

⚠ Safety instructions

General

- The safety devices to be provided on site must not be replaced under any circumstances!
- Temperature settings that are too high can lead to scalding or damage to the system.

Provide scald protection on site!

Wall mounting

- Install the controller only in dry rooms and under ambient conditions as described in "Technical Data."

(Further details are provided in the installation and operating instructions for qualified personnel.)

Electrical connection

- Before working on the device, switch off the power supply and secure it against being switched back on! Check that there is no voltage! The electrical connection may only be carried out by a qualified technician in accordance with the applicable regulations. The device must not be put into operation if there is visible damage to the housing, such as cracks.
- The device must not be accessible from behind.
- An all-pole disconnecting device, e.g., an emergency heating switch, must be provided on site in the power supply of the controller.
- Low-voltage cables, such as temperature sensor cables, must be laid separately from mains voltage cables and must not be laid in the same cable duct, for example! Only insert temperature sensor cables into the left side of the device and mains voltage cables into the right side.
- The cables to be connected to the device may be stripped to a maximum of 55 mm and the cable sheath should reach exactly to behind the strain relief in the housing.

(Further details are provided in the installation and operating instructions for qualified personnel.)

Replacement of fuse must be carried out by a qualified technician only!

⚠ Repairs and maintenance may only be carried out by a qualified technician. Before working on the device, disconnect the power supply and secure it against being switched back on! Check that there is no voltage!

⚠ Only use the spare fuse provided or an identical fuse with the following specifications: 2AT / 250 V.



If the controller does not function and display anything despite the mains voltage being switched on, the internal device fuse may be defective. In this case, open the device as described in section C of the installation and operating instructions for specialists, remove the old fuse, and check it.

Replace the defective fuse, locate and replace any external sources of error (such as actuator, motor-valve unit, pump). Only then should the controller be put back into operation and the function of the switching outputs checked in manual mode as described in section 4.2 of the installation and operating instructions for specialists.

Messages

Messages Information for professionals

Sensor defective: X	Either the sensor, sensor input on the controller, or the connecting cable is/was defective.
Restart	The controller has been restarted, for example due to a power failure. Check the date and time!
Time & Date	Appears automatically after a prolonged power outage because the time and date need to be checked and adjusted if necessary.
Strong cycling	Means that the relay was switched on and off more than 5 times within 5 minutes.

Instructions for use (Quick guide)

HCC Fresh *step a valve*



General information

These instructions contain basic information and important information on safety, installation, and operation of the device (controller). Before commissioning and operating the device, these instructions must be read in full by the installer/specialist and the operator of the station.

This device is an automatic electric temperature controller for domestic use. The configuration and default settings of the controller are specifically adapted to the scope of the selected options and the requirements of the station in the planned drinking water and heating system environment. Please also observe the accident prevention regulations applicable in the respective countries, the relevant standards and regulations, and the installation and operating instructions for the additional station components.

Installation, electrical connection, commissioning, modification of the default settings, and maintenance may only be carried out by a suitably trained specialist.

(Further details are described in the installation and operating instructions for the specialist)

Download at: www.strasshofer.de

For the operator: Have a specialist provide you with detailed instructions on how the controller works and how to operate it. However, settings that go beyond the adjustment options in the "3. Times" menu are reserved exclusively for appropriately trained specialists and are not described in detail in this user manual!

This user manual does not claim to be complete. If you have any questions, please contact an appropriately trained specialist at the manufacturer of the home station.

EU Declaration of Conformity

By affixing the CE mark to the device, the manufacturer declares that the HCC Fresh complies with the relevant provisions:

- EU Low Voltage Directive 2014/35/EU and the
- EU Electromagnetic Compatibility Directive 2014/30/EU

Conformity has been verified and the relevant documentation and EU declaration of conformity are available from the manufacturer.

Changes to the device

- Modifications, additions, and conversions to the device require the written approval of the manufacturer.
- The installation of additional components that have not been tested together with the device is not permitted.
- If it is apparent, for example due to damage to the housing, that safe operation of the device is no longer possible, the device must be taken out of service immediately.
- Device parts and accessories that are not in perfect condition must be replaced immediately.
- Only use original spare parts and accessories from the manufacturer.
- Factory markings on the device must not be altered, removed, or made illegible.
- Only make the settings described in these instructions on the device.**
(Further details can be found in the installation and operating instructions for the specialist technician).



Modifications to the device may compromise the safety and functionality of the device and the entire station.

Warranty and liability

The device has been manufactured and tested in accordance with high quality and safety standards. The device is covered by the statutory warranty period of two years from the date of purchase. The warranty and liability do not cover personal injury or property damage resulting from one or more of the following causes:

- Use of the device for purposes other than those for which it is intended
- Use of the device with accessories or components not supplied by the manufacturer
- Failure to observe these instructions for use and the installation and operating instructions for the specialist
- Improper installation, commissioning, maintenance, and operation
- Improperly performed repairs
- Violation of the section "Modifications to the device"
- Improper use of the device
- Exceeding and falling below the limit values specified in the technical data
- Force majeure

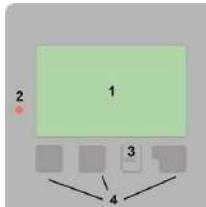
Disposal and hazardous substances

The device complies with the European RoHS Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



The device must not be disposed of with household waste. Only dispose of the device at appropriate collection points or return it to the seller or manufacturer.

Display and input



The display (1) with extensive text and graphics mode allows for easy operation of the controller. The LED (2) lights up green when a motor valve unit is switched on. The LED (2) lights up red when the operating mode is set to "Off." The LED (2) flashes red rapidly when an error occurs. Inputs are made using 4 buttons (3 + 4), which are assigned different functions depending on the situation. The "esc" button (3) is used to cancel an input or exit a menu. This may be followed by a security prompt to save changes.

The function of the other 3 buttons (4) is explained in the display line above the buttons, with the right button usually performing a confirmation and selection function.

Examples of key functions:

+/-	Increase/decrease values	▼/▲	Scroll down/up through the menu
Yes/No	Agree/disagree	Info	Further information
Back	Go to previous display	Ok	Confirm selection
Confirm	Confirm setting		

The menu

3. Times

3.1. Time & Date

Used to set the current time and date.



For time-dependent functions such as night setback, circulation, and the evaluation of station data, it is essential that the time on the controller is set accurately. Please note that the clock will continue to run for approx. 24 hours in the event of a power failure and must then be reset. Incorrect operation or an incorrect time setting may result in data being deleted, recorded incorrectly, or overwritten. The manufacturer accepts no responsibility for the recorded data!

3.2. Daylight savings time

When this function is enabled with Yes, the controller automatically switches to standard time or daylight savings time (DST).



The following time settings can be specified for each day of the week in up to three time intervals, accurate to the minute. A time schedule created for one day can be copied to the time periods Mon-Fri or Sat, Sun, or Mon-Sun.

3.3. Heating circuit 1 Day

(Only available with selected weather-compensated heating circuit options.)

Used to set the heating times during the day. During the set times, the system continuously reheats according to the specified day heating curves and requirements. Outside the set times, the system continuously reheats according to the specified reduced night heating curves and requirements, which can lead to energy savings during the night, for example.

(The heating circuit is used to reheat rooms connected via heating surfaces and can thus contribute to increased comfort in the living areas and prevent the connected rooms from cooling down.)

(The heating circuit is used to reheat the rooms connected via heating surfaces and can thus prevent the connected rooms from cooling down, contributing to increased comfort in the living areas.)

3.7. Circ. times

(Only if the option is selected: Circulation available.)

Used to set the circulation times. During the non-circulation times that are not set, reheating does not take place continuously, which can lead to energy savings during the night, for example.

(Circulation prevents the connected domestic hot water pipes from cooling down to the taps, thus contributing to increased tap comfort and avoiding hot water waiting times when tapping.)

3.8. Night setback

(Only available if the backup option is selected.)

Night setback lowers the temperature of the reserve by approx. 15 K for the purpose of saving energy during the night.

(The reserve prevents the heating water supply line to the station from cooling down significantly, thus contributing to increased tapping comfort and shorter hot water waiting times when "first tapping" after longer tapping breaks.)

Technical specifications

Model	HCC Fresh step a valve		Freshwater- and Heating-Controller
Temperature controller class	VI		
Standby loss	0,5 W		On/off operation or modulating
Heater requirement type			
Electrical data			
Power supply	100 - 240VAC		
Power consumption / Standby	0,5 - 2,5 W / 0,5 W		
Internal fuse	2A slow-blow 250V		
Protection class	IP40		
Protection category / Overvoltage category	II / II		
Inputs/Outputs	Measuring range		
Sensor inputs	-40 °C.... 300 °C		
Sensor inputs DF sensors	SIKA VVX15 2 - 40 L/Min		
Mechanical relay	460VA for AC1 / 460W for AC3		
Potential-free relay	460VA for AC1 / 185VA for AC3		
0..10V / PWM output	Designed for 10 k Ω load / frequency 1 kHz, Level 10 V		
+ Terminal / Voltage output	+24VDC, max.12W for motor-valve unit		
Max. cable length	step a valve		
Collector sensor / Outdoor sensor	S1	<30m	
Other Pt1000 sensors	S2-S5	< 10m	
VVX15 sensors		< 3m	
CAN			
0-10V/PWM	< 3 m; bei > = 3 m use a shielded twisted pair cable. Connect the shielding to the protective conductor on one side. Maximum cable length for the entire system is 200 m.		
Mechanical relay	< 3m		
Interfaces	< 10m		
Fieldbus			CAN
Permissible environmental conditions			
During controller operation	0 °C - 40 °C, Max. 85 % rel. humidity at 25 °C		
During transport/storage	0 °C - 60 °C, no condensation permitted		
Other data and dimensions			
Housing design	2-piece, ABS plastic		
Installation options	Panel mounting (wall mounting)		
Overall dimensions	163 mm x 110 mm x 52 mm		
Cutout installation dimensions	157 mm x 106 mm x 31 mm		
Display	Full graphic, 128 x 64 dots		
light-emitting diode	Multicolor		
real-time clock	RTC with 24-hour power reserve		
Operation	4 input keys		