

COOLING SYSTEM DATASHEET

SOETECK · LIQUID COOLING & CDUS

Soetec In-Rack Liquid-to-Air CDU 20–120 kW

Liquid-to-air CDU, 20 kW or 120 kW, enabling cold-plate servers in air-cooled rooms without facility water

SKU SY-AL-CDU-RK

Soetec



COOLING CAPACITY

up to 120 kWHEAT EXCHANGE
CAPACITY**SY-AL CDU-...**

DESIGNED AIR FLOW

SY-AL CDU-...

PRICE

On request**REQUEST A QUOTATION ONLINE**serverinvest.com/product/soetec-rack-mounted-air-liquid-cooling-solution-in-...

01 Product overview

The Soetec liquid-to-air CDU lets data centres deploy cold-plate cooled servers in rooms that only have conventional air cooling. It circulates coolant through the server cold plates, then releases the captured heat into the room air through an integrated air-to-liquid heat exchanger and fans. The existing room cooling removes that heat as usual, so no facility water piping has to be installed.

This makes it a practical bridge for mixed environments where air-cooled and liquid-cooled servers share the same rack – for example, a few GPU nodes for AI or HPC alongside general-purpose compute. Operators can introduce direct-to-chip cooling for the hottest components without redesigning the building's mechanical infrastructure.

Two capacities

SY-AL CDU-RK-20 – 20 kW heat exchange, 3,600 m³/h air flow, 536×900×445 mm, 85 kg operating weight, 1.6 kW rated power.

SY-AL CDU-RK-120 – 120 kW heat exchange, 15,000 m³/h air flow, 600×1200×2000 mm, 400 kg operating weight, 7 kW rated power.

Both units use deionised water as coolant, rated at 25 °C air-side conditions, with an outlet liquid temperature range of 35–50 °C and a maximum working pressure of 5 bar. Moving heat with liquid at the chip level reduces the fan energy servers would otherwise need and supports a better energy-efficiency ratio in high-density racks, while keeping the deployment simple.

ServerInvest sizes, supplies and integrates liquid-to-air CDUs together with racks, servers and power distribution – plan the layout...

HIGHLIGHTS

- Two models: SY-AL CDU-RK-20 (20 kW) and SY-AL CDU-RK-120 (120 kW)
- Rejects cold-plate heat to room air – no facility water loop needed
- Mixes air-cooled and liquid-cooled servers in the same rack
- Deionised water coolant, 35–50 °C outlet range
- Air flow of 3,600 m³/h or 15,000 m³/h
- Maximum working pressure of 5 bar

KEY SPECIFICATIONS

Heat exchange capacity	SY-AL CDU-RK-20: 20 kW · SY-AL CDU-RK-120: 120 kW
Air-side temperature	25 °C
Designed air flow	SY-AL CDU-RK-20: 3,600 m ³ /h · SY-AL CDU-RK-120: 15,000 m ³ /h
Cooling medium	Deionised water
Inlet liquid temperature	51/45 °C
Outlet liquid temperature range	35–50 °C
Water pressure drop	≥120 kPa
Circulation flow rate	SY-AL CDU-RK-20: 2.88 m ³ /h · SY-AL CDU-RK-120: 17.26 m ³ /h
Connection size	SY-AL CDU-RK-20: φ31.8×1.5 mm · SY-AL CDU-RK-120: φ63.5×2.0 mm
Rated power	SY-AL CDU-RK-20: 1.6 kW · SY-AL CDU-RK-120: 7 kW
Operating weight	SY-AL CDU-RK-20: 85 kg · SY-AL CDU-RK-120: 400 kg
Max. working pressure	5 bar



02 Full specifications

LIQUID-TO-AIR CDU MODELS

Heat exchange capacity	SY-AL CDU-RK-20: 20 kW · SY-AL CDU-RK-120: 120 kW
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Max. working pressure	5 bar
Dimensions	SY-AL CDU-RK-20: 536×900×445 mm · SY-AL CDU-RK-120: 600×1200×2000 mm

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

