

## DIGITAL WEEKLY THERMOSTAT

# WTW 900

### APPLICATION

**WTW 900** consists of :

- **WTB 900:** This device is a battery-powered digital weekly thermostat for controlling room temperature on three levels: Comfort, Economy or Off/Antifreeze.

Its main characteristic is the lack of electrical connections; indeed the ON and OFF signals are transmitted to the receiving unit by radio, making this device easy and cheap to install, especially when there is no existing electrical system available.

- **WTR 900 :** One-channel receiver designed to switch on loads (more precisely, electro-thermal valves or circulators) via radio in home or office heating/cooling systems.

It has 1 channel that can be associated with an independent transmitter (wireless thermostat or thermostat). This system is an optimal solution for buildings in which wires cannot be laid between thermostats and the environment to be controlled.

### Features

#### TECHNICAL DATA WTB 900

- Power supply: 2 x 1.5V, alkaline batteries (Type AA)
- Battery life: > 2,5 years
- Frequency: 868,150 MHz
- Modulation: GFSK
- Effective radiated power (ERP):< 1 mW
- Antenna type: Internal
- Max. receiver distance: >300 m in free air; >50 m in buildings (depending on the building and environment)
- Room temperature
- Regulation range: comfort: 5,0 .. 35,0°C; economy: 5,0 .. 35,0°C
- Hysteresis: 0,2°C adjustable 0,1 .. 5,0 °C
- Sensor type: NTC 4K7 ohm ±1% @ 25°C
- Resolution: 0,1°C (T > 0,0°C); 0,2°C (T < 0,0°C)
- Range: -9,9°C .. +50,0°C
- Precision: ±1,0°C
- Floor temperature (external sensor)
- Regulation range: Lower limit: 10 .. 30°C
- Upper limit: 20°C .. 50°C
- Sensor type: NTC 4K7 ohm ±1% @ 25°C
- Resolution: 0,1°C (T > 0,0°C); 0,2°C (T < 0,0°C)
- Range: -9,9°C .. +60,0°C
- Precision: ±1,0°C
- Wires' maximum length to the remote sensor: 15 m
- Antifreeze: OFF/0.5°C .. 25.0°C (Default 3.0°C)
- Offset: ± 5.0°C. (Default 0.0°C)
- Backlight turns off: 20 sec. after the last pressing of a button
- Protection rating: IP 30
- Classification under reg. 2013.811.EC:
- Class: IV
- Contribution to energy efficiency: 2%
- Equipment class: III
- Number of manual cycles: 1.000
- Number of automatic cycles: unlimited
- Software class: A
- EMC test voltage: 3V
- EMC test current: 30mA
- Ball pressure test temperature: 75°C
- Operating temperature: 0°C .. +40°C
- Storage temperature: -10°C .. +50°C
- Humidity limits: 20% .. 80% RH non-condensing
- Enclosure: Material: ABS+PC V0 self-extinguishing
- Colour: Cover: Signal white (RAL 9003)
- Base: Anthracite (RAL 7016)

#### TECHNICAL DATA WTR 900

- Technical features
- Power supply: 230V~ 50Hz
- Absorption: 11VA
- Relay contacts ratings: 6A 250V~ (voltage free)
- Regulation hysteresis : 0,3°C
- Frequency: 868,150 MHz
- Sensitivity: -105 dBm
- Modulation: GFSK
- Bandwidth (-3 dB): 100 KHz
- Type of antenna: internal stylus

- Max. distance from transmitter: >300m in free field; >50 m in buildings (depending on the building and environment)
- Protection rating: IP 4X
- Type of action: 1
- Pollution degree: 2
- Equipment class: II ( )
- Rated impulse voltage: 2500V
- Number of manual cycles: 50000
- Number of automatic cycles: 100000
- Software class: A
- EMC test voltage: 230V~ 50Hz
- EMC test current: 45 mA
- Distances tolerances fault mode 'short' exclusion:  $\pm 0,15$  mm
- Ball pressure test temperature: 75 °C
- Operating temperature: 0°C .. 40 °C
- Storage temperature: -10°C .. +50 °C
- Humidity limits: 20% .. 80 % RH noncondensing
- Enclosure: Material: ABS V0 self-extinguishing
- Colour: Signal White (RAL 9003)
- Installation: Wall mounted

Code	Description	Data Sheet
<b>WTW 900</b>	Digital weekly thermostat.	-