**R309 Temperature Controller**     **RCV309 RF Receiver**

**Operating Modes**: Manual Mode, Automatic (5+1+1 Programmable, 6 Time Zones),Comfort, Energy Saving, and Frost Protection

**Size of LCD Display**: 80x55.8mm(3.15x2.20")

**R309 is transmitter, 2xAA batteries-powered**

**RCR309 receiver, main powered**

### Application

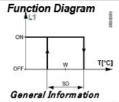| | |
|---|---|
| R309 is used to control the room temperature in Heating or Cooling systems. Typically applications include: | The Controller can be used together with following equipment or device: |
| ☞ Homes | ☞ Thermal Valves or Zone Valves |
| ☞ Residential buildings | ☞ Combi Boilers |
| ☞ Schools | ☞ Gas or Oil Burners |
| ☞ Offices | ☞ Fans |
| | ☞ Pumps |

### Specification

※ **Function Diagram**

T    Room Thermostat
SD   Switching differential (1K)
W    Room temperature setpoint
L1    Output Signal for Heating

※ **General Information**

Casing Material:    ABS & Acrylic
LCD Backlight:     80x55.8mm(3.15x2.20")
**Power Supply:**    R309    3V DC（2 x AA1.5 V）

RCV309    220 or 110 ± 10% Vac, 50/60Hz
**Current Load:**    10A (Resistive)
**Ambient Temp. Range:**    0~99.5℃
**Setpoint:** 5~45℃/41~113℉ (Comfort Mode)
           5~45℃/41~113℉ (Energy-saving Mode)
           5~15℃/41~59℉ (Holiday Mode)
**Accuracy/Tolerance :**   +/-0.5℃     **Timing Tolerance** :     <1%
**Thermistor :**     10KΩ@25 ℃
**Storage Conditions Temp.** -10~60 ℃    **Humidity:**< 90% r.h.
**RF Module:**    Semi-duplex Module
**Frequency:**     433 Hz(defaulted) , 846 Hz(customized)
**Backup**     Setpoints and other parameters is able to retained when batteries are replacing, except Time setting(If replacing batteries quickly, time setting should be retained as well). Please check and set the time again if it is lost.

※    **Display Icons & Buttons**

**Display**         **R309**         **RCV309**

### Display

| | |
|---|---|
| 1. Week day: from Monday to Sunday | 2. Number of Programmable Time Zones |
| 3. Room Temperature | 4. Buttons Lock |
| 5. Battery Consumption Indication | 6. Time of day (00:00..23:59) |
| 7. Heating is on | 8.Comfort Mode |

9. Manual Mode, setpoint is temporarily overridden until switching to next programmable time zone.
10.Automatic Programmable Mode: 5+1+1, 6 time zones

| | |
|---|---|
| 11. Energy Saving Mode | 12. Frost Protection Mode |

13.Setpoint,or Floor Temperature(It displays when external sensor is activated).

### Buttons

14. *Modes selecting or Time setting, etc.*