INTELLICOMFORT CH180WIFIRL
WIFI WIRELESS MULTI-ZONE PROGRAMMABLE THERMOSTAT

- Supervisor for the Fantini Cosmi wireless multi-zone temperature and humidity control system

- Long-range LoRa® radio communication

- Weekly and seasonal programs

- Control of heating, cooling, and dehumidification systems
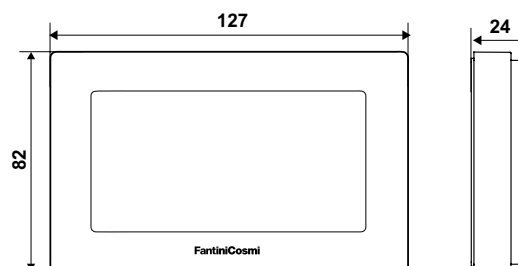
- Remote control via mobile APP

Temperature setting range	2 ÷ 30°C, 0.1°C increasing
Relative humidity setting range	30 ÷ 70%, 1% increasing
Power supply	230V 50 Hz
Contact rating	5(3)A 250 V AC
WiFi connection	2.4 GHz (802.11 b/g/n)
Transmission frequency	ISM band EU868
Control differential	0.3 ÷ 5 K

STANDARDS AND CERTIFICATIONS

- Compliant with EN 60730-1 and relevant parts
- Compliant with Directive 2014/53/EU (RED)
- ErP classification (EU Regulation 811/2013 – 813/2013):
  - Class IV; Energy efficiency contribution: 2%
  - Class VIII; Energy efficiency contribution: 5% when used with other devices in the Fantini Cosmi wireless multi-zone system

CE

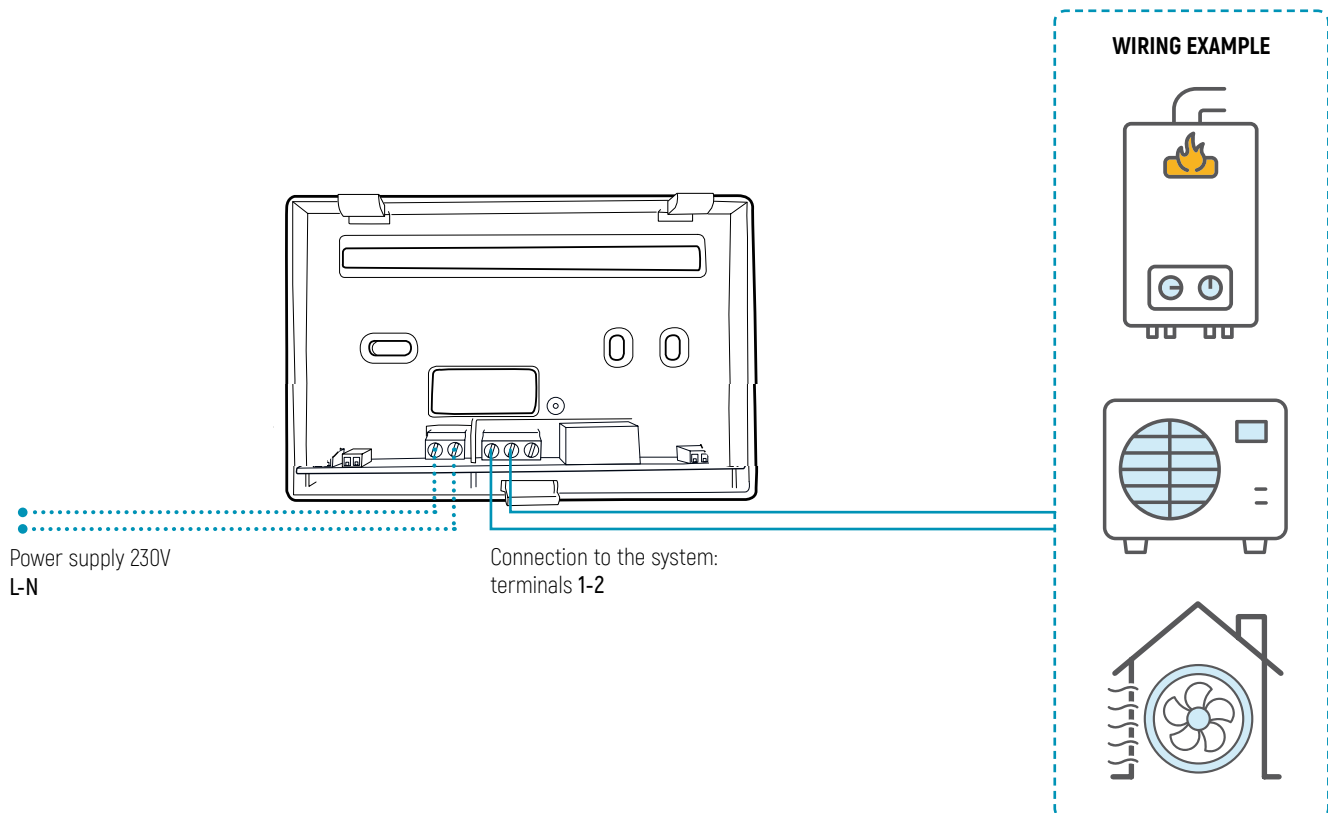## DIMENSIONS mm

127

24

82

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INSTALLATION

Wall mounting, or installation on standard 500, 502, or 503 wall boxes, at a height of approximately 1.5 m from the floor, preferably on interior walls and away from doors and windows.

ELECTRICAL CHARACTERISTICS

Power supply	230V-50Hz
Maximum power consumption	5 W
Contact rating	5(3)A 250 VAC
Type of action	1 B.U. (Micro-disconnection)
Output relay configuration	■ 1 relay for heating/cooling or dehumidifier (3 screw terminals, normally closed + normally open)
Software	CLASS A
Electrical insulation	Double insulation

■ ELECTRICAL CONNECTION

WIRING EXAMPLE

Power supply 230V
L-N

Connection to the system:
terminals **1-2**

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GENERAL CHARACTERISTICS

WiFi connection	2.4 GHz (802.11 b/g/n)
Transmission frequency	ISM band EU868
Temperature setpoint range	2 ÷ 30 °C, 0.1°C increasing
Room temperature measurement/display range	-50 ÷ +50 °C
Maximum ambient temperature	45°C
Relative humidity setpoint range	30 ÷ 70%, 1% increasing
Ambient relative humidity measurement/display range	0 ÷ 100%
Control differential	0.3 ÷ 5 K
Radio modulation	LoRa®
Storage temperature	-10°C ÷ +60°C
Protection rating	IP40
Pollution degree	2
Available display languages	Italian, English, French, Spanish, German, Russian
CH180WIFIRL screen lock	With password and cleaning mode
System management	■ Up to 8 zones ■ Up to 32 devices connected directly ■ Daylight saving time ■ Summer/Winter mode ■ Display of system usage in operating hours ■ Display of system faults ■ Temperature offset correction for thermostats

MULTI-ZONE SYSTEM COMPONENTS

The CH180WIFIRL wireless multi-zone programmable thermostat with WiFi connection acts as the supervisor for the temperature control and dehumidification system. It communicates with the zone devices and with the climate control module EV200RL.

The integrated WiFi connection allows the remote system control via the dedicated APP in a practical and intuitive way.

CH180WIFIRL	C830RL	O70RL	CH177RL	EV200RL

REMOTE CONTROL VIA APP

With the Fantini Cosmi APP, available for free download on smartphones or tablets, you can:

■ Turn the heating and cooling system on or off

■ Control the temperature and humidity levels in each zone

■ Check the system status in real-time

■ Set the ideal temperature at any time and decide how long to maintain it

■ Create a weekly or daily schedule or choose from pre-set programs for each zone

■ Optimize comfort and save energy

■ Receive push notifications for general alarms and system anomalies

■ Manage ON/OFF for an auxiliary electrical load via the scheduled profile

■ Monitor the system usage in operating hours

■ Share the system control with multiple users

EXAMPLE OF INFORMATION FROM A MULTI-ZONE HEATING SYSTEM

The Fantini Cosmi APP is available for free on

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ACCESSORIES

C830RL
WIRELESS ZONE THERMOSTAT-HUMIDISTAT

O70RL
WIRELESS RADIATOR THERMOSTAT

CH177RL
1 RELAY WIRELESS RECEIVER

EC19
FLOOR SENSOR

EV200RL
WIRELESS MULTI-SYSTEM CLIMATE REGULATOR

EC18RL
WIRELESS OUTDOOR TEMPERATURE SENSOR

SPECIFICATIONS

Multi-zone "MASTER" Thermostat model Fantini Cosmi code CH180WIFIRL, touchscreen, wireless with WiFi connection, for the control of temperature and humidity within the Fantini Cosmi LoRa® wireless multi-zone system, acting as the supervisor for the different zones of the house. It communicates with the Fantini Cosmi radio environment thermostats model C830RL, wireless thermostatic radiator heads model O70RL, actuators for boilers or zone solenoid valves model CH177RL, and the wireless climate control module model EV200RL.

General Characteristics:

- Heating, cooling, and dehumidification management for the system and/or zones.
- Management of up to 8 zones.
- Management of up to 32 devices connected directly to the CH180WIFIRL.
- Ability to assign names to all zones.
- Display of energy consumption.
- Operating modes: MAN (manual), AUTO (weekly), HOLIDAY (eighth day), JOLLY (programmable up to 90 days), OFF (system off or with frost protection program).
- Screen lock password.
- Screen cleaning lock.
- System lock management for exceeding minimum and maximum temperature thresholds.
- Display of system anomalies.
- Daylight saving time management.
- Summer/winter mode management.
- Correction of temperature offsets read from the different zones.

Mounting: Wall-mounted or on a 503-type box.

Power supply: 230V-50Hz, internal relay with potential-free contacts: 5(3)A / 250Vac.

Wireless connection: WiFi 2.4 GHz.

Transmission frequency: 868MHz.

Protection rating: IP40.

Compliant with Directive 2014/53/EU (RED); ErP classification (Reg. EU 811/2013 - 813/2013): Class IV; 2% or Class VIII; 5% when paired with other devices of the Fantini Cosmi multi-zone radio system.

Integrated WiFi: Usable with the dedicated App.

App Features:

- Real-time system status check, with the possibility to turn it on/off.
- Temperature and humidity adjustment, with the ability to set hourly profiles for each zone.
- Selection of different operating modes.
- Simultaneous management of multiple homes and multiple thermostats within a single home.
- Ability to receive alarm notifications for exceeding temperature thresholds (minimum and maximum) from an auxiliary input contact.
- Alarm management for exceeding minimum and maximum temperatures.
- ON/OFF control of an auxiliary electrical load.
- System usage hour counting.
- Sharing the thermostat with multiple users.

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