

# Single room temperature controller

## CosiTherm®

### Overview wired version



Base module with controller module for 6 control circuits



Base module with timer module and controller module for 8 control circuits



Base module with timer module and controller module for 12 control circuits



Room temperature sensor wired

#### Functions

- Adjustment of reference temperature 6/30 °C
- Measurement of actual temperature

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The controller modules can be combined as required, subject to the conditions on site.



reddot award 2014  
winner



### Overview wireless version



Base module with controller module for 6 control circuits



Base module with timer module and controller module for 8 control circuits



Base module with timer module and controller module for 12 control circuits



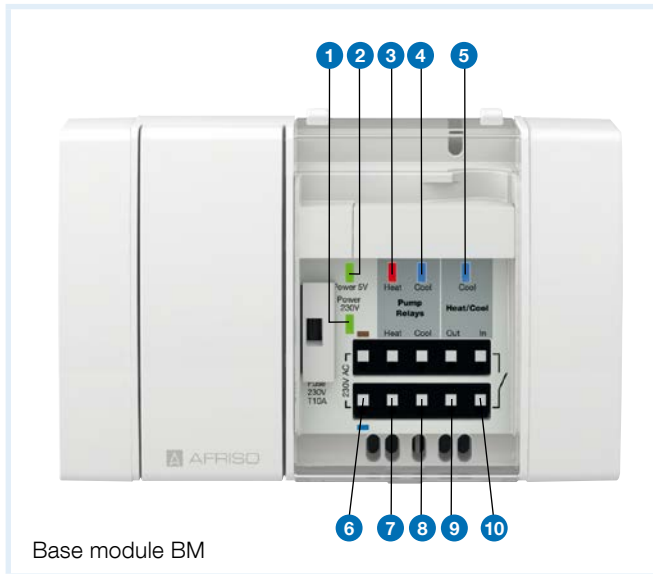
Room temperature sensor wireless

#### Functions

- Adjustment of reference temperature 6/30 °C
- Measurement of actual temperature
- Humidity measurement 0/100 % r.h. (option)

# Functions and connections

## Single room temperature controller CosiTherm®

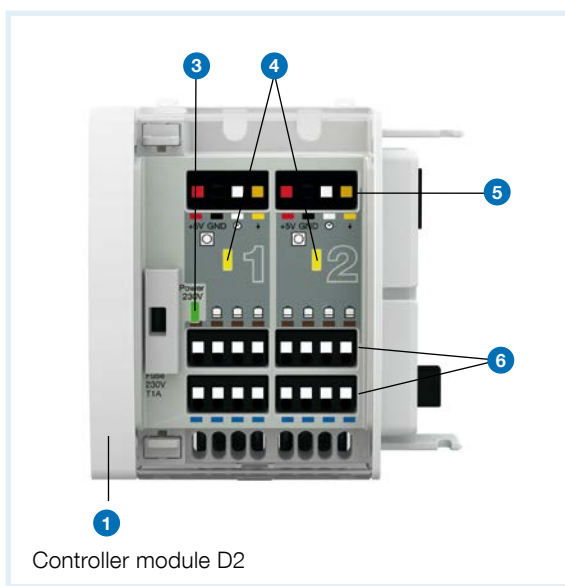


### Base module BM

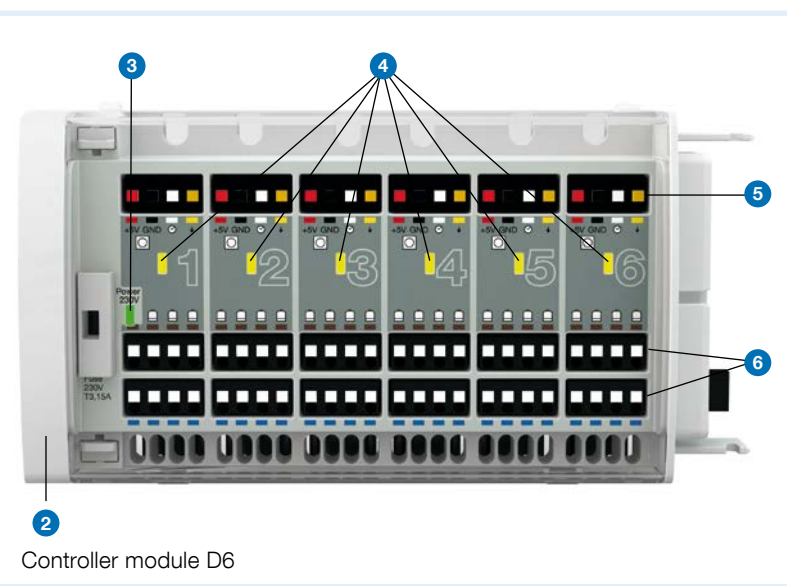
- 1 LED green: Operation mains voltage
- 2 LED green: Operation DC 5 V
- 3 LED red: Pump "Heating"
- 4 LED blue: Pump "Cooling"
- 5 LED blue: Display program mode "Heating" or "Cooling"
- 6 Connection supply voltage AC 230 V
- 7 Relay contact pump "Heating"
- 8 Relay contact pump "cooling"
- 9 Cascading output "Heating/Cooling"
- 10 Input switchover "Heating/Cooling"

Base module BM

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Controller module D2



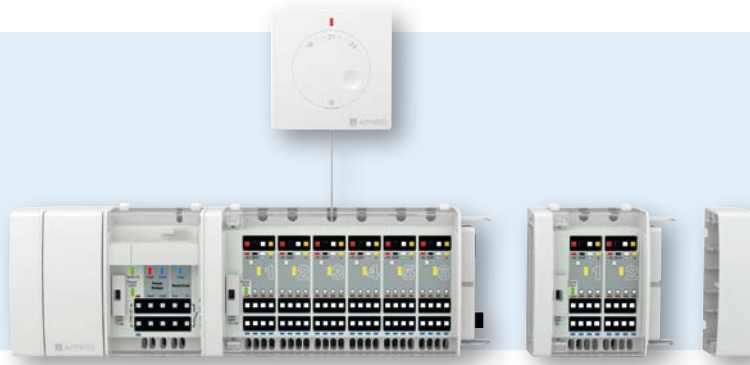
Controller module D6

### Controller module wired

- 1 Controller module with two control circuits
- 2 Controller module with six control circuits
- 3 LED green: Indication mains voltage for thermal actuators
- 4 LED yellow: Indication thermal actuator active
- 5 Terminal block for room temperature sensors
- 6 Terminal block for thermal actuators

# Single room temperature controller

## CosiTherm® – wired



- For manifold systems for heating and cooling
- Extremely flat room temperature sensor with a height of 12.5 mm
- Room temperature sensor with wire connection
- Timer module for programming temperature reduction, pump operating time and valve protection function

**Application** Controls the temperature of individual rooms in connection with manifold systems for heating and cooling.

**Description** The base version of the single room temperature controller CosiTherm® wired consists of a base module, at least one controller module with two or six independent control circuits and a corresponding number of room temperature sensors. The controller modules can be interconnected in a modular way to account for the number of control circuits/rooms. One room temperature sensor is required per control circuit; it is wired to the controller module. The room temperature sensor measures the actual temperature in the room. The reference temperature is adjusted via the rotary knob of the room temperature sensor. The controller module compares the actual temperature and the reference temperature and controls the volume flow of the heating/cooling water via the thermal actuators of the manifold system.

An optional timer module with display and an integrated hundred-year calendar can be plugged into the base module. It features two independently programmable switching channels for temperature reduction, nine programmable memory blocks and a valve and pump protection function. The additional pump running time is adjustable. The terminals of the controller modules are colour-coded for easy assignment to the wires of the thermal actuators; in conjunction with the DIN rail snap connectors at the rear of the housing, this facilitates installation.

### Functions **Base module BM**

- Power supply of the room temperature sensors (DC 5 V) and thermal actuators (AC 230 V)
- Switchover of the system to "Heating" or "Cooling"
- Control of the heating/cooling pumps

### **Controller module**

- Comparison of actual and reference temperatures
- Control heating/cooling water via connected thermal actuators
- Connection of two or six control circuits, extensible as required
- Wired connection of room temperature sensors

### **Timer module UM (option)**

- Time data: Date, time, weekday (leap year detection)
- Automatic switching between daylight saving time and winter time (CEST)
- Temperature reduction adjustment
- Additional pump running time adjustment
- Valve and pump protection function adjustment



Timer module (option) for programming and display of date, time, weekday

# Single room temperature controller CosiTherm® – wired

## Technical specifications

### Connections

#### Base module BM

Max. 9 controller modules D2 or  
3 controller modules D6

#### Controller module D2

Max. 2 room temperature sensors and  
8 actuators

#### Controller module D6

Max. 6 room temperature sensors and  
24 actuators

### Operating temperature range

Ambient/storage: -10/+60 °C

### Base module BM

#### Supply voltage

AC 230 V, 50-60 Hz

#### Nominal power

1 VA

#### Housing

Plastic housing PC/ABS  
W x H x D: 122 x 92 x 45 mm  
Degree of protection: IP 20 (EN 60529)

#### Weight

215 g

### Controller module

#### Supply voltage

AC 230 V, DC 5 V (via base module BM)

#### Nominal power

Controller module D2: 0.1 W  
Controller module D6: 0.3 W

#### Housing (W x H x D)

Plastic housing PC/ABS  
Controller module D2: 73 x 92 x 45 mm  
Controller module D6: 162 x 92 x 45 mm  
Degree of protection: IP 20 (EN 60529)

#### Weight

Controller module D2: 130 g  
Controller module D6: 260 g

### Timer module UM (option)

#### Automatic switching between daylight saving time and winter time (CEST)

#### Temperature reduction

4 K  
Switching channels: 2, independently programmable  
Memory blocks: 9, independently programmable

#### Valve and pump protection function/ additional pump running time

0/15 min, adjustable

#### Supply voltage

DC 3.3 V (via base module BM)

#### Nominal power

3 mW

#### Housing (W x H x D)

Plastic housing PC/ABS  
Colour: Light grey, similar to RAL 7047  
W x H x D: 37 x 93 x 28 mm  
Degree of protection: IP 30 (EN 60529)

#### Weight

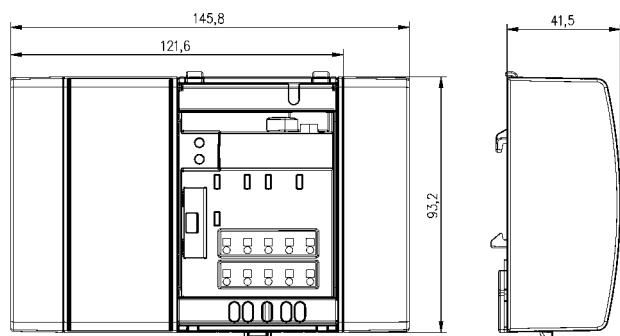
33 g

DG: G, PG: 4	Part no.	Price €
<b>Base module BM</b>	<b>78112</b>	
<b>Controller module D2</b> for 2 control circuits	<b>78114</b>	
<b>Controller module D6</b> for 6 control circuits	<b>78115</b>	
Options		
<b>Timer module UM</b> for base module BM	<b>78113</b>	
<b>Wireless module timer FMA</b> with external antenna, for timer module UM	<b>78122</b>	

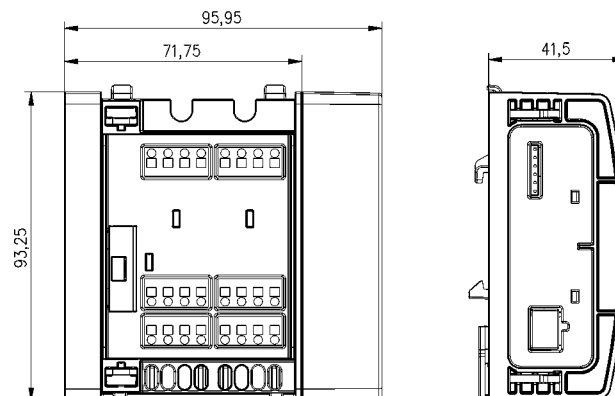
# Single room temperature controller CosiTherm® – wired

Types and dimensions (mm)

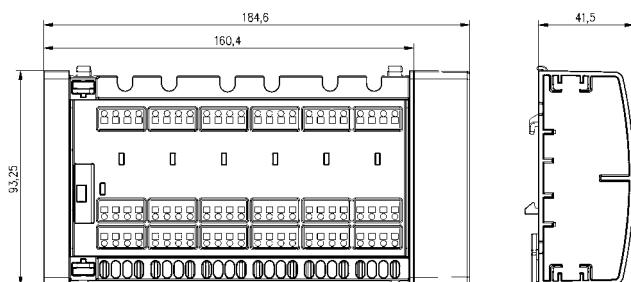
Base module BM



Controller module D2



Controller module D6



Timer module UM

