PERRY 1CR CR309/S

PERRY 1CRCR309/S Weekly Digital Wall Thermostat Instruction Manual

Model: 1CR CR309/S

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1. INTRODUCTION

This manual provides detailed instructions for the installation, setup, operation, and maintenance of your PERRY 1CRCR309/S Weekly Digital Wall Thermostat. Please read this manual carefully before using the device to ensure proper function and safety.

2. SAFETY INFORMATION

- Installation and electrical connections must be performed by qualified personnel in compliance with local regulations.
- Before any electrical work, ensure the main power supply to the heating/cooling system is disconnected.
- Do not expose the device to direct water spray or excessive humidity.
- Use only the specified battery type (2 x 1.5V AA alkaline batteries).
- Keep batteries out of reach of children.

3. PRODUCT OVERVIEW

The PERRY 1CRCR309/S is a weekly programmable digital thermostat designed for wall mounting. It features an LCD display for clear temperature and program visualization, along with intuitive controls for setting schedules and operating modes.
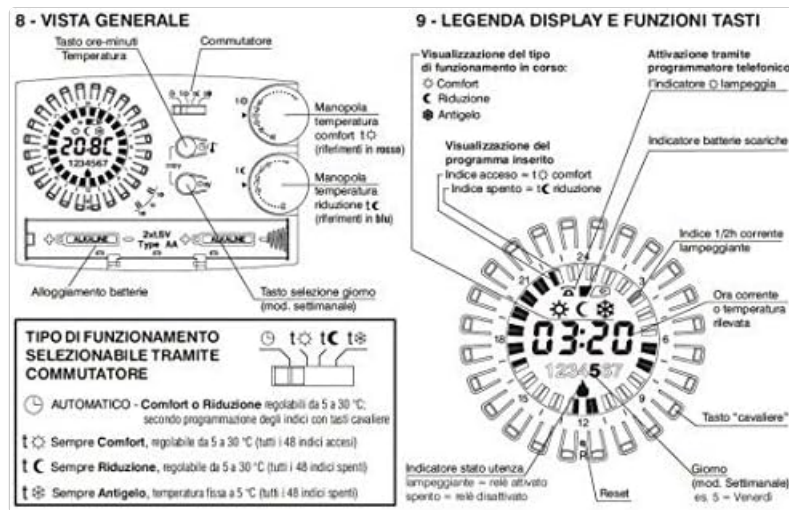
Figure 3.1: Overview of the thermostat's display and control elements. This image shows the LCD screen, temperature adjustment knobs, function buttons, and the battery compartment.

Key Components:

- **LCD Display:** Shows current time, temperature, day of the week, and active program.

- **Temperature Knobs:** Used to set Comfort and Reduction temperatures.

- **Function Buttons:** For setting programs, copying settings, and day selection.

- **Mode Selector Switch:** Allows selection between Automatic, Manual (Comfort/Reduction), and Anti-freeze modes.

- **Battery Compartment:** Located at the bottom, for two AA batteries.

4. INSTALLATION

4.1 Mounting

The thermostat is designed for wall mounting. Ensure the mounting location is away from direct sunlight, drafts, or heat sources that could affect temperature readings.
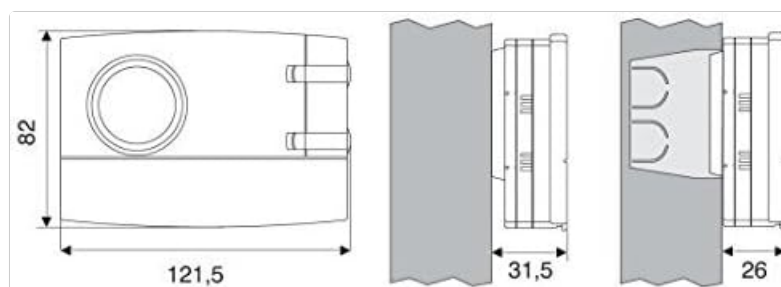

Figure 4.1: Technical drawing illustrating the dimensions of the thermostat (121.5mm width, 82mm height) and various mounting options, including flush and surface mounting, with depth measurements.

4.2 Electrical Connections

Important: Electrical connections must be performed by a qualified electrician. Disconnect power before proceeding.
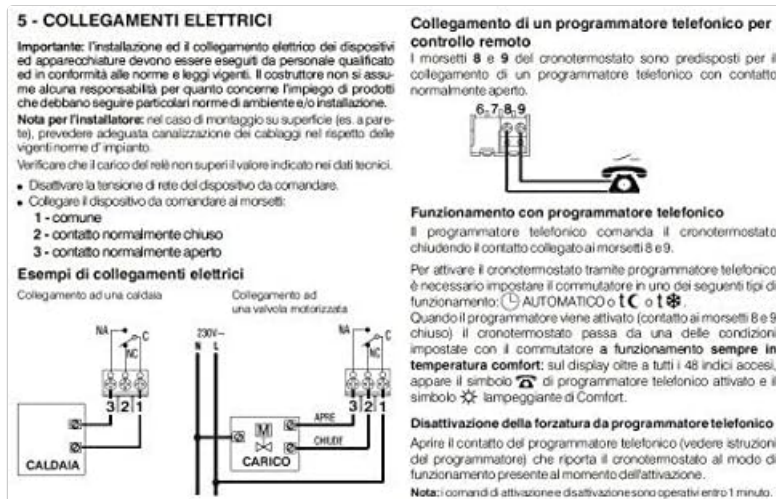
Figure 4.2: Electrical connection diagrams. This image shows wiring examples for connecting to a boiler (Caldaia) and a motorized valve (Valvola Motorizzata), indicating common (C), normally open (NO), and normally closed (NC) terminals.

The thermostat requires a 3V power supply from two 1.5V AA alkaline batteries. It provides potential-free contacts for controlling heating or cooling systems.

- **Terminal 1:** Common (C)
- **Terminal 2:** Normally Closed (NC)
- **Terminal 3:** Normally Open (NO)

Connect the load (e.g., boiler, valve) to the Common terminal and either the Normally Open (for heating) or Normally Closed (for cooling) terminal, depending on your system's requirements.

5. SETUP

5.1 Battery Installation

1. Open the battery compartment cover at the bottom of the thermostat.
2. Insert two 1.5V AA alkaline batteries, observing the correct polarity (+/-).
3. Close the battery compartment cover. The display should illuminate.

5.2 Initial Time and Day Setting

Upon first power-up or after battery replacement, you will need to set the current time and day. Refer to the detailed instructions in the programming section for specific button presses.

6. OPERATING INSTRUCTIONS

6.1 Operating Modes

Use the slide switch on the side of the thermostat to select the desired operating mode:

- **Automatic Mode (Programmed):** The thermostat follows the weekly program you have set, switching between Comfort and Reduction temperatures.
- **Manual Comfort Mode:** Maintains the Comfort temperature continuously.
- **Manual Reduction Mode:** Maintains the Reduction temperature continuously.
- **Anti-freeze Mode:** Maintains a fixed temperature of 5°C to prevent freezing.

6.2 Setting Temperatures

Rotate the dedicated knobs to set your desired temperatures:

- **Comfort Temperature:** The higher temperature for active periods.
- **Reduction Temperature:** The lower temperature for inactive or night periods.

6.3 Weekly Programming

The thermostat allows for a weekly program with 48 time segments per day (30-minute intervals). You can assign each segment to either Comfort or Reduction temperature.

1. Enter programming mode (refer to the specific button sequence in the full manual).
2. Select the day of the week you wish to program.
3. Use the time buttons to scroll through the 48 segments.
4. Assign Comfort or Reduction to each segment using the appropriate button.
5. Use the 'Copy' function to duplicate settings from one day to another.
6. Exit programming mode to save your settings.

6.4 Telephone Programmer Function (Optional)

The thermostat is equipped with terminals (8 and 9) for connection to a telephone programmer. This allows remote activation of the Comfort mode.

- Ensure the thermostat is in Automatic mode.
- When the telephone programmer closes the contact between terminals 8 and 9, the thermostat will switch to Comfort mode.
- The Comfort indicator on the display will flash.

7. MAINTENANCE

7.1 Battery Replacement

When the low battery indicator appears on the display, replace the batteries promptly to ensure continuous operation. Typically, batteries last for approximately two seasons.

1. Open the battery compartment cover.
2. Remove the old batteries.
3. Insert two new 1.5V AA alkaline batteries, ensuring correct polarity.
4. Close the compartment cover. You may need to reset the time and day after battery replacement.

7.2 Cleaning

Clean the thermostat's exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents.

8. TROUBLESHOOTING

- **Display is blank:** Check battery installation and charge. Replace batteries if necessary.
- **Heating/Cooling not activating:**
  - Ensure the thermostat is in the correct operating mode (Automatic or Manual

Comfort/Reduction).

- Verify that the set temperature is above (for heating) or below (for cooling) the ambient temperature.
- Check electrical connections to the heating/cooling system.

- **Incorrect temperature readings:** Ensure the thermostat is not exposed to direct heat sources, drafts, or direct sunlight.

- **Programming issues:** Review the programming steps carefully. If issues persist, perform a factory reset (refer to the full manual for reset procedure) and reprogram.

9. SPECIFICATIONS

- **Model:** 1CR CR309/S
- **Power Supply:** 2 x 1.5V AA Alkaline Batteries
- **Display:** 2-inch LCD
- **Temperature Control Type:** Manual and Remote
- **Temperature Adjustment:** 2/3 setpoint adjustment
- **Anti-freeze Temperature:** Fixed 5°C
- **Installation Type:** Wall Mount
- **Dimensions:** 5 x 14 x 14 cm (approximate)
- **Weight:** 220 g
- **Connectivity:** Wi-Fi (for remote control via telephone programmer, if applicable)
- **Included Components:** Weekly wall thermostat

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact PERRY customer service. Keep your proof of purchase for warranty claims.