

RackChiller Rear Door Cooler, Active

Data Solutions



RackChiller Rear Door Cooler (RDC) Heat Exchanger is designed for managing high heat load cooling requirements within high-density server, computing and storage racks. The RDC installs on equipment racks as a separate rear door with an extra frame, enabling it to be retrofitted to existing racks. Heat dissipated by the rack equipment will be removed by the air-to-liquid heat exchanger and transferred into the facility water circuit, adding no heat to the IT room. Door-mounted fans support the IT equipment air flow to overcome the coil impedance. The integrated controller modulates the water flow to keep a constant supply air temperature, as well as the fan speed to maintaining a (configurable) pressure differential between rack and IT room. The entire system is integrated within an aesthetically framed perforated door with protective covers to isolate the liquid source and cooling loop from the rack-mounted equipment.

CERTIFICATIONS



FEATURES

Active solution with fans supporting air flow and neutralizing the pressure drop at the heat exchanger

Frame solution separates coil and condensate management from the rack-mounted equipment

Rear space inside the cabinet is left available for power distribution and cable management

Easily adapts to nVent cabinets; contact nVent to request information for integrating with third party cabinets

Temperature sensors on air supply and return side

Integrated control system with Modbus TCP and SNMP v2c interface

Optional water flow, pressure and temperature sensors included with the water control package allow for water monitoring and regulation according to actual heat load

Optional local display

SPECIFICATIONS

Table 1/2						
Catalog Number	Article Number	Product Type	Product Family	Type	Finish	Material
21130-806	38438	Air/Liquid Heat Exchanger	RackChiller	Rear Door Cooler, Active	Powder Coated	Steel
21130-807	38441	Air/Liquid Heat Exchanger	RackChiller	Rear Door Cooler, Active	Powder Coated	Steel
21130-808	38442	Air/Liquid Heat Exchanger	RackChiller	Rear Door Cooler, Active	Powder Coated	Steel
21130-809	38443	Air/Liquid Heat Exchanger	RackChiller	Rear Door Cooler, Active	Powder Coated	Steel
21130-810	38444	Air/Liquid Heat Exchanger	RackChiller	Rear Door Cooler, Active	Powder Coated	Steel
21130-811	38445	Air/Liquid Heat Exchanger	RackChiller	Rear Door Cooler, Active	Powder Coated	Steel

Table 2/2		
Catalog Number	Article Number	Package Quantity
21130-806	38438	1
21130-807	38441	1
21130-808	38442	1
21130-809	38443	1
21130-810	38444	1
21130-811	38445	1

ADDITIONAL PRODUCT DETAILS

For trouble-free operation it is recommended to use the water connection set and the optional accessories.

The cooling capacity is determined under the following conditions: delta p water: < 100 kPa; water flow temperature: 12 °C / 53.6 °F; outlet temperature 24 °C / 75.2 °F; water flow: 4.8 m³/h / 21.1 gal/min ; Airflow: Depending on cooling module, see Diagram Performance Map.

WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.



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