



i-FX Air Cooled Chiller with Inverter screw compressors provides cooling for the new Sofitel Hotel in Adelaide, in one of the tallest developments in South Australia.



Project Info

Application
Sofitel Hotel

Location
Adelaide, SA

The Challenge

The new Sofitel Hotel in Adelaide, in one of the tallest developments in South Australia, design called for centralised cooling with the use of two air-cooled centrifugal chillers with evaporative cooling pads.

The system would be required to operate at high ambient temperature of 45°C

The Solution

Mitsubishi Electric Australia, with the HVAC contractor, proposed an alternative system of two air-cooled Variable Screw Drive (VSD) screw chillers instead.

The two i-FX-G01 chillers operate at the required high ambient temperature without the requirement of adiabatic or evaporative cooling pads.

The Team

Client
Accor Pacific / Palumbo Pty. Ltd.

HVAC Contractor
Climat Commercial Pty Ltd

i-FX-G01 chillers provided simpler installation and cost savings on initial capital compared to a centrifugal chiller. The system also provides reduced water consumption and reduced maintenance requirements associated with chillers using wet pads.

Two VSD screw compressors in the system allow the unit to operate from -20°C up to 55°C outdoor air temperature and from -8°C to 20°C evaporator leaving water temperature.

Stepless capacity control down to 13% allows the client to run the system at reduced capacity during low load scenarios such as the hotel's low season.

The i-FX-G01 chiller compressor is rated to 150,000 hours with carbon steel bearing guaranteed for a lifetime.



UNIT INFORMATION



Units

i-FX-G01 /K /NR 2602 – Air-cooled VSD Screw Chiller, 520kW Cooling Capacity
i-FX-G01 /K /NR 2202 – Air-cooled VSD Screw Chiller, 417kW Cooling Capacity