

# Room Controller

## SE7600W Water Source Heat Pump Controller

The SE7600W water source heat pump room controller with dedicated dehumidification sequences provides exceptional control of water source heat pumps for commercial buildings. Common indoor air quality issues such as mold, mildew, condensation, poor occupant comfort, and overall building health can be effectively resolved in an energy-efficient manner.



# SE7600W Water Source Heat Pump Features



Simple to install and commission, the SE7600W monitors water temperature, as well as other points, offering added value without the additional costs related to more complex systems.

## Introduction

The SE7600W water source heat pump controller with dedicated dehumidification sequences provides exceptional control of water source heat pumps for commercial buildings. Common indoor air-quality issues such as mould, mildew, condensation, poor occupant comfort, and overall building health can be effectively resolved in an energy efficient manner using our new controller.

## Water source heat pump controller

Designed for new construction and retrofit projects, the SE7600W water source heat pump controllers dramatically decreases project delivery costs by reducing installation, configuration, and commissioning time. No complex software or tools are required to customise functionality to meet your required applications.

The water source heat pump controller provides all the advanced features and monitoring functions required by most modern building automation systems in one simple “thermostat-like” enclosure.

The water source heat pump controllers also feature an intuitive menu-driven, and backlit LCD display that guides users through the configuration steps, making configuration extremely simple. This menu is used to configure parameters such as temperature, time events, system mode, and fan mode.

Open protocol design provides compatibility to BACnet® MS/TP and wireless ZigBee® Pro network systems. Our network ready “standalone” versions can be field retrofit with optional communication modules, which enable the controllers to be integrated into virtually any leading building automation system as building requirements change.

All models can be customised with passive infrared (PIR) motion sensor functionality via an optional PIR accessory cover. The PIR cover can be ordered as a factory-installed option. PIR functionality provides advanced occupancy routines and automatic energy savings during occupied periods without sacrificing occupant comfort.

When compared to traditional building automation controllers, the SE7600W water source heat pump controller with RH control for dehumidification provides building owners with unmatched return on investment while maximising profits for system integrators.



## AT A GLANCE

### Custom design

- Built-in dehumidification strategies
- Extra monitoring points provided
- Open protocol for easy integration into any network system
- Network Ready and can be field retrofit with optional communication modules
- One simple wall-mounted device to install, wire and commission
- Fully em

### Options and accessories

- PIR occupancy sensor
- Advanced occupancy and monitoring functions
- 7-day programmable

# SE7600W Water Source Heat Pump Specifications

## Specifications

### Dimensions

12.5cm/4.9in (H) x 8.6cm/3.38in (W) x 2.9cm/1in (D)

### Power Requirements

19-30Vac, 50/60 Hz; 2 VA (RC & C) Class 2

### Operating Conditions

0 °C - 50 °C ( 32 °F - 122 °F )

0% - 95% R.H. non-condensing

### Storage Conditions

-30 °C - 50 °C ( -22 °F - 122 °F )

0% - 95% R.H. non-condensing

### Temperature Sensor

Local 10 K NTC thermistor

### Temperature Sensor Resolution

± 0.1 °C ( ± 0.2 °F )

### Temperature Control Accuracy

±0.5 °C ( ± 0.9 °F ) @ 21 °C ( 70 °F ) typical calibrated

±0.5 RH from 20 to 0% RH at 50 to

90 °F ( 10 - 32 °C )

### Humidity Sensor Precision

±5% RH from 20 to 80% RH

### Humidification Setpoint Range

10% RH to 90% RH

### Dehumidification Setpoint Range

15% RH to 95% RH

### Occ and Unocc Cooling Setpoint Range

12.0 - 37.5 °C ( 54 - 100 °F )

### Occ and Unocc Heating Setpoint Range

4.5 °C - 32 °C ( 40 °F - 90 °F )

### Room and Outdoor Air Temperature

#### Display Range

-40 °C - 50 °C ( -40 °F - 122 °F )

### Proportional Band for Room Temperature control

Factory set, heating and cooling at: 1.1°C ( 2.0°F )

### Digital Inputs

Relay dry contact only across C terminal to DI1 or DI2

### Contact Output Rating

Each relay output: ( Y1, Y2, G, & AU )

30 Vac, 1 Amp. maximum

30 Vac, 3 Amp. in-rush

### Wire Gauge

18 gauge maximum, 22 gauge recommended

### Approximate Shipping Weight

0.75 lb ( 0.34 kg )

### Agency Approvals All Models

**UL:** UL 873 (US) and CSA C22.2 No. 24 (Canada), File E27734 with CCN XAPX (US) and XAPX7 (Canada)

**Industry Canada:** ICES-003 (Canada)

**FCC:** Compliant to CFR 47, Part 15, Subpart B, Class A (US)

**CE:** EMC Directive 89/336/EEC (Europe Union)

**C-Tick:** AS/NZS CISPR 22 Compliant (Australia / New Zealand) Supplier Code Number N10696

### Agency Approvals Wireless Models

**FCC:** Compliant to: Part 15, Subpart C

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.



Check with your local government for instruction on disposal of these products.



## Ordering information

SE76   W   45

**Programmability:**  
 -00= No local scheduling / Non programmable  
 -52= Local scheduling / programmable

**PIR options:**  
 -50 =PIR ready but PIR cover not included  
 -55 =Factory assembled with PIR cover

**Communication options:**  
 -B = BACnet® MS/TP  
 -P = ZigBee Pro wireless  
 -W = ZigBee® wireless  
 - = Network ready

\* Some part number configurations may not be available.