Installation Instructions **Kit cooling module complete**

Replacement for Liquistation CSFxx sampler

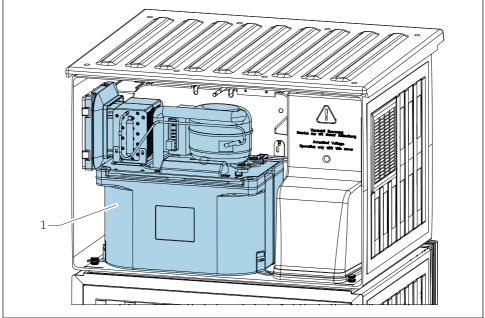




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1 Overview of CSFxx



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■ 1 Liquistation CSFxx (without rear panel)

1 Cooling module

2 Intended use

- The components of the kit are to be used exclusively as retrofit or spare parts for CSFxx automatic samplers. Any other use is not permitted!
- Use only original parts from Endress+Hauser.
- In the W@M Device Viewer, check if the spare part is suitable for the existing device.

3 Authorized installation personnel

- Installation, commissioning, operation and maintenance of the measuring system may be carried out only by specially trained technical personnel.
- The technical personnel must be authorized by the plant operator to carry out the specified activities.
- The electrical connection may be performed only by an electrical technician.
- The technical personnel must have read and understood these Installation Instructions and must follow the instructions they contain.
- Faults at the measuring point may only be rectified by authorized and specially trained personnel.
- Repairs not described in the Operating Instructions provided must only be carried out directly at the manufacturer's site or by the service organization.

4 Safety instructions

A WARNING

Danger! Electrical voltage!

- Assemblies connected to the power supply must be replaced only by specialized electrotechnical staff.
- ▶ The work must be carried out in accordance with the applicable safety standards.
- ► Integrated safety measures must be restored.

WARNING

Danger! Mains voltage!

- ► Stop the current sampling program.
- ▶ Disconnect the sampler from the mains voltage.
- ► Ensure that the sampler is safely disconnected from the mains voltage when carrying out the replacement.

A CAUTION

Risk to health due to contact with the process medium!

- ► Wear protective gloves, protective goggles and protective clothing. particularly when working with reagents, chemicals or process solutions.
- ► In case of contact with eyes or skin, rinse the affected area with plenty of water and then seek medical advice. Show the relevant safety data sheet to the physician.

A CAUTION

Risk to health due to the removal of sensors from the process!

 Pay attention to the process pressure, the process temperature and the toxic aggressiveness of the medium.

A CAUTION

Damage due to incorrect transportation and installation!

- ▶ Always transport and install the cooling module in a vertical position. It must never be tilted!
- ▶ Place the cooling module on a stable surface.
- ▶ If the cooling module has been inadvertently tilted, it must be stored vertically for a sufficient period of time before it is put back into service!

Potential impact on the process

Before decommissioning an active device, the potential impact on the overall process must be taken into account! This applies in particular when using the switching contacts, the analog signal outputs or the communication interface of the associated measuring device to control process variables. Coordinate service tasks with the operator!

5 Scope of delivery

5.1 Kit 71547350 CSFxx cooling module coated version 2.0

The kit contains the following parts $\rightarrow \blacksquare 2$, $\blacksquare 6$:

1 x Cooling module coated version 2



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■ 2 Kit 71547350 CSFxx cooling module coated version 2.0 (front view on left, rear view on right)

6 Additional documentation

Detailed information on the device can be found in the Operating Instructions for the sampler in question and in the other documentation available via:

- www.endress.com/device-viewer
- smartphone / tablet: Endress+Hauser Operations app

7 Tools list









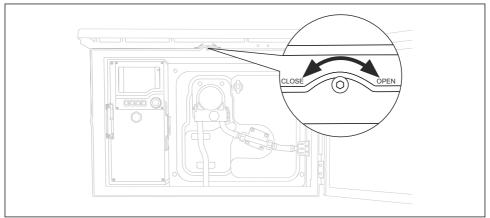
multimeter

8 Replacing the spare part

► Pay attention to the installation instructions provided in the Operating Instructions for the sampler used.

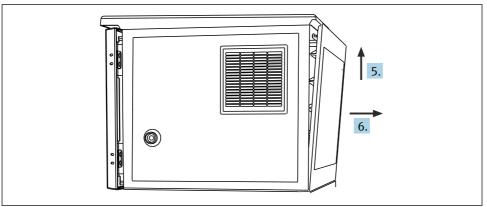
Removing rear panel of dosing compartment and cover of electronic compartment

- 1. Open the door of the dosing compartment.
- 2. Stop the current sampling program.
- 3. Disconnect the sampler from the mains voltage and secure it so that it cannot be switched back on.
- 4. Loosen the screw above the dosing compartment with an Allen key to unfasten the rear panel of the dosing compartment.



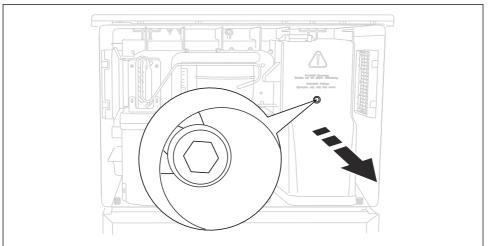
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5. Lift the rear panel upwards.



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- 6. Pull the rear panel away and store it in a safe place.
- 7. Loosen the screw on the cover of the electronic compartment with an Allen key and remove the cover.



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Replacing the cooling module

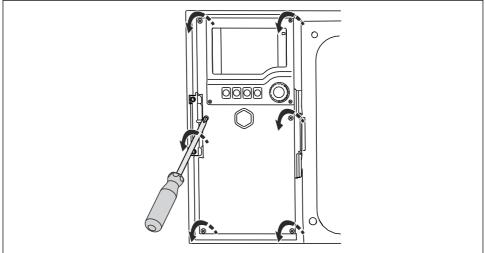
1. WARNING

Danger! Mains voltage!

► Ensure that the mains voltage is switched off.

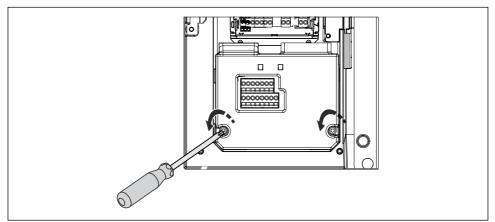
Using a multimeter, take an AC measurement at the L and N connections of the 90-230V AC power supply.

2. Loosen the screws (6 pieces) on the controller housing with a Philips screwdriver and open up the housing cover to the right.



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3. Loosen the screws of the cover on control module FMSY1 with a Torx screwdriver and remove the cover from the control module.



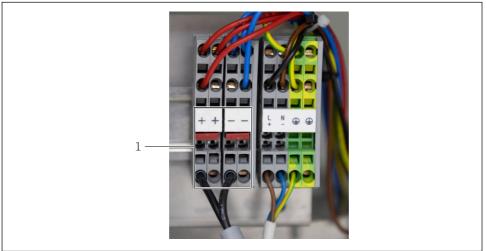
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4. Disconnect the cables with plug-in terminal X2 (6-pin) (1) and plug-in terminal X10 (2-pin) (2) from control module FMSY1.



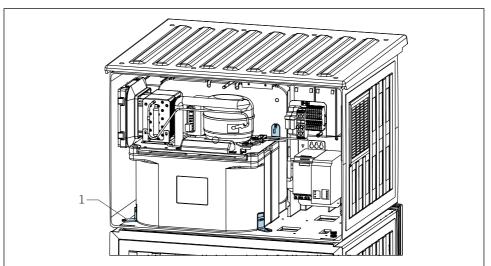
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- 5. Route the cables on the left side of the control module to the rear.
- 6. Mark + and on the DC power supply cables (cooling module) (1) from the electrical distributor on the rear of the sampler.
- 7. Disconnect the DC power supply cables with a flat-blade screwdriver.



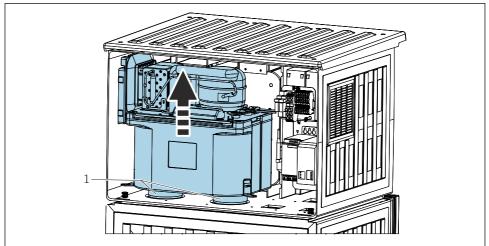
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8. Loosen the screws on the stainless steel brackets of the cooling modules with a Torx screwdriver. Only the screws to the sampler need to be loosened, since the stainless steel brackets remain on the cooling module!



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9. Lift the entire cooling module upwards until the air outlet pipes (1) of the cooling module are pulled completely out of the passages to the lower sample chamber.



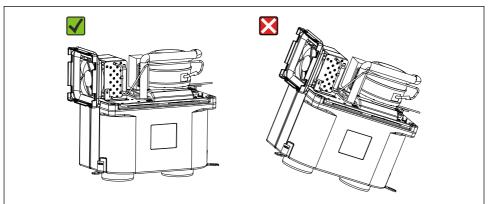
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10. **A** CAUTION

Damage to due to incorrect transportation and installation!

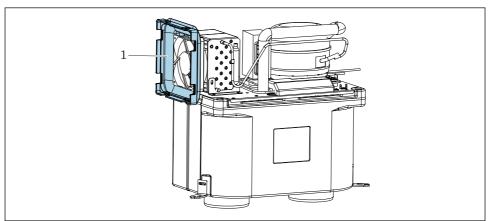
- Always transport and install the cooling module in a vertical position. It must never be tilted!
- ▶ Place the cooling module on a stable surface.
- ► If the cooling module has been inadvertently tilted, it must be stored vertically for a sufficient period of time before it is put back into service!

Remove the complete cooling module from the sampler.



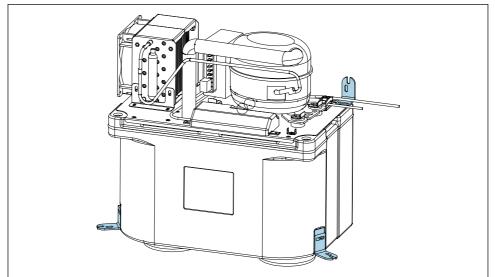
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11. Remove the bellows (1) from the old cooling module and attach it to the fan of the new cooling module.



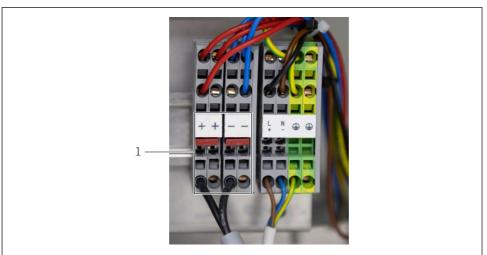
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12. Unscrew the three support brackets on the old cooling module and attach them to the new cooling module.



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- 13. Insert the new cooling module into the sampler in such a way that the Endress+Hauser nameplate can be read from the outside. Make sure that the air outlet pipes and the seals on the air outlet pipes are seated exactly in the passages to the lower sample chamber.
- 14. Screw down the new cooling module. The short screw is inserted at the upper stainless steel bracket in the rear panel of the sampler.
- 15. Connect the DC power supply cables (climate control module) (1) to the electrical distributor on the rear of the sampler.



- 16. Route the cable on the left side towards the front to the control module.
- 17. Connect the cables with plug-in terminal X2 (6-pin) (1) and plug-in terminal X10 (2-pin) (2) to control module FMSY1.

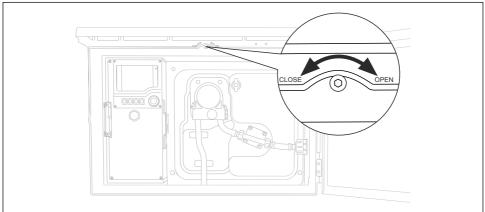


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- 18. Fit the cover of the control module and secure with the screws.
- 19. Close the housing cover on the controller housing and secure with screws (6 pieces).
- **20**. Fit the mains cover and use an Allen key to screw in the screw on the mains cover.

Installing the rear panel of the dosing compartment

- 1. Slide the rear panel into the bracket from below and then guide the metal tabs into the slots provided for this purpose.
- 2. Tighten the screw above the dosing compartment with an Allen key to secure the rear panel of the dosing compartment.



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- 3. Reconnect the sampler to the mains voltage.
- 4. Reset the operating hours counter of the compressor (menu: Diagnostics → Operating time information → Operating hours cooling → Reset)
 - More information on this can be found in the Operating Instructions for the sampler in the Downloads area at www.endress.com.
- 5. Close the door of the dosing compartment.
- 6. Run function test with the sampler.

9 Disposal

▶ Please observe local regulations!



www.addresses.endress.com