

Commercial Heat Pump Water Heater

This air source heat pump water heater is designed for commercial applications. It uses R410A refrigerant and delivers hot water up to 60°C with a high Coefficient of Performance (COP).



Overview

High-Efficiency Commercial Hot Water Solution

This air-source heat pump is designed for large-scale commercial applications such as hotels, hospitals, and industrial facilities. It utilizes advanced scroll compressor technology and R410A refrigerant to provide a sustainable and cost-effective way to generate hot water up to 60°C. With intelligent controls including MODBUS communication and automatic defrosting, it ensures reliable performance even in low ambient temperatures down to -25°C.

Performance Highlights

Key Performance Metrics

60 °C Max Water Temp	4.42 Max COP	200 kW Max Heating Capacity	4000 L/h Max Water Output
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Technical Features

Features:

- Adopt R410A refrigerant, environmental friendly.
- Higher water temperature output up to 60°C.
- Adopt tube in tube heat ex-changer and circulating heating method, has higher COP.
- Defrost automatically, intelligent and fast.
- High pressure protection function.
- With MODBUS communication.
- Full automatically operation.
- Low operation ambient temperature-15°C/-25°C
- The system can be used for cooling, but it is not the main function.



Key features including R410A refrigerant usage, MODBUS communication, and high-temperature water output.

Core System Features

- Environmentally friendly R410A refrigerant
- Tube-in-tube heat exchanger for higher efficiency
- Intelligent automatic defrosting system
- High-pressure protection safety function
- MODBUS communication for BMS integration
- Fully automatic operation
- Vertical air flow direction
- Electronic expansion valve control

Operating Conditions

Ambient Operating Range

-15°C to 43°C (Extended range models down to -30°C)

Model Specifications

Model Performance Comparison

Model No.	Heating Cap (kW)	COP	Rated Output (L/h)	Net Weight (kg)
RS-019TA1	18	4.29	380	160
RS-038TA1	36	4.34	770	259
RS-050TA1	50	4.36	1050	450
RS-100TA1	100	4.42	2100	800
RS-200TA1	200	4.28	4000	1000

Hardware Components

Compressor Type

Scroll Compressor

Power Supply

380V / 3 Phase / 50Hz