# **Delta InfraSuite Precision Cooling**

## Rear Door Heat Exchanger (RDHx), CoolDoor 30/50 kW

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 (option) 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**

Cooling Capacity30 kW <sup>(1)</sup> 50 kW <sup>(2)</sup> Rated Air Flow3812 CFM4016 CFMPOWER SUPPLYNominal Voltage200-240 Vac, 1P2W+PEFrequency50/60 ± 3 HzInput Connection TypeNEMA 6-15P, Top inletMECHANICALValve Type2-way valve, FC typeFan TypeECFan Quantity4Water Leakage Detector4m lengthDELOYMENT0.44 kW0.67 kWRated Water Flow55 LPMValve Time55 LPM	Model	D30	D50
Rated Air Flow  3812 CFM  4016 CFM    POWER SUPPLY	Cooling Capacity	30 kW <sup>(1)</sup>	50 kW <sup>(2)</sup>
POWER SUPPLY    200-240 Vac, 1P2W+PE      Nominal Voltage    200-240 Vac, 1P2W+PE      Frequency    50/60 ± 3 Hz      Input Connection Type    NEMA 6-15P, Top inlet      MECHANICAL	Rated Air Flow	3812 CFM	4016 CFM
Nominal Voltage    200-240 Vac, 1P2W+PE      Frequency    50/60 ± 3 Hz      Input Connection Type    NEMA 6-15P, Top inlet      MECHANICAL	POWER SUPPLY		1
Frequency    50/60 ± 3 Hz      Input Connection Type    NEMA 6-15P, Top inlet      MECHANICAL	Nominal Voltage	200-240 Vac, 1P2W+PE	
Input Connection Type  NEMA 6-15P, Top inlet    MECHANICAL  2-way valve, FC type    Valve Type  2-way valve, FC type    Fan Type  EC    Fan Quantity  4    Water Leakage Detector  4m length    DEPLOYMENT	Frequency	50/60 ± 3 Hz	
MECHANICAL    Valve Type  2-way valve, FC type    Fan Type  EC    Fan Quantity  4    Water Leakage Detector  4m length    DEPLOYMENT  0.44 kW    Rated Power Consumption (Rating Input Power)  0.44 kW    S5 LPM  90 LPM	Input Connection Type	NEMA 6-15P, Top inlet	
Valve Type  2-way valve, FC type    Fan Type  EC    Fan Quantity  4    Water Leakage Detector  4m length    DEPLOYMENT	MECHANICAL		
Fan Type  EC    Fan Quantity  4    Water Leakage Detector  4m length    DEPLOYMENT	Valve Type	2-way valve, FC type	
Fan Quantity  4    Water Leakage Detector  4m length    DEPLOYMENT  0.44 kW  0.67 kW    Rated Water Flow  55 LPM  90 LPM	Fan Type	EC	
Water Leakage Detector  4m length    DEPLOYMENT  0.44 kW  0.67 kW    Rated Water Flow  55 LPM  90 LPM	Fan Quantity	4	
DEPLOYMENT  0.44 kW  0.67 kW    Rated Power Consumption (Rating Input Power)  0.44 kW  90 LPM    Rated Water Flow  55 LPM  90 LPM	Water Leakage Detector	4m length	
Rated Power Consumption (Rating Input Power)  0.44 kW  0.67 kW    Rated Water Flow  55 LPM  90 LPM	DEPLOYMENT		
Rated Water Flow  55 LPM  90 LPM	Rated Power Consumption (Rating Input Power)	0.44 kW	0.67 kW
	Rated Water Flow	55 LPM	90 LPM
Piping Connection Iop/ Bottom	Piping Connection	Top/ Bottom	
Piping Size 1 inch 11/4 inch	Piping Size	1 inch	1 1/4 inch
	COMMUNICATION INTERFACE		
Display LCD display with LED indicators	Display	LCD display with LED indicators	
Port MODBUS (RS-485), Remote On/Off input dry contact, Fire alarm input dry contact, Total alarm output	Port	MODBUS (RS-485), Remote On/Off input dry contact, Fire alarm input dry contact, Total alarm output	
dry contact		dry contact	
PHYSICAL	PHYSICAL		
Dimensions (W x D x H) 600 x 345 x 1970 mm (23.6 x 13.6 x 77.4 in)	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)	Net Weight	90 kg (198 lb)	98 kg (216 lb)
Compatible Rack Height 2000/ 2200 mm	Compatible Rack Height	2000/ 2200 mm	
Width 600/ 800 mm	Width	600/ 800 mm	
ENVIRONMENT	ENVIRONMENT		
Inlet Chiller Water Temperature 12 °C (recommended) to 20 °C (3)	Inlet Chiller Water Temperature	12 °C (recommended) to 20 °C <sup>(3)</sup>	
Inlet chiller water temperature should be higher than dew point temperature	Maximum Operating Prossure	Inlet chiller water temperature should be higher than dew point temperature	
Maximum Operating Pressure 10 bai (145 ps)	Maximum OW Flow Poto		122 L DM (DIC)/ 108 L DM)
CONFORMANCE Safety CE III (4)	CONFORMANCE Safety		
		02,02	
Leak Detection Standard	Leak Detection	Standard	
Dual Power Feed/ ATS	Dual Power Feed/ ATS	Ontion	
PICV Valve Ontion	PICV Valve	Ontion	
T/RH Sensor-Cold Side Dew Point Monitoring Option	T/RH Sensor-Cold Side Dew Point Monitoring	Option	
Cut-off Valve (Isolate Leakage RDHy) Ontion	Cut-off Valve (Isolate Leakage RDHx)	Ontion	
Air Static Pressure Sensor	Air Static Pressure Sensor	Ontion	
	Quick Disconnect Couplings	Ontion	
BACnet	BACnet	Option	
SNMP Card Option	SNMP Card	Option	

(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.





Complete System

Connect Duct

Rack



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