# Delta InfraSuite Precision Cooling

## RoomCool F Series

The Delta RoomCool F series, using electronically commuted (EC) fans, are room-based precision cooling of modern data center developed specifically for medium or small sized data centers. The Delta RoomCool F series' design achieves a high Annual Energy Efficiency Ratio (AEER), as well as high reliability and flexibility. As most data centers use traditional air supplies under a raised floor, the new approach of the F series offers both traditional and modern options. The F series is the best choice for medium or small sized data centers, for both building new data center facilities and retrofits.

#### **High Efficiency**

- Fans can be configured under a raised floor to reduce fan power consumption by about 20%.
- All series use EC fans with variable fan speeds set according to static pressure of data centers' requirement, optimizing the operation and performance of the precision cooling system.
- Smart fuzzy control of condenser fan operation is more stable and energy saving compared to traditional controls.
- Highly efficient scroll compressor with various energy-saving optimization designs provides traditional data centers with outstanding AEER performance.

#### **High Availability**

- Compact design with full front access maintenance minimizes footprint and maintenance space and creates maximum available IT space in the same data center area.
- Dual compressor system models offer internal redundancy function for continuous system operation when other systems malfunction.
- Color graphical touch panel offers user-friendly, interactive operation.
- Using the optional condenser models for low temperature allows operations in environments below -40°C.
- Smart group control offers rotation, back up, competition free, and soft start functions.
- Used with Delta ADU provides sufficient cooling capacity for some high power density racks.

#### **High Flexibility**

- Depending on raised floor height or customer preference, fan installation can be below the raised floor or inside the RoomCool machine. Installing fans directly does not require additional accessories, settings, or tools. Fan installation under the floor reduces power consumption and noise.
- Full front access maintenance does not require rear maintenance space. Installation against a wall to fit with the layout design of the data center is possible for maximum flexibility.
- Multiple communication interfaces satisfy the surveillance and communication needs for a variety of data centers.
- Condensers equipped with AC fans are also available for budget customers.





## **Technical Specifications**

Model		HCD6640-20	HCD6660-30	HCD6660A-35	HCD6670A-40	HCD6680A-50	HCD66A0A-60	HCD66B0A-70		
Air flow		Down flow								
Power	Input	3-phase 380-4	3-phase 380-415V, 50 Hz							
Capacity*	Total capacity	17.8 kW	25.7 kW	34.1 kW	36.8 kW	48.5 kW	55.1 kW	65.8 kW		
	Sensible capacity	16.0 kW	23.1 kW	28.3 kW	30.5 kW	43.7 kW	49.6 kW	59.2 kW		
Compressor	Туре	Scroll compressor								
	Referigerant	R410A								
Fan	Туре	EC								
Heater	Туре	Electronical heater								
Humidifier	Туре	Electrode hum	Electrode humidifier							
Filter	Туре	MERV 8								
Conformance		CE								
Display		Touch panel								
Communication		RS-485 x 1, Input dry contact x 2, Output dry contact x 6, SNMP x 1								
Dimensions	Width	852 mm	852 mm	852 mm	852 mm	1702 mm	1702 mm	2052 mm		
	Depth	850 mm	850 mm	850 mm	850 mm	850 mm	850 mm	850 mm		
	Height	1970 mm	1970 mm	1970 mm	1970 mm	1970 mm	1970 mm	1970 mm		
Weight		250 kg	288 kg	311 kg	314 kg	520 kg	527 kg	595 kg		

\* Cooling capacity is measured at 24°C return air temperature, 50% relative humidity and 45°C condensing temperature.

### **Outdoor Unit**

Model		HFC6B40-09S	HFC6B40-11S	HFC6B40-13S	HFC6B50-15S	HFC6B70-17D	HFC6B70-20D
Power	Input	1-phase 220-230\	/, 50Hz				
Fan	Туре	AC					
Dimension	Width	1115 mm	1315 mm	1515 mm	1715 mm	1915 mm	2215 mm
	Depth	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm
	Height	1090 mm	1090 mm	1090 mm	1090 mm	1090 mm	1090 mm
Weight		79 kg	89 kg	99 kg	107 kg	142 kg	154 kg

Model		HCC6C40-09S	HCC6C40-11S	HCC6C50-13S	HCC6C50-15S	HCC6C70-17D	HCC6C70-20D		
Power	Input	3N~, 380-415V, 50	3N~, 380-415V, 50/60Hz						
Fan	Туре	EC							
Dimension	Width	1115 mm	1315 mm	1515 mm	1715 mm	1915 mm	2215 mm		
	Depth	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm	1100 mm		
	Height	1090 mm	1090 mm	1090 mm	1090 mm	1090 mm	1090 mm		
Weight		82 kg	92 kg	102 kg	110 kg	148 kg	160 kg		

All specifications are subject to change without prior notice.



User-friendly color touch screen display



Energy-saving EC Fans



Fans under raised floor provide same air flow with 20% less power consumption

