CoolDoor-D30/ D50 Rear Door Heat Exchanger (RDHx)

Delta CoolDoor is the ideal solution for high-power-density racks. With EC fans ensuring reliability and efficiency, it removes heat at the source, preventing hot air in the room. No need for added footprint or raised floor, the CoolDoor saves space and reduces CAPEX. The turbo boost dissipates heat from neighboring racks, and the leakage detection ensures high reliability. Elevate your data center performance with Delta CoolDoor!



Unparalleled Reliability

- Built-in MCU precisely controls water and air flow for accurate temperature management
- Ensures chiller system stability during power recovery with a two-way ball valve design post-emergency shutdown
- Turbo boost control ensures uninterrupted operation by utilizing adjacent RDHx during ball valve or fan failure
- Enhances equipment protection with 4m water leakage detection and integrated cut-off valve (optional) to minimize potential damage
- Integrated ATS (optional) for continuous operation
- · Elevates security with lockable access door

Efficient Use of Space and Energy

- · No hot aisle containment needed
- · Low profile design mounts seamlessly on the rear of the rack, saving valuable space
- Enhance energy savings with an adjustable fan speed (30-100%) and high-efficiency EC fan

Easy Management

- LCD screen and LED indicators for onsite monitoring system status and control
- Empowers remote monitoring through input dry contact and external RTU device
- Tailor-made ducts, perfect for all rack types
- Hot-swappable fans and sensors allow for quick and easy maintenance
- Flow control valve (optional) delivers high cooling availability and control



Technical Specifications

Model	D30	D50
Cooling Capacity	30 kW ⁽¹⁾	50 kW ⁽²⁾
Rated Air Flow	3812 CFM	4016 CFM
PHYSICAL		
Compatible Rack Heights	42-60U	
Compatible Rack Widths	600-800 mm	
Dimensions (W x D x H)	600 x 345 x 1970 mm (23.6 x 13.6 x 77.4 in)	
Net Weight	90 kg (198 lb)	98 kg (216 lb)
DEPLOYMENT		
Inlet Chiller Water Temperature	12°C (recommended) to 20°C ⁽³⁾	
	Inlet chiller water temperature should be higher than dew point temperature	
Maximum Operating Pressure	10 bar (145 psi)	
Maximum CW Flow Rate	82 LPM (PICV 69 LPM)	122 LPM (PICV 108 LPM)
Rated Water Flow	55 LPM	90 LPM
Piping Connection	Top/ Bottom	
Piping Size	1 inch	1 1/4 inch
POWER SUPPLY		
Nominal Power Supply Voltage	200/ 208/ 220/ 230/ 240 Vac, 1P2W+PE	
Frequency	50/60 Hz	
Input Connection Type	NEMA 6-15P	
Rated Power Consumption	0.44 kW	0.67 kW
Power Feed Location	Тор	
MECHANICAL		
Valve Type	2-way valve, FC type	
Fan Type	EC	
Fan Quantity	4	
Water Leakage Detector	4m length	
COMMUNICATION INTERFACE		
Display	LCD display with LED indicators	
Port	Modbus RTU (RS-485), Remote On/Off input dry contact, Fire alarm input dry contact, Total alarm output dry contact	
CONFORMANCE		
Safety	CE, UL ⁽⁴⁾	
FEATURES		
Leak Detection	Standard	
Dual Power Feeds	Optional	
Cut-off Valve (Isolate Leakage RDHx)	Optional	
T/ RH Sensor-Cold Side Dew Point Monitoring	Optional	
PICV Valve	Optional	
Air Static Pressure Sensor	Optional	
Quick Disconnect Couplings	Optional	
BACnet	Optional	
SNMP Card	Optional	

(1) Conditions for D30 rated capacity at return air: 42°C (108°F), Inlet water 12°C (54°F) and outlet water 20°C (68°F)

(2) Conditions for D50 rated capacity at return air: 50°C (122°F), Inlet water 12°C (54°F) and outlet water 20°C (68°F)

(3) Over 12°C requires cooling capacity derating

(4) UL provided upon request

All specifications are subject to change without prior notice.





Rack

Complete System

RDHx Connect Duct





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