



Weather-Compensated Heating and System Controllers HCC

# Heating Circuit Controllers HCC

#### General

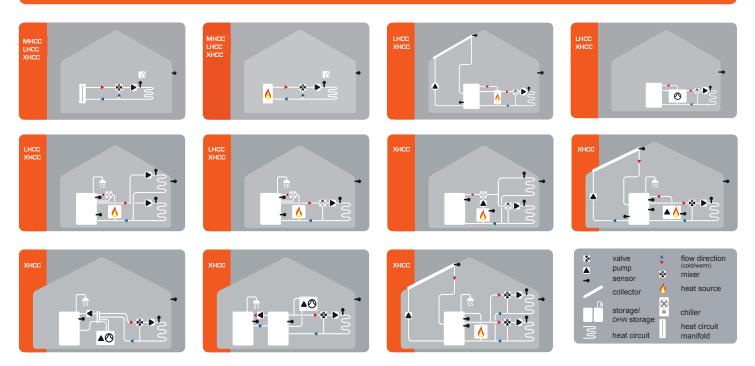
Heating and system controllers by SOREL: versatile and easy to use. With their crystal clear operator guidance, all kinds of weather-compensated heating systems can be handled intuitively - from small to complex.



Model Overview	MHCC		ХНСС
		If purp roky	
Sensor inputs in total	4	10	16
of which for temperature sensors	3	6	10
of which for remote adjuster	1	O	2
of which for Direct Sensors VFS $/$ RPS temperature	0	2	2
of which for Direct Sensors VFS / RPS flow/pressure	0	2	2
Compatible room thermostat	°CALEON (with Switching power supply) / RC20 / RC21	°CALEON / °CALEON Clima RC20	°CALEON / °CALEON Clima / RC20 / RC21
Relay outputs 115V	3	З	6
Relay outputs potential free	0	0	1
0-10V or PWM outputs	1	2	2 (4 with Extension Box)
Programmable thermostat times and functions per day	3	З	2x3
Comfort function for quick heating	$\checkmark$	$\checkmark$	$\checkmark$
Heating circuit with mixer	$\checkmark$	1-2	1-2
Heating circuit without mixer	×	1-2	1-2
Domestic hot water	×	$\checkmark$	$\checkmark$
Antilegionella function	×	$\checkmark$	$\checkmark$
Cooling	×	$\checkmark$	$\checkmark$
Setup wizard	$\checkmark$	$\checkmark$	$\checkmark$
Protection functions	$\checkmark$	$\checkmark$	$\checkmark$
Menu blocker	$\checkmark$	$\checkmark$	$\checkmark$
Error memory and analysis with date and time	$\checkmark$	$\checkmark$	$\checkmark$
Data storage with statistics and graphic analysis	$\checkmark$	$\checkmark$	$\checkmark$
Data logging on microSD card	via data logger	via data logger	×
Networkable / CAN-Bus	$\checkmark$	$\checkmark$	$\checkmark$
Ethernet connection	via data logger	via data logger	✓ (only V2)

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#### Hydraulic Variants HCC (Selection)

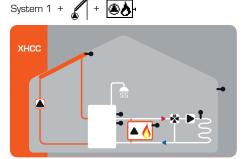


These pre-defined systems can be extended in a modular way by using free relays or connecting additional hardware.

#### Additional Functions to Extend Pre-Defined Systems

The predefined systems can be extended by free relays in an easy and flexible way. Whenever the controller is equipped with more outputs than the chosen schematic requires, the remaining relays can be assigned to a broad selection of additional functions. The user is then guided through the corresponding settings step by step. Functions that complement one another, such as thermostat and anti-legionella function, can be controlled by the same relay. Also the sensors can be used for multiple functions at the same time.

#### Example: System 1 +

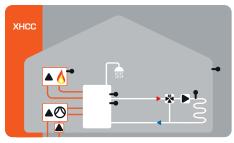


Combined storage tank with mixed heating circuit with additional function solar and additional heating.

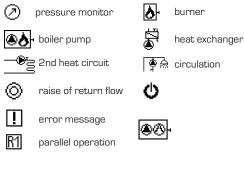
In this way, the user can compose his individual system very quickly.

# Example: Image: Storage transfer Image: Transfer transfer Image: Storage transfer

#### System 1 +

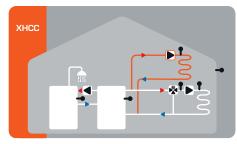


Combined storage tank with mixed heating circuit with additional function, additional heating and heat pump / compressor with brine pump.



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System 8 +

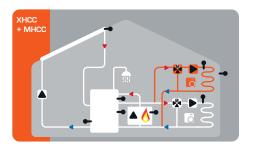


Combined storage tank with buffer storage tank with mixed heat circuit with additional function 2nd heating circuit.



#### MHCC as an Extension Module for 1 Mixed Heating Circuit each

Besides using it as a stand-alone device, the MHCC can be connected to other SOREL controllers via CAN-bus. For example, the XHCC can be extended by an additional mixed heating circuit which uses the same outdoor sensor and requests the heat source when falling below the target temperature.

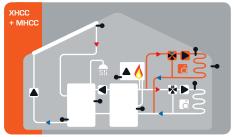


XHCC standard system: Combined storage with solar, gas boiler and heating circuit. An MHCC adds another heating circuit.

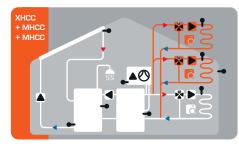
#### **Operator Guidance**



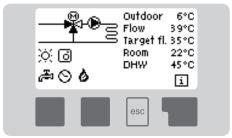
The setup wizard will rapidly guide you through the settings which need to be performed in a logically reasonable sequence. This way, any misadjustment is avoided and the parametrising is simplified.



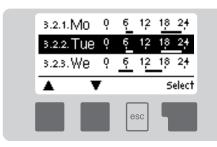
XHCC standard system: Buffer and hot water storage with solar, gas boiler and heating circuit. An MHCC adds another heating circuit.



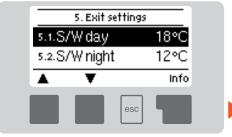
XHCC standard system: Buffer and hot water storage with solar, heat pump and heating circuit. Two MHCCs add two heating circuits.



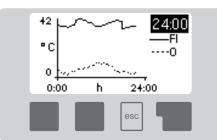
The display of the current measured values and the operating conditions is performed in a graphic mode with animations. Important functions are indicated as icons.

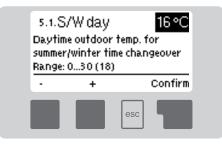


Three operating times can be set per weekday and can be transfered to other days as well.



The clear menu offers options for request, analysis and setting.

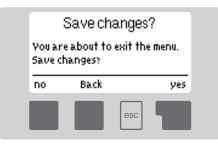




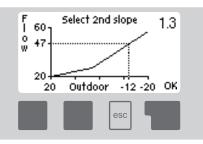
The self explanatory operator guidance allows the simple parametrisation, assisted with functional explanations.

The function control and the long term monitoring of the installation is provided by recording and evaluating of the data.

The split heating curve is used to produce the most comfortable temperature in different building conditions.



Confirmation dialogs and menu block functions prevent unwanted misadjustments.



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### °CALEON Room Controller

Elegant room controller with capacitive TFT touch panel for comfortable remote control and optimisation of the heating system in combination with MHCC, LHCC or XHCC.

Technical Data	°CALEON	°CALEON Clima
Room Temperature 0 50 °C, resolution of 0.1 °C	✓	$\checkmark$
Relative humidity 20% 80%, resolution of 0.1%	$\checkmark$	$\checkmark$
Outputs 0-10V or PWM signal for additional functions	×	2
Heating and cooling operation	×	$\checkmark$
CAN bus connection for SOREL Connect	$\checkmark$	$\checkmark$
Power supply 12VDC	$\checkmark$	$\checkmark$
Programmable thermostat times and functions per day	8	2x8









< Menu ≡ Off €co Turbo €22,5 °C +

Regular heating mode

Info screen

Intuitive time switch

System in cooling mode

#### °CALEONBox - Preview

New universal heating and single room controller for surface heating and surface cooling systems in combination with up to 8 °CALEON room controllers. The inputs and outputs are freely assignable via °CALEON or SOREL Connect, so that various heating and cooling systems can be realised.





## SOREL Connect - Monitoring, Analysis, Remote Control

SOREL Connect is the Plug & Play concept which does not require any particular network skills.

Using a CAN-bus interface, the controllers can communicate with each other, or be connected with local networks or the Internet via Ethernet.

The user can monitor and remote control his

heating system by PC, tablet and smartphone - anywhere, anytime.

Key features: visualisation of the heating system with status messages, temperatures and heat yield statistics. Influence the room temperature, activation of comfort boost and holiday mode. Experts can get a comprehensive PC software for setting all controller parameters in real time.

Data logging is realised by a microSD card, so that all system data can be recorded and analysed extensively.



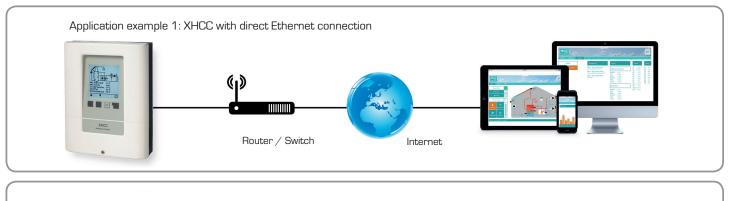
System Overview with Remote Control

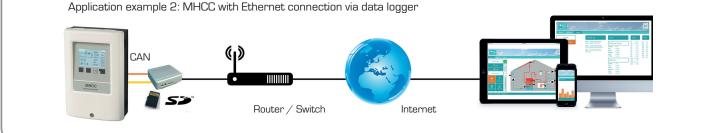


**Energy Statistics** 



Technical Details for the Expert





#### SOREL

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