

## Fantini Cosmi CH140GSM2

# Fantini Cosmi CH140GSM2 Chronothermostat User Manual

Model: CH140GSM2

## 1. INTRODUCTION

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The Fantini Cosmi CH140GSM2 is a weekly programmable chronothermostat equipped with an integrated GSM modem. This device allows for precise control of both heating and cooling systems, offering remote management capabilities via SMS messages or a dedicated mobile application on smartphones and tablets. Its design focuses on user convenience and energy efficiency, providing various operating modes and alarm functions.

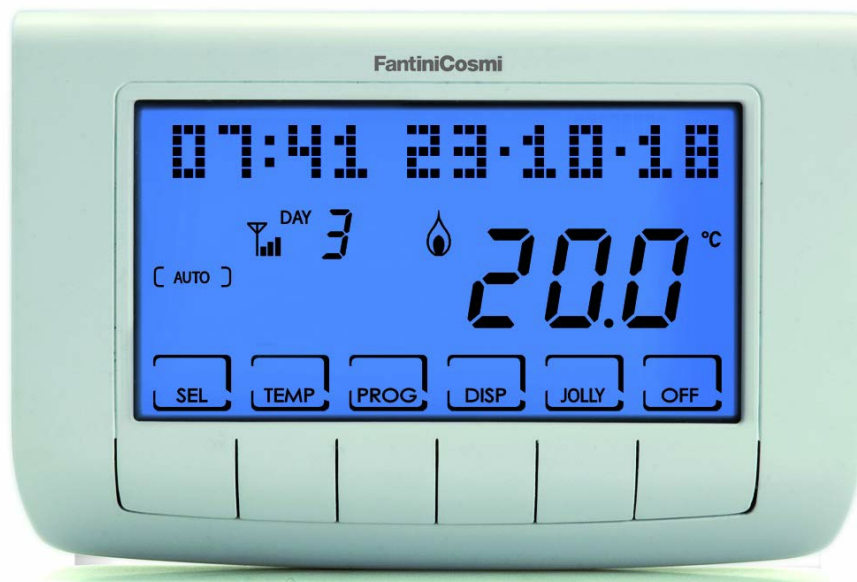


Figure 1: Front view of the CH140GSM2 Chronothermostat, displaying current time and temperature settings.

## 2. SAFETY INFORMATION

- **Electrical Installation:** Installation must be performed by qualified personnel in accordance with local electrical codes and regulations. Ensure the main power supply is disconnected before any installation or maintenance work.
- **Power Supply:** Connect the device only to a 230 V-50 Hz power supply.
- **Indoor Use Only:** This chronothermostat is designed for indoor use. Do not expose it to moisture, extreme temperatures, or direct sunlight.
- **SIM Card:** Use only a micro SIM card. Ensure the SIM card is correctly inserted before powering on the device.
- **Cleaning:** Clean the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.

## 3. PACKAGE CONTENTS

Verify that all components are present in the package:

- Fantini Cosmi CH140GSM2 Chronothermostat
- Instruction Manual (this document)
- Mounting accessories (screws, wall plugs)

## 4. PRODUCT OVERVIEW

The CH140GSM2 features an LCD display for clear information display and push-buttons for local control. It includes a micro SIM card slot for GSM functionality and various connection terminals for power and system control.

### 4.1. Main Components

- **LCD Display:** Shows time, date, temperature, operating mode, and programming.
- **Control Buttons:** Push-buttons for navigation, selection, temperature adjustment, and mode changes.
- **Micro SIM Card Slot:** Located on the device for GSM modem functionality.
- **Connection Terminals:** For 230V power, boiler connection (Relay 1), and auxiliary output (Relay 2).
- **Temperature Sensor:** Integrated for ambient temperature measurement.
- **Auxiliary Inputs:** Two inputs for alarm management.



Figure 2: Angled view of the CH140GSM2, highlighting the display and control interface.

## 5. SETUP

### 5.1. Mounting

The CH140GSM2 can be mounted directly on a wall or integrated into a standard 3-module flush-mount box (type 503).

1. **Choose Location:** Select an indoor location away from direct heat sources, drafts, or direct sunlight to ensure accurate temperature readings.
2. **Prepare Wiring:** Ensure the 230V-50Hz power supply and control wires for your heating/cooling system are accessible at the chosen mounting point.
3. **Mounting:**
  - For wall mounting, use the provided screws and wall plugs to secure the backplate to the wall.
  - For flush mounting, integrate the device into a compatible 3-module box.



Figure 3: CH140GSM2 dimensions for mounting reference (13.7 cm width, 9 cm height, 3.2 cm depth).

## 5.2. Electrical Connection

**WARNING: Disconnect main power supply before making any electrical connections.**

- **Power Supply:** Connect the 230 V-50 Hz power supply to the designated terminals.
- **Relay 1 (Boiler/System Control):** Connect the heating or cooling system control wires to Relay 1 (potential-free contact). This relay manages the primary temperature control.
- **Relay 2 (Auxiliary):** The auxiliary Relay 2 can be used for external ON/OFF control based on daily programming. Connect external electrical loads as required.
- **Auxiliary Inputs:** Connect external alarm contacts to the two auxiliary inputs for alarm management. An optional external temperature probe can also be connected.

## 5.3. SIM Card Installation

The CH140GSM2 requires a micro SIM card for its GSM functionality. Ensure the SIM card is active and has sufficient credit for SMS communication.

1. Locate the micro SIM card slot on the device.
2. Carefully insert the micro SIM card into the slot, ensuring correct orientation.
3. Once inserted, the device is ready for power-on.

## 5.4. Initial Power On

After mounting and wiring, restore power to the device. The display will illuminate, and the chronothermostat

will begin its initialization sequence. Follow on-screen prompts for initial setup, including date and time settings.

## 6. OPERATING INSTRUCTIONS

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The CH140GSM2 offers both local control via its push-buttons and remote control via SMS or a mobile application.

### 6.1. Local Control (Push-Buttons)

The device features several push-buttons (SEL, TEMP, PROG, DISP, JOLLY, OFF) for direct interaction:

- **SEL (Select):** Used to navigate menus and confirm selections.
- **TEMP (Temperature):** Adjusts the desired temperature setpoint.
- **PROG (Program):** Accesses weekly programming settings.
- **DISP (Display):** Cycles through different display information.
- **JOLLY:** Activates the "Jolly" mode for temporary temperature override.
- **OFF:** Turns the system off.

### 6.2. Operating Modes

- **Manual Mode:** Maintains a constant temperature set by the user until manually changed.
- **Automatic Mode:** Follows the programmed weekly schedule, allowing for two different temperature levels (comfort and economy).
- **Holiday Mode:** Sets a specific temperature for a defined period, ideal for when you are away.
- **Jolly Mode:** Provides a temporary temperature override for a short duration, after which it reverts to the previous mode.
- **Anti-freeze Protection:** Automatically activates heating if the temperature drops below a set threshold (adjustable between 2°C and 7°C) to prevent freezing.

### 6.3. Weekly Programming

The CH140GSM2 allows for detailed weekly programming, enabling you to set different temperature levels for various times of the day and days of the week. Refer to the on-screen menu for specific steps to create and modify programs.

1. Press the **PROG** button to enter programming mode.
2. Use the **SEL** and **TEMP** buttons to navigate and adjust time slots and desired temperatures for each day.
3. Save your settings before exiting programming mode.

### 6.4. Remote Control via SMS

The integrated GSM modem allows you to control the chronothermostat by sending specific SMS commands from any mobile phone. Ensure the SIM card in the device has sufficient credit.

*Specific SMS commands are detailed in the full product manual. General commands typically include:*

- **SET TEMP [temperature]:** To set a new target temperature.
- **MODE [AUTO/MANUAL/HOLIDAY/JOLLY/OFF]:** To change the operating mode.
- **STATUS:** To receive current status information (temperature, mode, etc.).
- **ALARM ON/OFF:** To enable or disable alarm notifications.

The thermostat will typically respond with an SMS confirmation of the command execution or current status.

## 6.5. Remote Control via Mobile Application

A dedicated mobile application (available for smartphones and tablets) provides an intuitive interface for managing the CH140GSM2. The app communicates with the thermostat via the GSM network.

1. **Download App:** Search for the official Fantini Cosmi chronothermostat app on your device's app store (e.g., Apple App Store, Google Play Store).
2. **Register/Login:** Follow the app's instructions to create an account or log in.
3. **Add Thermostat:** Add your CH140GSM2 to the app, typically by entering its unique identifier or phone number associated with the SIM card.
4. **App Features:**
  - Adjust temperature setpoints.
  - Select different operating modes.
  - Manage multiple thermostats or multiple homes from a single app.
  - Receive alarm alerts for temperature threshold breaches (minimum and maximum) or from auxiliary input contacts.
  - Share thermostat control with other users.

## 7. MAINTENANCE

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### 7.1. Cleaning

To maintain the appearance and functionality of your chronothermostat:

- Wipe the exterior with a soft, dry, lint-free cloth.
- Do not use liquid cleaners, aerosol sprays, or abrasive solvents, as these can damage the device.

### 7.2. SIM Card Management

Regularly check the credit balance of the SIM card installed in the chronothermostat to ensure uninterrupted remote communication. Top up the credit as needed according to your mobile network provider's instructions.

## 8. TROUBLESHOOTING

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If you encounter issues with your CH140GSM2 chronothermostat, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
<b>Display is off / No power</b>	No power supply; loose wiring.	Check the 230V power connection. Ensure circuit breaker is on. Verify wiring connections.
<b>Cannot control via SMS/App</b>	No GSM signal; SIM card issues (no credit, inactive, incorrect insertion); incorrect SMS command syntax; app not configured correctly.	Check GSM signal strength indicator on the display. Verify SIM card credit and activation. Reinsert SIM card. Consult manual for correct SMS commands. Reconfigure app connection.

Problem	Possible Cause	Solution
<b>Incorrect temperature reading</b>	Thermostat located near heat source/draft; calibration needed.	Relocate thermostat if possible. Use the temperature correction function (differential adjustable 0.3-5 K) in the settings to calibrate.
<b>Heating/Cooling system not responding</b>	Incorrect wiring to Relay 1; system fault; thermostat in OFF mode.	Verify Relay 1 wiring. Check the heating/cooling system for faults. Ensure the thermostat is not in OFF mode.
<b>Alarms not received</b>	Alarm function disabled; SIM card issues; auxiliary input not connected correctly.	Enable alarm notifications in settings or via app/SMS. Check SIM card. Verify auxiliary input connections.

For issues not covered here, please contact Fantini Cosmi customer support or a qualified technician.

## 9. SPECIFICATIONS

<b>Model Number</b>	CH140GSM2
<b>Brand</b>	Fantini Cosmi
<b>Power Supply</b>	230 V-50 Hz
<b>Max Absorbed Power</b>	10 W
<b>Contact Rating</b>	5 (3) A 250 Vca
<b>Output Relays</b>	2 (Relay 1 for boiler, Relay 2 auxiliary)
<b>Temperature Adjustment Range</b>	2°C to 40°C
<b>Anti-freeze Temperature Range</b>	2°C to 7°C
<b>Adjustable Differential</b>	0.3 K to 5 K
<b>Thermal Gradient Reference</b>	4 K/h
<b>GSM Module</b>	Quad Band EGSM850/900/1800/1900 MHz (Micro SIM slot)
<b>Connectivity Technology</b>	GSM (for remote control via SMS/App)
<b>Display Type</b>	LCD with backlight
<b>Control Type</b>	Push-button, Remote (SMS, Application)
<b>Mounting Type</b>	Wall mount or 3-module flush-mount box (type 503)
<b>Protection Degree</b>	IP30
<b>Dimensions (L x W x H)</b>	13.7 x 3.2 x 9 cm
<b>Weight</b>	275 Grams
<b>Compliance</b>	EN 60730-1, ErP Class IV (Reg. EU 811/2013 - 813/2013), RED 2014/53/UE

## 10. WARRANTY AND SUPPORT

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For warranty information, please refer to the documentation provided at the time of purchase or contact your retailer. For technical support, assistance, or to report any issues, please contact Fantini Cosmi customer service or visit their official website for up-to-date contact information.

Keep your purchase receipt as proof of purchase for warranty claims.