

COOLING SYSTEM DATASHEET

SOETECK · LIQUID COOLING & CDUS

Soetec JRXS Integrated Chiller Station

Packaged chiller plant from 60 kW to 1,700 kW with free cooling and magnetic bearing options for data centres

SKU JRXS

Soetec



COOLING CAPACITY

up to 1,700 kW

REFRIGERANT

R134a**JRXS-DS FREE COOLING
INTEGRATED CHILLER
500-1700 kW ...**

PRICE

On request**REQUEST A QUOTATION ONLINE**

serverinvest.com/product/soetec-integrated-chiller-station-cooling-syste...



01 Product overview

The Soetec JRXS Integrated Chiller Station packages a complete chilled water source into a single factory-built unit: chiller, heat rejection, pumps and water treatment are combined, so the site only needs to connect the supply and return pipes. There is no separate refrigeration room, cooling tower field or chilled water pump skid to design and build, which lowers civil works and initial investment. It is intended for data centres and IDC facilities that need year-round cooling, as well as commercial and industrial buildings.

The range is split into five series. The JRXS-DS (500–1,700 kW) and the magnetic bearing JRXS-DH (500–1,650 kW) include free cooling and are designed for year-round operation at elevated water temperatures typical of modern data centres. The JRXS-CS (500–1,700 kW) and the magnetic bearing JRXS-CH (500–1,600 kW) serve standard-temperature commercial loads without free cooling, and the JRXS-ME mini station (60–400 kW, under development) addresses smaller sites.

Efficiency

A patented hybrid cooling tower can switch between operating modes, an immersed free cooling heat exchanger is optional, and all series feature variable capacity and variable flow. Using R134a refrigerant, the stations reach a cooling load factor as low as 0.06. At 7/12 °C, Soetec states total consumption of 204.1 kW per MW of cooling for the magnetic bearing station and 218.8 kW for the standard station, versus 233.1–342 kW for conventional centrifugal, water-cooled screw and...

HIGHLIGHTS

- Five series covering 60–1,700 kW cooling capacity
- Plug-and-play: connect supply and return pipes, no plant room
- About 20 m² of floor space per 1 MW of cooling
- CLF as low as 0.06; 10–60% saving vs conventional plants
- Twin-screw or magnetic bearing compressors, R134a
- J-Smart control with multi-unit group operation

KEY SPECIFICATIONS

JRXS-DS Free Cooling Integrated Chiller Station	500–1700 kW • year-round cooling (IDC), high water temperature
JRXS-DH Magnetic Bearing Free Cooling Integrated Chiller Station	500–1650 kW • year-round cooling (IDC), high water temperature
JRXS-CS Standard Integrated Chiller Station	500–1700 kW • commercial, standard water temperature, no free cooling
JRXS-CH Magnetic Bearing Integrated Chiller Station	500–1600 kW • commercial, standard water temperature, no free cooling
Refrigerant	R134a
Compressor options	Twin-screw or magnetic bearing
Cooling load factor (CLF)	As low as 0.06
Energy saving vs conventional cold source Footprint	10–60% Approx. 20 m ² per 1 MW cooling capacity
Regulation	Full-series variable capacity and variable flow
Expansion	Direct parallel connection



02 Full specifications

SERIES OVERVIEW

JRXS-DS Free Cooling Integrated Chiller Station	500–1700 kW • year-round cooling (IDC), high water temperature
JRXS-DH Magnetic Bearing Free Cooling Integrated Chiller Station	500–1650 kW • year-round cooling (IDC), high water temperature

JRXS-CS Standard Integrated Chiller Station	500–1700 kW · commercial, standard water temperature, no free cooling
JRXS-CH Magnetic Bearing Integrated Chiller Station	500–1600 kW · commercial, standard water temperature, no free cooling
JRXS-ME Mini Chiller Station	60–400 kW · civil/industrial, optional free cooling (under development)

ENERGY CONSUMPTION PER MW OF COOLING (7/12 °C)

Magnetic Bearing Integrated Chiller Station	Chiller 204.1 kW (cooling, chilled water and water treatment included) · Total 204.1 kW
Standard Integrated Chiller Station	Chiller 218.8 kW (cooling, chilled water and water treatment included) · Total 218.8 kW
Water-Cooled Screw System	Chiller 178.6 kW · Cooling system 35.4 kW · Chilled water 29 kW · Water treatment 2 kW · Total 245 kW
Water-Cooled Centrifugal System	Chiller 166.7 kW · Cooling system 35.4 kW · Chilled water 29 kW · Water treatment 2 kW · Total 233.1 kW
Air-Cooled Screw System	Chiller 312.5 kW · Cooling system 0 kW · Chilled water 29 kW · Water treatment 0.5 kW · Total 342 kW
Note	Water-cooled centrifugal at energy efficiency Level 1; water-cooled and air-cooled screw at Level 2

KEY FEATURES

Refrigerant	R134a
Compressor options	Twin-screw or magnetic bearing
Cooling load factor (CLF)	As low as 0.06
Energy saving vs conventional cold source Footprint	10–60% Approx. 20 m ² per 1 MW cooling capacity
Control system	J-Smart integrated energy-saving control, multi-unit group control, hydraulic balance monitoring
Heat rejection	Patented hybrid cooling tower with switchable modes; optional submerged free cooling heat exchanger
Regulation	Full-series variable capacity and variable flow
Expansion	Direct parallel connection

03 Engineered, delivered & supported by ServerInvest

Engineering & sizing

Selected and sized against your real IT load, room and redundancy targets.

Installation

Delivery, installation and commissioning by our engineers across Europe.

Certified processes

ISO 9001, ISO 14001 and ISO 27001 certified project delivery.

Service & support

Maintenance, spare parts and support from a single partner.



Interested in this solution?

Request a quotation online or talk to a solutions engineer — we reply within one business day.
office@serverinvest.com

