# Smart
## Diamond

# WI-FI THERMOSTAT FOR FAN COIL

MADE IN ITALY

**seitron**

# SMART DIAMOND
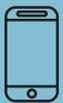
WI-FI THERMOSTAT FOR FAN COIL

MODERN DESIGN

SEMI-RECESSED INSTALLATION

MODBUS® RTU VIA RS485

REMOTE CONTROL

MAXIMUM CONFIGURABILITY

Modern, industrial, classic – whatever the style of the environment, Smart Diamond seamlessly integrates with it. A minimal wall **thickness of only 11.5 mm**, grants an elegant and discreet standing in the room, providing a distinctive touch of design.

Smart Diamond can be used as a simple ON/OFF thermostat or as a programmable thermostat with weekly scheduling. It is the ideal solution for managing all common functionalities of a fan coil. The flexibility of **parameter configuration makes it adaptable to various types of systems.**

Wi-Fi connectivity allows the user **to remotely control Smart Diamond** by using Seitron Smart mobile app.
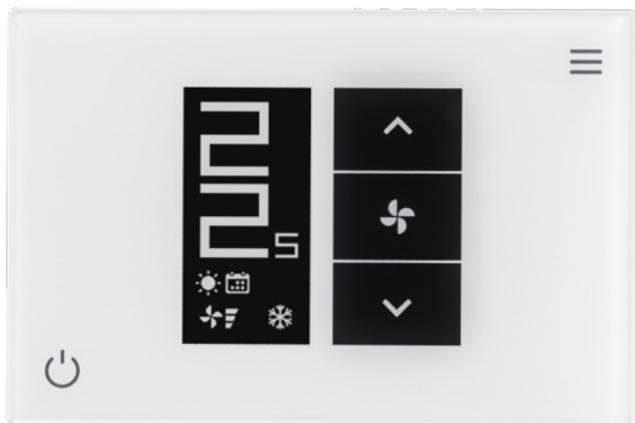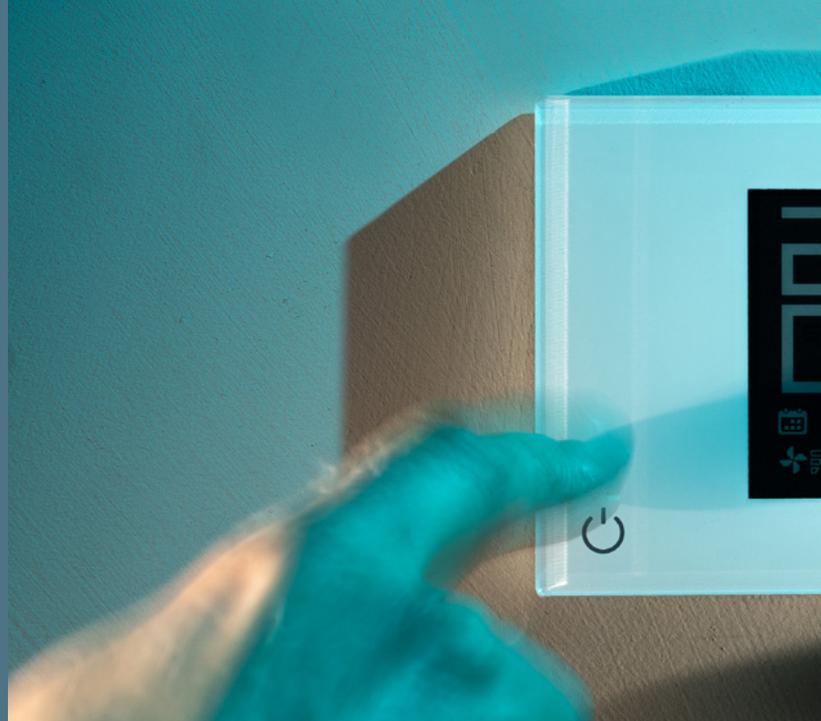
## Technical Features

| | |
|---|---|
| Power Supply: | 85-264 V~ 50-60 Hz |
| Sensor Type: | NTC 10kΩ ±1% @ 25°C, Beta 3977 ±1% (25/85°C) |
| Control Range: | 5.0-35.0 °C |
| Antifreeze: | 0.0-20.0 °C |
| Measurement Range: | -10.0 to +50.0 °C |
| Resolution: | 0.1 °C |
| Accuracy: | ± 1 °C |
| Hysteresis: | 0.2 °C (adjustable) |
| Fan Relay Outputs: | 3 x 4(1)A 250V~ |
| Actuator Relay Outputs: | 2 x 3(1)A 250V~ |
| Total Contact Rating: | 9 A MAX |
| Proportional Outputs: | 0-10 V (adjustable) |
| Wi-Fi: | 802.11 b/g/n |
| Antenna Type: | Internal |
| Communication Port: | Modbus RTU (via RS485) |
| Dimensions (L x W x D): | 120 x 80 x 12 mm |
| IP Rating: | IP 30 |
| Operating Temperature: | 0 °C to +40 °C |



11,5 mm

# SMART DIAMOND
## COMPLETE FUNCTIONALITIES

Smart Diamond provides many functions and configuration possibilities by setting parameters.

Pre-configured parameters settings are available, based on the characteristics of the system:
- ✔ 2-pipe or 4-pipe system, floor heating, or resistance heating
- ✔ AC motor or EC motor
- ✔ ON/OFF or proportional actuator

Over 100 parameters to customize/configure:
- ✔ User interface
- ✔ System
- ✔ Regulation
- ✔ Modbus® communication

Manual or automatic selection of fan speed for 3-speed AC motor or 0 .. 10 V EC motor

Manual, centralized, or automatic selection of **summer/winter mode**.

**Automatic mode with changeover** based on the supply water temperature (for 2-pipe systems) or on the neutral zone (for 4-pipe systems)

**Multiple operating modes**:
- 1 setpoint thermostat
- 2 setpoint thermostat (comfort/economy)
- Programmable thermostat with weekly programming

**Thermostatic control of the valves**, the fan, or both

**2 outputs 0 .. 10 V** for EC fan or actuators.

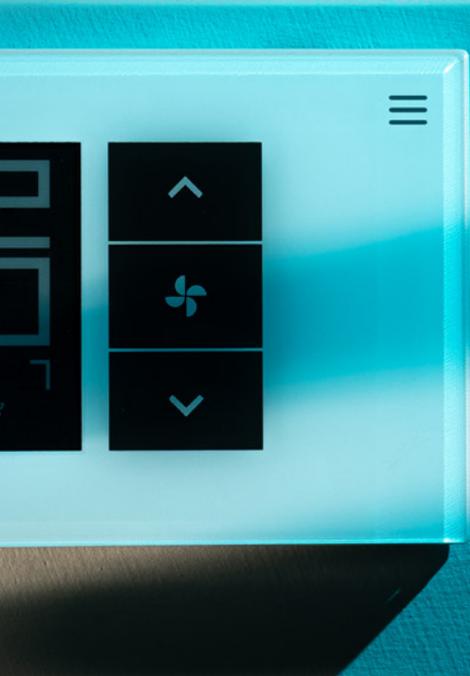**5 relay outputs** for 3-speed AC fan or ON/OFF actuators

**2 remote temperature sensor inputs** for room temperature and supply water temperature.

**1 configurable digital input**: economy mode, window contact, etc.

Inputs and outputs reconfigurable for **special functions** (examples: resistance heater, heat pump, floor heating system)

# DIFFERENT SYSTEMS
## one single solution

**Types of systems managed:**

• 2-pipe
• 4-pipe
• Floor systems
• Electric heaters
• Integrated electric heaters

**Types of fan coils:**
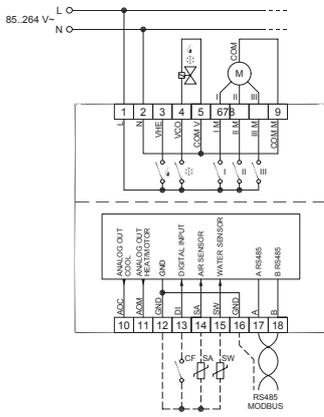
• With 3-speed AC motor
• With EC motor 0 .. 10 V

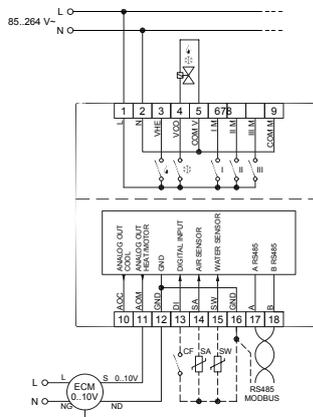**Types of valves:**

• ON/OFF
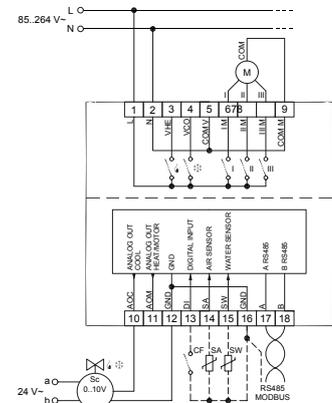• Proportional

# 2-PIPE SYSTEMS
## application examples



Wiring diagram for:

• 2-PIPE SYSTEM
• 1 ON/OFF Valve for Heating/Cooling
• 1 3-Speed AC Motor



Wiring diagram for:

• 2-PIPE SYSTEM
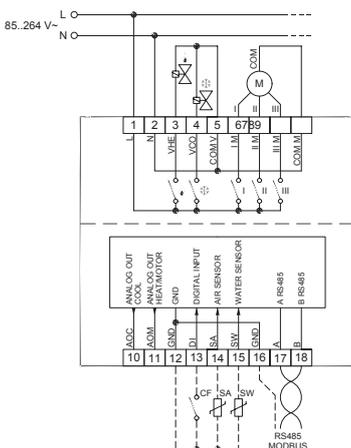• 1 ON/OFF Valve for Heating/Cooling
• 1 EC Motor 0 .. 10 V



Wiring diagram for:

• 2-PIPE SYSTEM
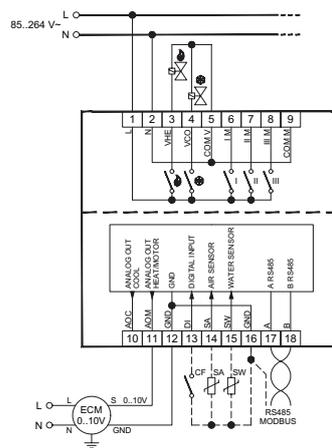• 1  0..10 V Actuator for Heating/ Cooling
• 1  3-Speed AC Motor

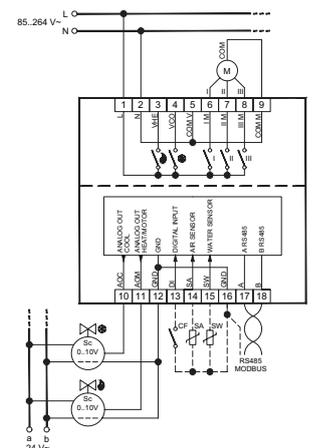# 4-PIPE SYSTEMS
## application examples



Wiring diagram for:

• 4-PIPE SYSTEM
• 2 ON/OFF Valve for Heating/Cooling
• 1 3-Speed AC Motor



Wiring diagram for:

• 4-PIPE SYSTEM
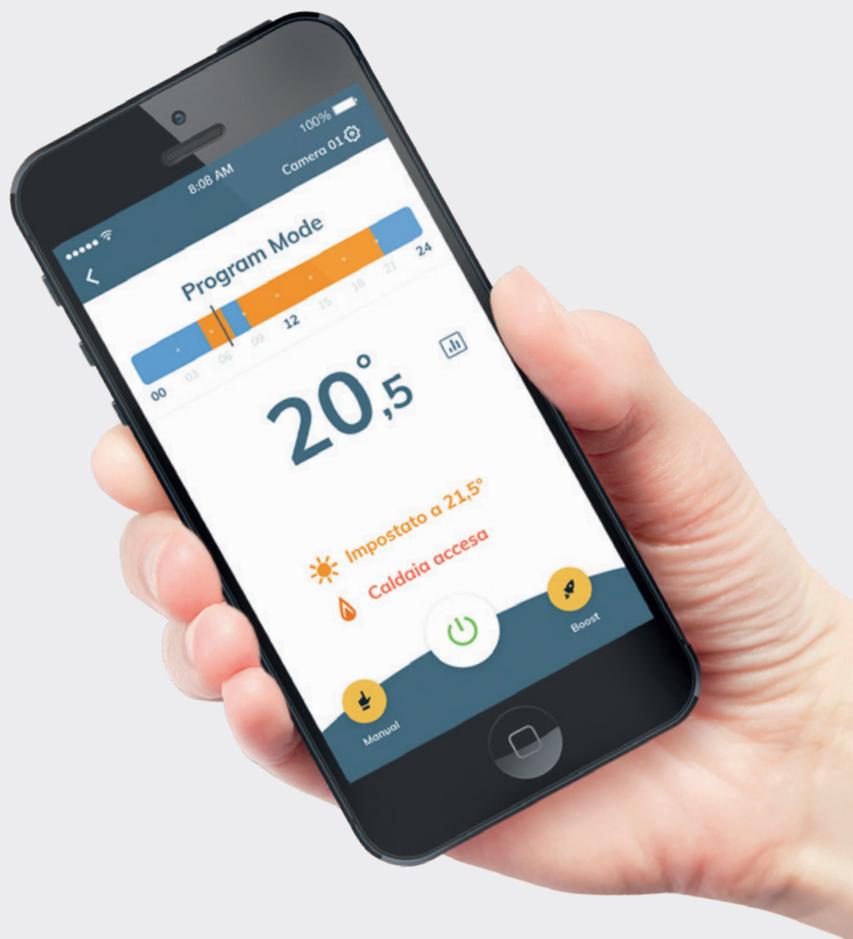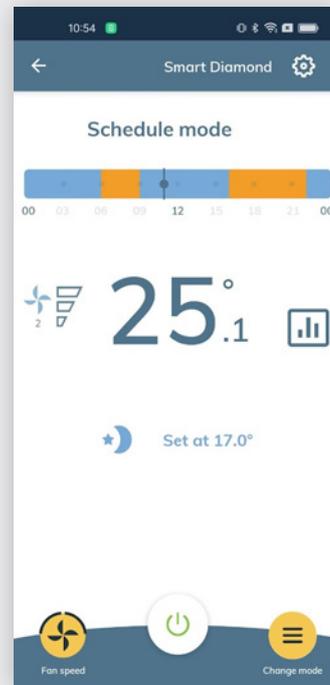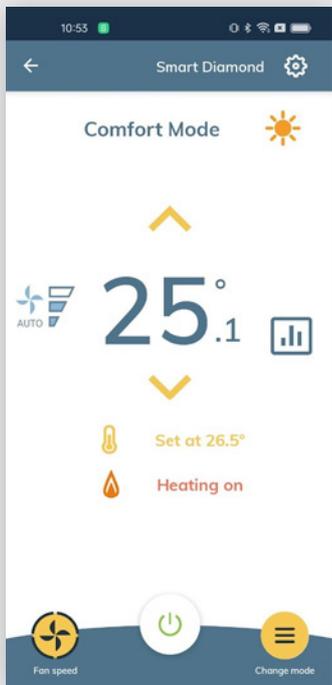• 2 ON/OFF Valve for Heating/Cooling
• 1 EC Motor 0 .. 10 V



Wiring diagram for:

• 4-PIPE SYSTEM
• 2  0..10 V Actuator for Heating/ Cooling
• 1  3-Speed AC Motor

# Seitron Smart App

Seitron Smart allows full control of the Smart Diamond thermostat directly from your smartphone.
By using the app, temperature and fan speed programming, other than heating/cooling mode setting, becomes quick and simple.





**Seitron Smart**
Temperature under control

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