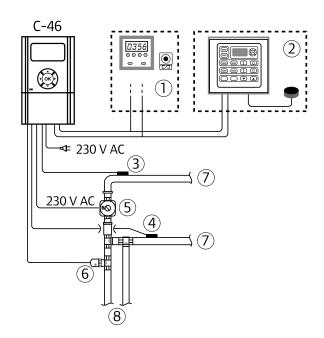
### **Meltaway Mode**

**Meltaway mode requires:** C-46 Climate Controller c/w Supply Water Temperature Sensor (Product Code: 1047844) and

Return Water Temperature Sensor (Product Code: 1047847)

C-46 can be used to control the water temperature to a Meltaway (Snow or Ice Melt) System. The C-46 can be wired to a timer and push button for simple manual activation, alternatively, a dedicated Meltaway controller with snow-and-ice sensor can used for fully automatic operation.

Item	Description
C-46	Climate Controller C-46
1	Simplified meltaway using timer and push button (alternative solution)
2	Meltaway controller with snow-and-ice sensor (alternative solution)
3	Supply sensor
4	Return sensor
5	Circulation pump
6	Mixing valve actuator  Thermal (See illustration)  Motorized, externally powered
7	Pipes to meltaway system
8	Pipes to heating source



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## **uponor**

## NEW Uponor Climate Controller C-46

The Climate Controller C-46 is a primary water temperature controller for heating, cooling and meltaway systems.



# The Climate Controller C-46 is flexibly, easy to install, simple to operate and designed to achieve optimum results.

#### The Uponor Controller C-46 is .....

- a fixed water temperature controller
- a weather compensator
- suitable for heating only applications
- suitable for combined heating and cooling applications
- configurable for ice and snow melt applications
- able to work stand alone (with basic sensors)
- able to co-operate with the wired system (heating/cooling switchover)
- able to co-operate in an integrated and enhanced way with the C-56/I-76 Radio Controller and Interface

The Uponor Climate Controller C-46 is a piece of advanced technology, yet simplifies the installation task and is intuitive for the end user.

Once connected, the installation wizard guides you through the system set-up. By following the on screen instructions it is configured in almost no time.

And it won't take long to instruct your customer, either! The quick menu makes it easy to find the settings and handle the Uponor Climate Controller C-46.

- Installation wizard allows fast and easy fit
- Quick menu system provides easy access to basic settings
- Automatic summer/winter time change
- ECO/Comfort timer
- Integrates water temperature with room temperature controls or can operate in stand alone mode



The Uponor Climate Controller C-46 provides room temperature control for a comfortable thermal environment.



The installation wizard gives on-displayguidance, making installation fast and easy for you.

### **Heating Mode**

**Heating mode requires:** C-46 Climate Controller c/w Supply Water Temperature Sensor and

Outdoor Sensor (Product Code: 1047844).

**Optional:** Antenna module for connection to wireless thermostats

Wired Indoor Sensor (Product Code: 1047848) Wired Return Sensor (Product Code: 1047847)

The C-46 can be setup to control heating in a number of different operating modes, which will depend on the sensors connected. The table below shows sensors used for each operating mode.

Operating mode	Supply sensor	Outdoor sensor	Indoor sensor	Return sensor	Relative humidity sensor	Floor sensor
Heating - fixed supply	Х					
Heating - outdoor controlled supply	Х	Х				0
Heating - outdoor controlled supply with indoor compensation	Х	Х	Х			
Heating - outdoor controlled average	Х	Х		Х		
Heating - indoor controlled	X		X			

In the majority of installations, heating with outdoor controlled supply (commonly known as weather compensation) will be the chosen operating mode. For this arrangement all required sensors are contained in the standard C-46 pack. To gain maximum benefits of energy efficiency and communication between water and room temperature controls, use the C-46 to interface with Uponor C-56 radio controller and/or wireless room thermostats.

### **Heating and Cooling Mode**

**Heating and Cooling mode requires:** C-46 Climate Controller Extended version c/w Antenna, Wireless Humidity Sensor H-56,

Supply Water Temperature Sensor and Outdoor Sensor (Product Code: 1047845).

**Optional:** Wired Indoor Sensor (Product Code: 1047848)

Wired Return Sensor (Product Code: 1047847)

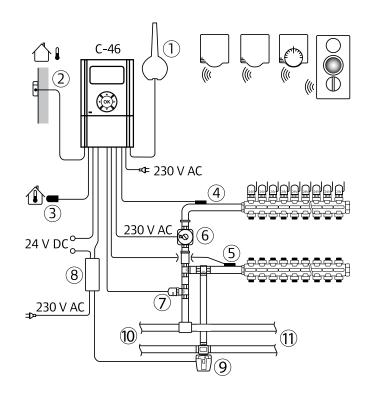
Up to 5 additional wireless Relative Humidity Sensors (Product Code: 1047846)

In addition to heating control, the C-46 can maintain design water temperature for cooling systems together with summer/winter switchover.

Operating mode	Supply sensor	Outdoor sensor	Indoor sensor	Return sensor	Relative humidity sensor	Floor sensor
Cooling - fixed supply	Х					0
Cooling - indoor controlled	Х		Х			0
Cooling - indoor compensated supply with dew point control	Х	-	X	-	Х	0

For combined floor heating and floor cooling systems, cooling with indoor compensated supply with dew point control is the recommended operating cooling mode. The relative humidity sensor(s) should be located to minimise the risk of condensation within the building.

Item	Description
C-46	Climate Controller C-46
H-56	Relative Humidity Sensor H-56 (only used in cooling systems with dew point control)
T-54	Thermostat Public T-54 Radio
T-55	Thermostat T-54 Radio
I-75	Thermostat I-75 Radio
1	Radio antenna
2	Outdoor sensor
3	Indoor sensor
4	Supply sensor
5	Return sensor
6	Circulation pump
7	Mixing valve actuator  Thermal. 24V DC, 3W, NC (See illustration)  Motorized, 0-10V DC, externally powered
8	II/C switchover relay box (only used in heating/cooling switchover systems)
9	Diverting valve (only used in cooling systems with dew point control)
10	Pipes to heating source
11	Pipes to cooling source



The C-46 features heating/cooling switchover, which can be controlled by C-56 wireless controller when using Uponor radio room temperature controls.