



NAUTILUS PRODUCT DATA SHEET

EcoCore RCD



The EcoCore RCD In-Row CDU is purpose-built to scale with the evolving demands of AI and HPC. Supporting a wide range of pressure and flow conditions, it delivers up to 2.5MW of liquid cooling direct to the rack. Shipped ready for seamless integration into data hall server rows or adjacent mechanical rooms, the RCD combines powerful liquid cooling performance with deployment flexibility.

Features

Design

- Compact form factor engineered for fast provisioning and long-term reliability
- Ideal for in-row or mechanical gallery deployment
- Integrated pump and filtration redundancy with zero-downtime serviceability for continuous operation
- Engineered with top-tier components from world leading manufacturers
- Backed by over 35 years of QA expertise from our regional fabrication partners

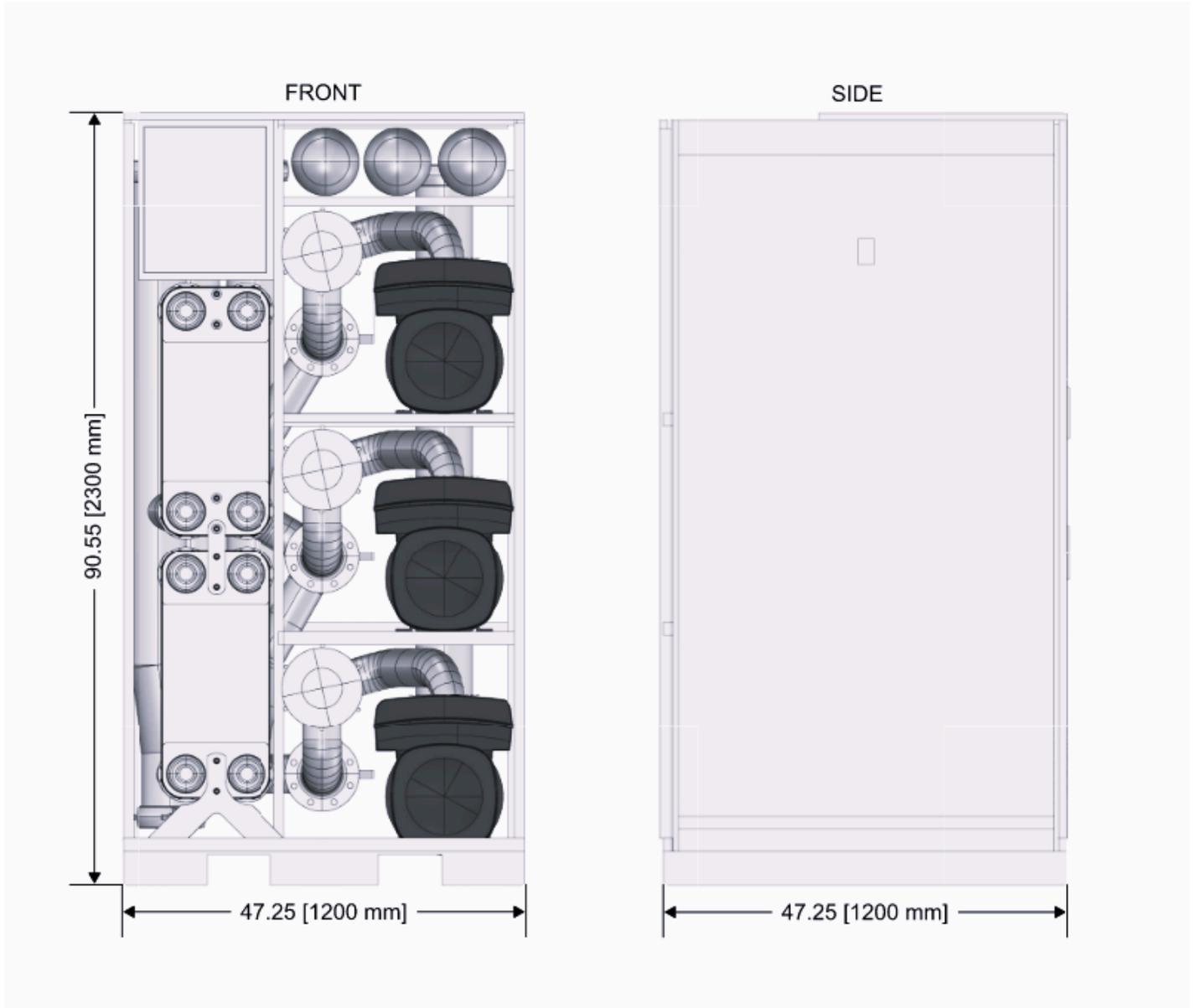
Control & Monitoring

- Customizable performance parameters, setpoints, and alarming
- Automated FWS and TCS flow control for dynamic thermal load balancing
- Local and network-ready HMI interface provides real-time monitoring and system control

Performance

- Up to 2,500 kW of high-efficiency cooling per module
- Linked operation enables synchronized performance across interconnected modules
- AI-Factory ready flow, pressure, and cooling capacity

EcoCore RCD Unit



EcoCore RCD Technical Specifications

Cooling Capacity per Module	300kW to 2500 kW
Approach [ATD]	4°C [7.2°F]
Maximum TCS Flow	60L/S (951 GPM)
TCS Pressure Head at Maximum Flow	2.3 Bar [33 PSI] (5 bar [73 psi] total available head)
Dimensions	1.2 m × 1.2 m × 2.3 m (3.9 ft × 3.9 ft × 7.6 ft)
Power	400V - 480V 50-60Hz 3-phase dual feeds
Maximum Power Consumption	32kW
Primary Coolant Type (FWS)	Process Water Water-Glycol Mix [1-25%]
Secondary Coolant Type (TCS)	Process Water Water-Glycol Mix [1-25%]
Primary Connection	150 mm [6 in.] Sanitary, SS316
Secondary Connection	150 mm [6 in.] Sanitary, SS316
TCS Filtration	25µm Full-Stream
FWS Filtration (Optional)	500µm Full-Stream
Redundancy	N+1 Pump and Filter
Integrated Degasser	Yes
Linked System Operation	2 to 6 CDU Modules
Communication & BMS Support	Modbus, OPC UA, SNMP, Redfish

Schematic Diagram

