Clean Ovens | Dust-free Environment Heating, Large Capacity

DES830C/830UC·DTS830C/830UC

| Operating temp. range | DES: RT+50~260℃ | DTS: RT+50~360℃ | Cleanliness | Class 100 | Internal capacity | 300L |

Space-saving, large capacity clean constant temperature chamber.

Features

With space-saving and large capacity design, it can suppress dust generation during temperature rise and fall. The controller allows for multifunctional, dialog-type input with simple operation, equipped with an easy-to-confirm graphical monitor.

● With large capacity of 300L for handling bulk workpieces, significantly reducing the footprint while effectively utilizing research, development, and production line space.
● Using high-temperature resistant HEPA filters, reaching up to 360℃; type C maintains cleanliness level 100 during constant temperature while type UC maintains cleanliness level 100 throughout heating, constant temperature, and cooling.

Specifications

Model			DES830C/830UC	DTS830C/830UC
System			Front horizontal air supply circulation	
Performance		Operating temp. range	Room temp. +50~260℃	Room temp. +50~360℃
		Cleanliness	C: cleanliness level 100 during constant temperature UC: cleanliness level 100 throughout heating, constant temperature, and cooling	
	GB standard	Temp. fluctuation	±0.5℃	
		Temp. uniformity	±1.5% (at 260℃)	±1.5% (at 360℃)
	JTM standard	Temp. adjusting accuracy	±0.5℃	
		Temp. distribution accuracy	±2.0℃ (at 260℃)	±5.0℃ (at 360℃)
		Max. temp. reaching time	Approx. 70 min	Approx. 90 min
Composition		Interior material	Stainless steel plate	
		Exterior material	Cold rolled steel plate with chemical proofing coating	
		Insulating material	Ceramic fiber	
		Heater	Stainless steel heating tube with fins	
			6KW	9KW
		Fan blade/motor	Centrifugal fan, high-temperature self-cooling motor 200W × 2	
		Differential pressure gauges	Analog type 0~500Pa	
		Cable port	Internal diameter: 30mm×1, located on the right	
		HEPA filter	Dust collection efficiency: 99.97% for 0.3μm particles	
		N₂ inlet interface	Outer diameter: 8mm tapered joint	
Controllers		Temp. control method	3-stage PID	
		Temp. setting method	Digital setting through special function menu keys and up/down keys	
		Temp. display method	Achieved temp. display: Green 4-digit LED digital display	
			Setting temp. display: Red 4-digit LED digital display	
		Other displays	1 min~99 h 59 min and 100~999 h 50 min (including timer waiting function)	
		Timer	1 min~99 h 59 min and 100~999 h 50 min (including timer waiting function)	
		Operation functions	Fixed temp. operation, automatic start operation, automatic stop operation, program operation (up to 16 segments, can repeat, be separated, etc.)	
		Additional functions	Timing function (actual time timing within 24 hours), accumulated timing function (can accumulate up to 49,999 hours), external communication function (RS422A)	
		Sensors	K thermocouple (temp. controller and overheating protector)	
Safety device			Self-diagnostic circuit (temperature sensor anomaly, heater disconnection protection, automatic overheating preventer, SSR short-circuit), overheating preventer, overcurrent leakage protection, key lock functions	
Specifications		Internal dimensions	610×480×1100	
		External dimensions (W×D×H mm)	830×1078×1955	
		Internal capacity	300L	
		Shelf load	30kg/layer	
		Shelf layers/shelf support spacing	35 layers/30mm	
		Power supply (50/60Hz) rated current	3 phase AC380V 10.5A	3 phase AC380V 15A
		Weight	Approx. 350kg	
Accessories	Shelf		Stainless steel wire mesh plate	
			3 pcs	
	Supports		6 pcs	
Options			Shelf plate (1 shelf plate with 2 shelf supports), automatic vent, N₂ introduction device, micro printer, data logger, combined warning light (standby/operation/fault), temperature output terminal (4~20mA), external alarm output terminal, timer output terminal, central monitoring software, touchscreen controller	

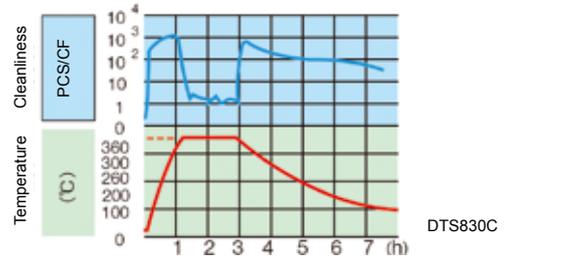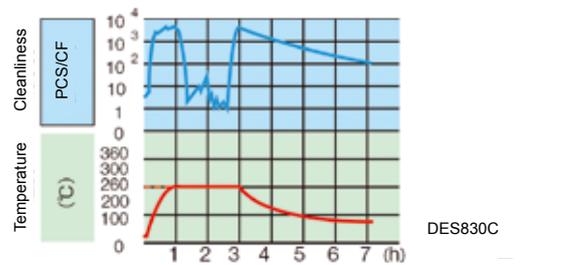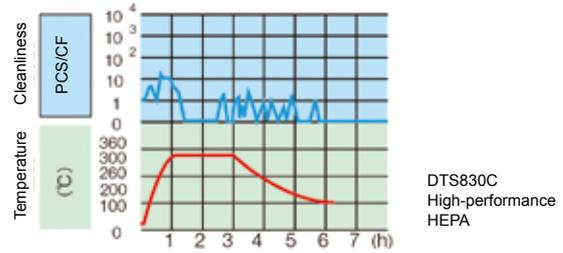| Forced Convection	Automatic Overheating Preventer	Overheating Preventer	Self-diagnostic Function	Key Lock Function	Power Failure Compensation Function	Overcurrent Leakage Circuit Breaker

Structural diagram

Side View · Circulation Fan

Heater

HEPA

Inner Box

Door

Door-side circulation mechanism
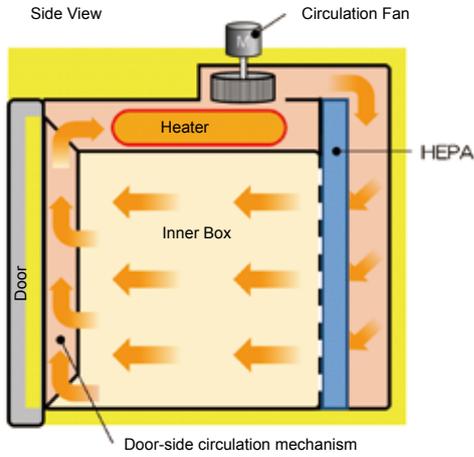
Control panel

Shelf

Cleanliness data during temperature rise and fall

DES830C
High-performance HEPA

DTS830C
High-performance HEPA

DES830C

DTS830C