

Rack Cooling Units

Micro Coils MRC – Rack Cooling System



Smart Cooling for Edge and Compact IT Spaces

The Micro Coils™ MRC Rack Cooling System delivers intelligent, high-efficiency cooling for small data centres, edge computing hubs, and network closets where performance and reliability are non-negotiable. With a cooling capacity of up to 7 kW, this unit ensures stable thermal management for high-density server racks, maintaining optimal performance of critical IT assets even under demanding conditions.

Engineered for Efficiency and Reliability

Designed with Micro Coils' advanced heat transfer expertise, the MRC system integrates a dedicated external condenser unit for enhanced heat rejection. This separation of the heat rejection unit from the IT space reduces noise, improves energy efficiency, and ensures reliable operation in varying ambient conditions.

- ❖ **External Condenser Design:** Efficient heat rejection with quiet indoor operation.
- ❖ **Compact Rack Integration:** Fits seamlessly within standard IT enclosures.
- ❖ **Plug-and-Run Installation:** Simplifies setup and commissioning.
- ❖ **Energy-Efficient Components:** Optimized airflow, high-efficiency coils, and low-power fans.
- ❖ **Scalable Solution:** Multiple units can be networked for redundancy or higher capacity.

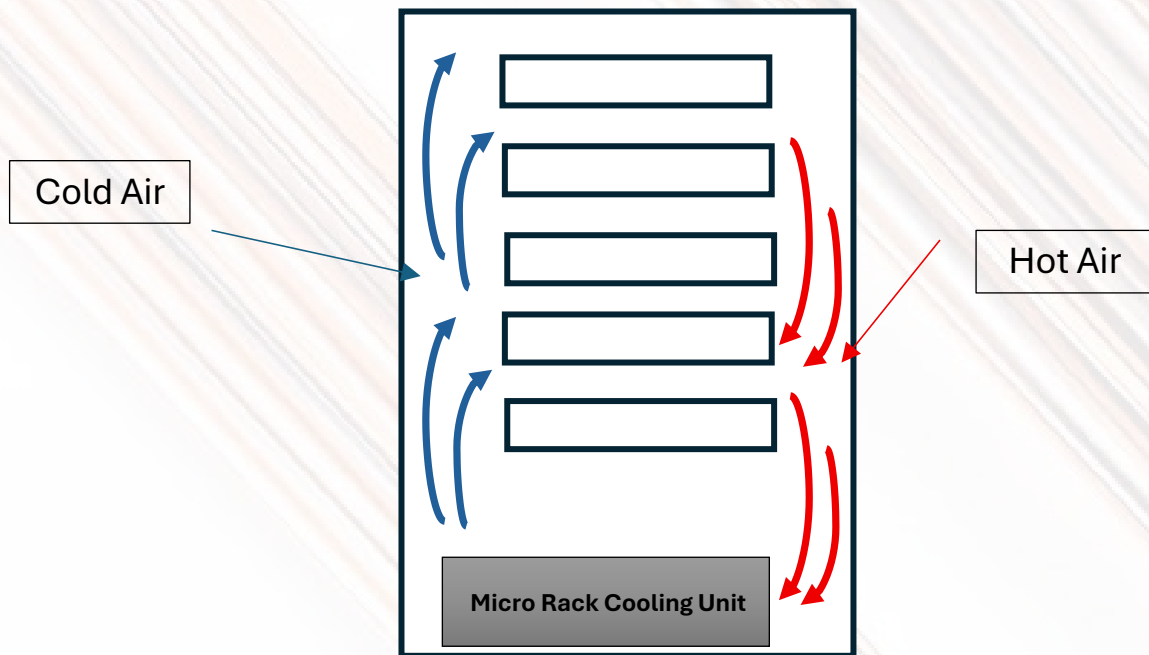
Protect What Powers Your Business

Built to safeguard uptime, the MRC Series keeps your equipment running within ideal temperature ranges, extending system life and minimizing downtime. The combination of robust engineering, intelligent control, and modular design makes the Micro Coils™ MRC the trusted choice for future-ready IT cooling.

Applications

- ❖ Edge computing environments
- ❖ Network and telecom closets
- ❖ Laboratory and electronic equipment enclosures
- ❖ Micro data centers
- ❖ Industrial control rooms

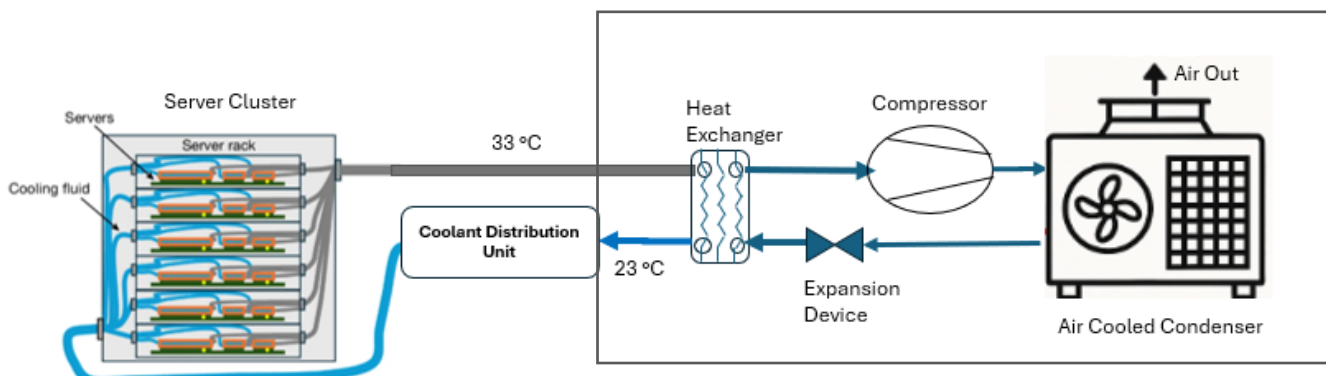
Airflow Diagram



Features

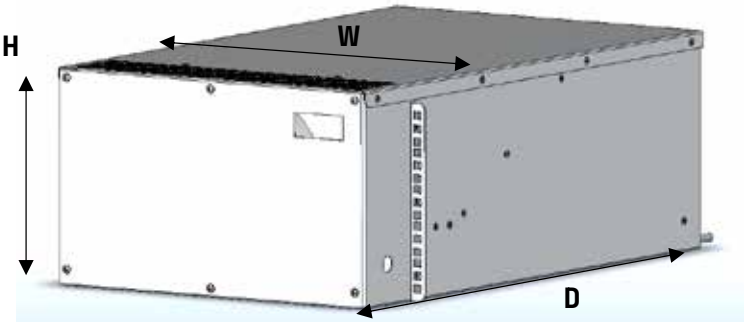
- ❖ Factory pre-charged with refrigerant for easy and quick installation.
- ❖ Optional condensate pump available to efficiently manage condensate removal and simplify drainage.
- ❖ Provision for remote monitoring to enable system performance tracking and control.
- ❖ Integrated alarm notification for prompt alerts and enhanced system.

Upcoming Product **Liquid Cooling System (35 TR to 130 TR)**



Micro Coil's Liquid Cooling System for Data Centre

Technical Specifications

Parameters	MRC035	MRC070
Cooling Capacity (TR/ kW)	1 TR / 3.5	2 TR / 7
Rating Condition	Indoor, Air DBT: 24 Outdoor, Air DBT :35	Indoor, Air DBT: 24 Outdoor, Air DBT :35
Power Supply	230 V, AC, 1Ph	230 V, AC, 1Ph
Power Consumption, W	1145	2700
Current, A	5.2	12.7
Compressor	Copeland	Copeland
Refrigerant	R410a / R407C/ R134a	R410a / R407C / R134a
Communication	RS-485/ MODBUS	RS-485/ MODBUS
Internal Fan Type	Centrifugal Blower	Centrifugal Blower
External Fan Type	Axial Fan	Axial Fan
Dimensions (H X W X D), mm	Indoor: (237 x 486 X 725) Outdoor: (560 X830 X322)	Indoor: (400 x 486 x 815) Outdoor: (705 X1030 X365)
Indoor		
Outdoor	