

# COMMERCIAL CASE STUDY



# Rheem Air-to-Water Heat Pumps at Blacktown International Centre of Training Excellence

The Blacktown International Centre of Training Excellence (ICTE) in New South Wales, Australia, a state-of-the-art facility for vocational training, required an efficient and sustainable hot water system to meet the demands of its diverse operations. Rheem collaborated with Blacktown City Council and local plumbing experts to deliver a tailored solution using the YF Series Air-to-Water (A2W) Heat Pump system.

### THE CHALLENGE

The ICTE needed a hot water system capable of supporting high-demand usage across multiple training facilities while aligning with strict sustainability goals. The system had to operate reliably in varying climatic conditions, reduce energy consumption, and comply with local environmental regulations. Legacy systems were inefficient, leading to high operational costs and carbon emissions.

# THE SOLUTION

Rheem implemented a customised YF Series A2W Heat Pump system, designed for commercial applications. The installation included:

- Multiple high-capacity YF Series heat pumps for consistent hot water delivery.
- Integration with existing infrastructure to minimise disruption.
- Use of low-GWP (Global Warming Potential) refrigerants to enhance environmental performance.
- Collaboration with local plumbing specialists to ensure precise installation and compliance with regulations.

## THE IMPACT

The new system delivered significant benefits:

- Energy Efficiency: Reduced energy consumption by up to 60% compared to traditional electric systems, lowering operational costs.
- Sustainability: Decreased carbon footprint through low-GWP refrigerants and efficient heat pump technology.
- Reliability: Ensured consistent hot water supply for training facilities, supporting operational needs.
- Scalability: Provided a flexible solution adaptable to future expansions of the ICTF.

The project showcased Rheem's expertise in delivering sustainable, high-performance commercial hot water solutions, reinforcing the ICTE's commitment to environmental responsibility and operational excellence.

### THE KITS

### Zone One

- 2 x Rheem Commercial A2W 35kW Heat Pumps – model 953035H0 (Non-Ducted, Horizontal Discharge)
- 2 x Grundfos CM10-1 primary circulators
- 2 x Rheem RT2000N9ALU Stainless Steel Storage Tanks

### **Zone Two**

- 2 x Rheem commercial A2W 16kW heat pump – model 95301600 Vertical Discharge
- 2 x Grundfos CM3-2 Single Phase primary circulators
- 4 x Rheem RT1000N9ALU Stainless Steel Storage Tanks

## **Swimming pools**

- 2x Rheem Thermal 102kW Direct to Pool Heat Pumps
- 2x Rheem Thermal 22kW Low Temperature Direct to Pool Chillers Heat Pumps
- 2x Rheem Thermal 20kW Direct to Pool Heat Pumps

# CONTACT THE RHEEM COMMERCIAL TEAM TODAY

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