ENGLISH

ECO™ heat transfer coolers

MODINE®

DRY COOLERS

MODINE

Engineering a Cleaner, Healthier World

DRY COOLERS

Dry coolers are used in a wide range of sectors: air conditioning, free-cooling, industrial processes, cogeneration plants, and energy production. They are installed in commercial buildings as well as hospitals.

With the rapid growth of data centers, they play a crucial role in cooling hydronic circuits and liquid-cooling systems, supporting the demands of modern digital infrastructures.

EFFICIENCY AND PERFORMANCE

Thanks to their operational stability, dry coolers ensure precise thermal control of fluids and critical components, maintaining continuity even under challenging conditions.

They deliver reliable performance with low energy consumption, making them an effective solution for applications that require consistent operation and high energy efficiency.

SUSTAINABILITY

Dry operation eliminates water consumption and aerosol formation, reducing WUE (Water Usage Effectiveness) and improving hygienic safety compared to evaporative systems.

Both standard and adiabatic models offer an optimal balance of efficiency, reliability, and ESG (Environmental, Social and Governance) compliance, making them suitable for high-performance data centers.

SOLUTIONS

Our dry coolers,now also available in configurations exceeding 12 meters, are designed for mission-critical applications and ensure continuous operation even under variable loads and high ambient temperatures.

They incorporate advanced technologies, optimized copper-aluminum heat exchangers, and circuits engineered to maximize heat transfer with minimal pressure drop.

The exchanger geometries provide a balance between performance, reduced static pressure, and low fouling risk, while industrial-grade construction ensures reliability in the most demanding conditions.

Aeraulics

Ventilation is primarily managed by high-efficiency EC axial fans, continuously adjustable to match airflow to thermal load and minimize consumption.

Aerodynamic profiles and dedicated controls ensure low noise levels.

For specific needs, options with dynamic pressure recovery are available to handle high capacities within limited spaces.

Each fanmotor assembly is equipped with an independent intake plenum to prevent recirculation of expelled hot air.

KEY BENEFITS

1. High thermal performance
2. High-efficiency ventilation with low sound levels
3. Adiabatic option for peak load conditions
4. Durable materials, protective coatings, and long service life
5. Hygiene, safety, and sustainability
6. Acoustics for site-specific constraints

Adiabatic Systems

The adiabatic option handles temperature peaks through evaporative pre-cooling with humidified panels.

Water use is intelligently regulated, reducing consumption or maximizing performance as required.

Dedicated drainage systems ensure hygienic and safe operation.

Durability

Corrosion-resistant materials and advanced protective treatments, such as ElectroFin® E-coat, provide long-lasting durability even in harsh environments.

Structures are designed for outdoor installation, with easy handling and full accessibility for maintenance and cleaning.

Scelte SELECTION SOFTWARE

www.modineselect.com

Scelte is the software that guides you in selecting our coolers in a simple, fast, and fully customized way.

Thanks to an intuitive interface and an advanced selection engine, the program analyzes technical requirements, operating conditions, and performance needs, recommending the ideal solution for every application.

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OPTIONS

Anti-corrosion treatments
Protect heat exchangers and casing, ensuring durability in harsh environments.

Adiabatic spray or pad systems
Increase efficiency during thermal peaks without wasting water or oversizing the system.

Special fan-motor assemblies
Featuring dynamic pressure recovery and diffusers, they reduce energy consumption and noise levels.

Advanced electrical panels
Equipped with touchpad interface and remote management via MODBUS protocol.

ATS (Automatic Transfer Switch) panels
Ensure operational continuity during power outages.

Harmonic compensation filters
Improve electrical quality and protect components.

Spring anti-vibration mounts
Reduce vibrations and noise, preserving the unit's mechanical integrity.

Step into the world of advanced cooling with ECO™ products.

Our experience and the technologies we employ
enable us to guarantee optimum levels of performance and energy efficiency.

Our units are reliable and flexible to use
in a wide range of applications.

Opting for our products means selecting quality solutions
that respect the environment.

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2 YEARS GUARANTEE

www.modinecoolers.com