Proven PERFORMANCE. Unmatched SAVINGS. Sustainable SOLUTION.

Rheem® Commercial Heat Pump Water Heaters (Split System)

These products meet a stringent set of our company's internally defined sustainability standards.
Tuition Efficient, Surprisingly Versatile, Smart Decision

Rheem® Commercial Heat Pump Split Systems use heat extracted from the air and transfer it to water, so there’s no need to choose between sustainability goals and the hot water needed for the business to operate. Although Rheem Commercial Heat Pump Systems are a relatively new option in the North American market, they’ve been helping businesses in Australia save energy, save money, and reduce their carbon footprint for more than a decade.

Whether you’re interested in its super high efficiency design for saving money, reducing impact on the environment or positively contributing to regional decarbonization goals, Rheem® Commercial Heat Pumps are an ideal choice.

SUSTAINABILITY

Super High Efficiency – Exceeds 4.0 coefficient of performance (COP) at 80°F ambient and 60% relative humidity using less energy than electric, natural gas or propane water heaters. 135k BTU models are ENERGY STAR® certified

Decarbonization – No fossil fuel consumption and zero combustion emissions

Improved Building Ratings – Ideal for green building programs and increased efficiency ratings like LEED

Building Energy Compliance – Supports requirements set forth in legislative bills SB 350, AB 758, SB 1477, AB 3232

SAVINGS

Energy Savings – Super high energy efficiency with over 70% energy savings compared to gas or electric resistance heating*

Decarbonization Incentive Eligibility – Available rebates, incentives and tax credits offset initial capital costs

High ROI – Save upfront with rebates and incentives, and continue to save with energy cost savings

Low Maintenance – With minimum moving parts, routine maintenance is fast and inexpensive

Rheem® Commercial Heat Pump Split Systems use heat extracted from the air and transfer it to water, so there’s no need to choose between sustainability goals and the hot water needed for the business to operate. Although Rheem Commercial Heat Pump Systems are a relatively new option in the North American market, they’ve been helping businesses in Australia save energy, save money, and reduce their carbon footprint for more than a decade.

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Rheem® Commercial Heat Pumps deliver business advantages that go on and on.

PROVEN PERFORMANCE

Proven Performance – While new in the US, this Rheem solution has been used in Australia’s challenging environments for over a decade

Suits Most Mild Climates – The heat pump will efficiently perform in ambient temperatures down to 40°F. For colder days, it includes an auxiliary boost mode and auto defrost

Exceptional Durability – High quality components and epoxy-coated evaporator coils provide protection in corrosive environments. Rated for marine environments

FLEXIBLE INSTALLATION & SERVICE

Multiple Install Options – Reduced System footprint with stackable, horizontal and vertical exhaust options can be installed indoors or outdoors

Design Customization – Single or multiple heat pumps and storage units easily meet the facility performance and layout requirements

Faster Servicing – The control panel provides on board diagnostics, system configuration and optional high level BMS connectivity via Modbus or BACnet

*Sustaining Conditions: 80°F ambient, 60% RH, 110°F Making, 120°F Water out. Tested in accordance with ASHRAE 118.1-2012. Ratings as per 10 CFR Appendix G to Support G or Part 431

Learn more about Rheem Commercial Heat Pump Solutions at Rheem.com/CommercialHPWH
How it Works

1. When there is a call for hot water, the evaporator fans, compressor and water pump activate.

2. Evaporator fans draw air through air inlet and over the evaporator.

3. As warm air passes over the evaporator coils, low temperature refrigerant absorbs the heat from the air.

4. Cooled air is exhausted via the top (vertical discharge models) or side (horizontal discharge models) of the heat pump.

5. The compressor increases the temperature of the refrigerant and pumps refrigerant vapor out to the heat exchanger and around the refrigerant system.

6. Water pump pulls cold water from the storage tanks to the inlet connection.

7. The heat exchanger heats cold inlet water with refrigerant vapor.

8. Hot water is then pumped out to the storage tanks.

Typical Installation

BMS Connectivity
Rheem Commercial Heat Pumps can be connected to a customer’s Building Management System (BMS) or Building Automation System (BAS) via an interface card. Modbus or BACnet interface cards are available as accessories.

With this feature, the system is discoverable and can be remotely monitored and managed, making it easy for facility managers to receive equipment alarms on their dashboard and dispatch maintenance as needed.

<table>
<thead>
<tr>
<th>Pump</th>
<th>BMS Card</th>
<th>LAN Cable</th>
<th>Tank Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP22760A CM 3-2 (60K BTU)</td>
<td>17412 BACNET MS/ TP over RS485</td>
<td>17405</td>
<td>ST Models – Storage E Models – Electric backup</td>
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<tr>
<td>AP22760B CM 10-1 (135K BTU)</td>
<td>17447 PCOWEB SE Ethernet Card IP Protocols</td>
<td>17414 PCOS004850 Serial Card</td>
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</table>
Air to Water 60k BTUh Heat Pump Specifications

Rheem Model Number | HPHD-060NU-201 (Horizontal) | HPHD-060VNU-201 (Vertical)
--- | --- | ---
ELECTRICAL INPUT | 480 Volts / 3 Phase / 60 Hz | 480 Volts / 3 Phase / 60 Hz
Voltage / Phase | 26.3 FLA / 150 LRA | 26.3 FLA / 150 LRA
Min. Circuit Amperage | 49.4 | 49.4
Compressor Type | Scroll Axial | Scroll Axial
Type of Water Tube | Vented Brazed Plate | Vented Brazed Plate
HEAT EXCHANGER (Water Side) | .08" W.C. | .08" W.C.
Max. Outlet Water Temp, °F | 208/240 Volt/ 1 Phase / 60 Hz
Flow Rate Excl. By Pass, gpm | 15-1/2 | 15-1/2
Max. Operating Pressure, PSI | 250 | 250
Max. Operating Pressure Drop, PSI | 18-1/4 | 18-1/4
Designt Pressure Drop, PSI | 1620 (Per Fan) | 1620 (Per Fan)
Max. Running Amps @ 54°F SST / 54°F | 32.1 | 32.1
Power Input, kW | 12.3 | 12.3
Min. Circuit Amperage | 29.5 FLA / 176 LRA | 29.5 FLA / 176 LRA
Min. Circuit Amperage (Amps Per Phase) | 26.3 FLA / 150 LRA | 26.3 FLA / 150 LRA
General Information | 145 | 145
Max. Operating Pressure Drop, PSI | 18-1/4 | 18-1/4
Max. Outlet Water Temp, °F | 208/240 Volt/ 1 Phase / 60 Hz
Flow Rate Excl. By Pass, gpm | 15-1/2 | 15-1/2
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<th>40°F</th>
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<th>100°F</th>
<th>110°F</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°F</td>
<td>94,907</td>
<td>96,184</td>
<td>97,461</td>
<td>98,738</td>
<td>100,015</td>
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</tr>
<tr>
<td>110°F</td>
<td>93,631</td>
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<td>96,779</td>
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<td>99,331</td>
<td>100,608</td>
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<td>99,333</td>
<td>100,610</td>
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<tr>
<td>140°F</td>
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<td>91,662</td>
<td>92,944</td>
<td>94,229</td>
<td>95,504</td>
<td>96,780</td>
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Installation Clearances

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<tr>
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<tbody>
<tr>
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<td>Side</td>
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<td>Side</td>
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<tr>
<td>Display Side</td>
<td>Display Side</td>
<td>24&quot;</td>
</tr>
<tr>
<td>Top (Horiz. Discharge)</td>
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<td>D</td>
<td>Compressor Access</td>
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<td>E</td>
<td>Top - Fan Discharge</td>
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Air to Water 135k BTUh Heat Pump Specifications

Rheem Model Number | HPHD-135HNU-483 (Horizontal) | HPHD-135VNU-483 (Vertical)
--- | --- | ---
ELECTRICAL INPUT | 480 Volts / 3 Phase / 60 Hz | 480 Volts / 3 Phase / 60 Hz
Voltage / Phase | 26.3 FLA / 150 LRA | 26.3 FLA / 150 LRA
Min. Circuit Amperage | 49.4 | 49.4
Compressor Type | Scroll Axial | Scroll Axial
Type of Water Tube | Vented Brazed Plate | Vented Brazed Plate
HEAT EXCHANGER (Water Side) | .08" W.C. | .08" W.C.
Max. Outlet Water Temp, °F | 208/240 Volt/ 1 Phase / 60 Hz
Flow Rate Excl. By Pass, gpm | 15-1/2 | 15-1/2
Max. Operating Pressure, PSI | 250 | 250
Max. Operating Pressure Drop, PSI | 1620 (Per Fan) | 1620 (Per Fan)
Min. Circuit Amperage | 29.5 FLA / 176 LRA | 29.5 FLA / 176 LRA
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When units are placed side by side, allow at least 40" between evaporator coils.
Behind every product solution is the support of Rheem commercial experts. Rheem will be with customers every step of the way through application and design, install, start up, maintenance and service—for an unmatched experience.

### Sizing Support Application Engineers
Rheem Applications Engineers are standing by to help you determine the right solution for your next project—get help with specifying products and pro-active replacements for location layouts.

### Installation, Start-up & Technical Support
Training, technical assistance and easily accessible live support when you need help.

### Stocked Solution
Units and system parts are stocked and available through distributor locations in California and Utah, ensuring quick turnaround on orders, getting you what you need in days versus months.

### Contractor Network
Our network is trained in every aspect of our commercial heat pump product from application to technical support and servicing.

Learn more about Rheem Commercial Heat Pump Solutions at Rheem.com/CommercialHPWH

To get in touch with our sizing pros, go to: rheem.com/application-form