

CAHV

Low-GWP Heat Pump Water Heater

Low-GWP (148)
refrigerant R-454C

40kW / 136,480 Btuh
capacity

Operating temperature
down to -25°C

Up to 74°C
maximum LWT
and up to 70°C
at -20°C Outdoor
Temperature

High-efficiency
inverter technology

Modular design
provides flexible
solutions



Shaping the Future of Sustainable Heating

The Mitsubishi Electric CAHV is a high-performance, eco-friendly heat pump water heater engineered as an alternative to fossil fuel systems with a low-carbon and energy-efficient solution. The CAHV uses the low-GWP (148) R-454C refrigerant, reducing environmental impact.

Optimal Energy Performance

The CAHV's advanced heat pump technology attains a Coefficient of Performance (COP) of 2.85.* The CAHV maintains high efficiency even in low ambient conditions—reducing energy consumption and delivering consistent savings.

All-Weather Control

Mitsubishi Electric designed flash injection circuit and optimized scroll compressor delivers high-capacity performance across a wide ambient temperature range, from -25°C to 43°C (-13°F to 109°F), including 70°C (158°F) output water temperatures at ambient conditions down to -20°C (-4°F), ensuring year-round comfort and capacity.

Streamlined Installation and Maintenance

The fully electric system eliminates the need for inspections and maintenance related to fossil fuel combustion systems. The Monobloc (packaged) system simplifies installation with self-contained refrigeration circuit, eliminating the need for field refrigerant piping and large additional refrigerant charges.

*Under normal heating conditions at the outdoor temperature of 7°C DB/6°C WB (44.6°F DB/42.8°F WB), the outlet water temperature of 45°C (113°F), and the inlet water temperature of 40°C (104°F) Tolerance of capacity and COP is based on AHRI 551/591.

Multi-Use Applications



Multi-Unit Residential:

Radiators, domestic hot water and underfloor heating



Hospitality:

Space heating, sanitization, and laundry services



Recreation Centres:

Sanitary water and pool heating



Industrial Facilities

High heat-retention loads and high horsepower demands

Optimized Control Flexibility



Multiple Unit Ready:

Connect up to 16 units and operate with one remote controller.



Rotation Function:

Auto staging control to equalize run time and equipment starts.



Onboard Controls:

M-NET compatible. Connect to City Multi units or operate as a standalone. No plant manager control is required.



Various Configurations:

External outputs for backup heaters, analog capacity control input, defrost signal, and more.



Heating and Cooling

ecodan

Learn more at
MitsubishiElectricCAHV.ca