - **OK** Menu entry or selection confirmation key.

Typical application	SCC30	SCC40
Solid fuel boiler return temperature control	•	•
Storage tank loading	•	•
Control of a pellet or combined boiler	•	•
Technical characteristics		
No. of preset hydraulic schemes	2	6
No. of storage tanks	1	2
No. of mechanical relays	2	4
No. of solid state relays	2	2
No. of temperature sensor inputs	7	7
Auxiliary sensor for measuring the source temperature	•	•
Option for controlling mixing valves according to the temperature of the pipelines and the source	•	•
The option for controlling the pump according to the temperature of the pipeline and the source	•	•
Measurement of the energy obtained (kWh)	•	•
Option for pulse meter flow measurement (l/min)	•	•
Free programming option	1 output	up to 3 outputs
System control		
Single-stage storage tank loading	•	•
Two-stage storage tank loading	—	•
Heat source control		
Pellet boiler	•	•
Heating system protection		
Boiler overheating protection	•	•
Antiblock function for pumps	•	•
Antiblock function for pumps and diverting valves	—	•
A comprehensive overview of the heating system operation		
Graphic display of temperatures according to days of the last week	•	•
Detailed display of temperatures for the current day	•	•
Notifications on the activated protection functions and warnings about system failures	•	•
Possibility to simulate sensors and analyse the system operation	•	•
Remote access		
Possibility of USB connection to a PC	•	•
Setup and installation		
Wizard for an easy and quick device start-up	•	•
13-language user interface Languages: EN, DE, FR, NL, PL, ES, SL, IT, CS, LT, GR, HU, HR	•	•
Setting up the operation by selecting the hydraulic scheme	•	•
“Help” button for quick help with the setup	•	•
Graphically adjustable time programmes	•	•
Option to simulate the system operation	•	•
Logging and display of changes made to the setup	•	•
Option for retrieval of the basic setup in the event of data loss or unwanted changes	•	•
Option for programming free outputs	•	•
Possibility of wall or DIN rail installation	•	•
Simple installation and connection	•	•

Outlined functions



Step 1



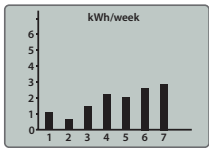
Step 2

Start-up wizard

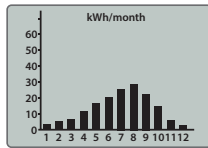
The SCC controller features a start-up wizard, which takes you through the initial setup of the controller in 2 steps.

Step 1: language selection.

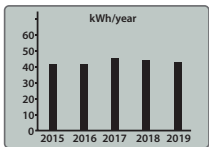
Step 2: hydraulic scheme selection.



Display by days



Display by months



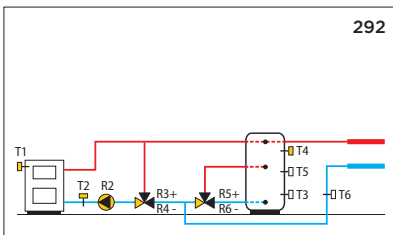
Display by years

Measurement of the energy obtained

When the solar system is also used for domestic hot water heating, we want to know how much heating energy has been obtained from the solar system.

The SCC controllers provide an informative and accurate measurement of the solar energy obtained and the display of the data in weekly, monthly and yearly diagrams.

- For informative measurements of the solar energy obtained, the maximum reading of the medium flow from the mechanical meter must be entered in the controller setup.
- For accurate measurements of the solar energy obtained, a flow meter with a pulse generator or a Vortex flow meter (VFS) must be installed in the solar system.



Typical hydraulic connection

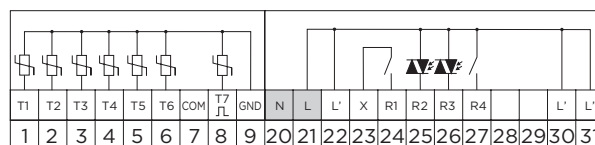
Solid fuel boiler, storage tank, constant return temperature control, two-stage loading.

Example: hydraulic connection 292.

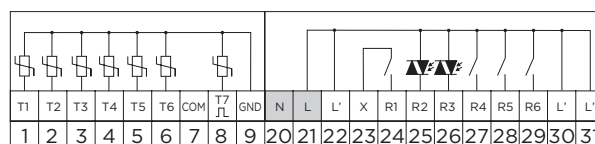
Technical specifications	SCC30	SCC40
Backlit graphic display	•	•
Operating hours meter	•	•
Program timer	•	•
Connection voltage	230 V~, 50 Hz	
Own consumption	2.5 W	
Energy consumption in the standby mode	Max. 0.5 W	
No. of outputs	7 pcs temperature sensor (Pt 1000) 1 pulse input	
No. of outputs	2 pcs Triac (R2, R3) 2 pcs relay (R1, R4)	2 pcs Triac (R2, R3) 4 pcs relay (R1, R4, R5, R6)
Relay outputs	4 (1) A-, 230 V-	
Triac outputs	1 (1) A-, 230 V-	
Clock power supply	Battery CR2032 (Li-Mn) 3 V	
Clock accuracy	+/-1 s (24 h) at 20 °C	
Degree of protection	I according to P20/EN60529	
Safety class	I according to EN 60730-1	
Operation mode	1B according to EN 60730-1	
Type of temperature sensors	Pt1000 or KTY10	
Housing material	ASA - thermoplastic	
Operating temperature	5÷40 °C	
Storage temperature	-20÷65 °C	
Product weight	410 g	410 g
No. of pieces in the packaging unit	6 pcs	
Dimensions		

Electrical connection

SCC30



SCC40



Hydraulic schemes for SCC30, SCC40

<p>291</p> <p>Solid fuel boiler, storage tank, constant return temperature control.</p>	<p>291b</p> <p>Pellet boiler, storage tank, constant return temperature control.</p>
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Hydraulic schemes for SCC40

<p>292</p> <p>Solid fuel boiler, storage tank, constant return temperature control, two-stage loading.</p>	<p>292b</p> <p>Pellet boiler, storage tank, constant return temperature control, two-stage loading.</p>	<p>293</p> <p>Pellet boiler, 2 storage tanks, constant return temperature control.</p>	<p>293b</p> <p>Pellet boiler, 2 storage tanks, constant return temperature control.</p>
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Item	Order code	Description
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2SCC3030-010	Constant temperature controller SELTRON SCC30
2SCC4030-010	Constant temperature controller SELTRON SCC40



2SCC3030-010	Constant temperature controller SELTRON SCC30, with sensors (3×TF/Pt)
2SCC4030-010	Constant temperature controller SELTRON SCC40, with sensors (3×TF/Pt)

Accessories



1TFPT-000	Immersion temperature sensor SELTRON TF/Pt
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1VFPT-000	Surface temperature sensor SELTRON VF/Pt
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1AVCO532M210-O30	Actuator SELTRON AVC 05, 3-point, 5 Nm, 2 min, 230 V-
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1SVC25+NN0	Pulse flow meter SVC 25 (up to 2.5 m ³ /h, 40 l/min)
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