AMMONIA
WATER COOLED CHILLERS

Water Cooled Ammonia Chiller

Water cooled chiller using HallScrew ammonia semi-hermetic compressor technology

AMMONIA
LOW CHARGE

Features & Benefits

HallScrew semi-hermetic ammonia compressor

- Design eliminates the shaft seal, which is the weakest containment point
- Does not require motor-compressor shaft alignment (or transition piece)
- A single screw with single star compressor is easy to refurbish
- Condenser heat can be recovered and reused in the process to save energy in heating and steam production

Reliability

- Design minimises potential leak points
- Simple mechanical design with the minimal pipework and valves
- Micro-controller designed to withstand mechanical vibration and ambient conditions
- Single star HallScrew compressor has minimum moving parts

Proven technology

- HallScrew compressors can provide cooling at high, medium and low temperatures
- Speed-controlled compressor and fans optimise performance and allow for a large range of operating ambient conditions
- Ammonia shell and tube heat exchangers for direct expansion provides a cost effective solution when used with electronic expansion valves
- Effectively optimises the ammonia charge

Low noise

- The condenser fan profile limits the noise level when operating at high speed

Protection

- When an acoustic housing is used, the leak detector alerts whenever there is an ammonia leak
- A pH sensor alerts when the cooler's tubing leaks ammonia to the water/glycol circuit

Available optional maintenance and monitoring packages

Environmental

- Ammonia has no ozone depleting (ODP) and global warming potential (GWP)

J&E Hall International

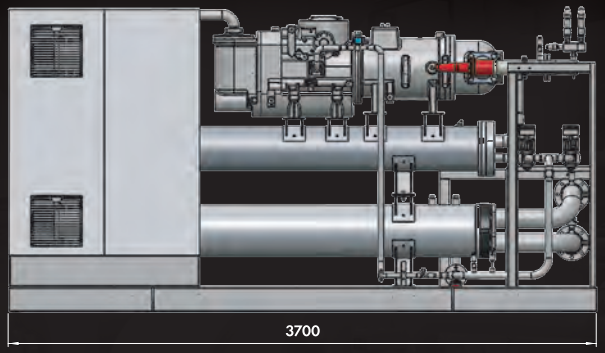
Technical Specifications

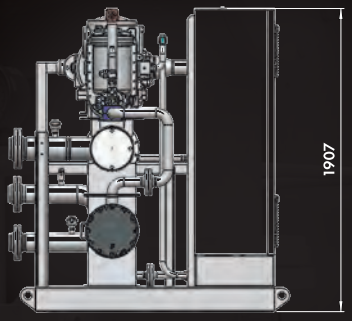
Model	Size	Length & Width (m)	Weight (Kg)
WCCN31 Mono-compressor	S	3.7 x 1.5	3200
	L	3.7 x 1.5	6400
WCCN31 Dual-compressor	S	3.7 x 2.0	3300
	L	3.7 x 2.0	6600

Performance Data

Model	High* Water +12°C to +7°C Condenser water +30°C		Medium* EG 35% -2°C to -8°C Condenser water +30°C		Low* EG 51% -19°C to -25°C Condenser water +30°C	
	Cooling Capacity (kW)	Power Input (kW)	Cooling Capacity (kW)	Power Input (kW)	Cooling Capacity (kW)	Power Input (kW)
WCCN31 Mono-compressor	360	95	190	85	90	75
	500	130	280	120	130	95
WCCN31 Dual-compressor	720	190	380	170	180	150
	1000	260	560	240	260	190

* No economiser DX U-Bundle Shell & Tube Condenser: Shell & Tube EG Concentrations are by weight





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