

Industrial & Laboratory Fine Ovens
DFS710/810, DHS710/810



DFS710/DHS810

Large-capacity type. Optimum for various temperature characteristic tests.

Model	
DFS	DHS
Operating Temperature Range	
Room temp. +15 to 260 deg.C	Room temp. +15 to 360 deg.C
Temp. Distribution Accuracy	
±2.0deg.C (at260deg.C)	±3.0deg.C (at360deg.C)
Internal Capacity	
418L/558L	

Large volume type. Various heat treatments and characteristic tests of temperature are possible owing to the accurate temperature control and the large range of temperature. As the input system of the control panel is dialogical, anyone can input easily.

- A 16-segment program operation is possible.
- Forced hot air circulation and ventilation by a damper.
- Safety measures are enriched, including self-diagnosis function and an independent superheating prevention device.

■ Specifications

Model	DFS710	DFS810	DHS710	DHS810
Performance				
Circulation method	Forced air circulation and ventilation		Forced air circulation and ventilation	
Operating temperature range	Room temp. +15 to 260deg.C		Room temp. +15 to 360deg.C	
Temp. adjustment accuracy	±0.2deg.C(at 260deg.C)		±0.3deg.C(at 360deg.C)	
Temp. distribution accuracy	±2.0deg.C(at 260deg.C)		±3.0deg.C(at 360deg.C)	
Max. temp. reaching time	Approx. 40 min.		Approx. 50 min.	
Components				
Interior material	Stainless steel		Stainless steel	
Exterior material	Cold rolled steel plate with melamine resin baking finish		Cold rolled steel plate with melamine resin baking finish	
Heat insulating material	Glass wool		Glass wool	
Heater	Stainless pipe heater with fan		Stainless pipe heater with fan	
	4.5kW	5.4kW	5.4kW	6.0kW
Fan type	Scirocco fan		Scirocco fan	
Motor	Condenser type, 100 W		Condenser type, 100 W	
Cable hole	50 mm I.D. (left side)		33 mm I.D. (left side)	
Controller				
Temp. controller	PID control by microprocessor		PID control by microprocessor	
Temp. setting method	Digital setting with UP/DOWN key		Digital setting with UP/DOWN key	
Temp display method	Digital display by green LED and orange LED		Digital display by green LED and orange LED	
Other display	Operation monitor (operation condition graphic display by LED patterns)		Operation monitor (operation condition graphic display by LED patterns)	
Timer	1 min. to 99 Hrs. 59 min		1 min. to 99 Hrs. 59 min.	
Min. division	1 min. or 1 Hrs.		1 min. or 1 Hrs.	
Operation function	Fixed temperature operation, auto-start operation, auto-stop operation, program operation		Fixed temperature operation, auto-start operation, auto-stop operation, program operation	
Additional functions	Variable wind velocity function, Calendar timer (max. 24 Hrs.), Integration time (max. 65535 Hrs.), Time display, Amount of electricity saved / carbon dioxide emission / heater operation amount display (Switching display), Power fail recovery mode selection, Store and recall user settings, External communication terminal (RS485)		Variable wind velocity function, Calendar timer (max. 24 Hrs.), Integration time (max. 65535 Hrs.), Time display, Amount of electricity saved / carbon dioxide emission / heater operation amount display (Switching display), Power fail recovery mode selection, Store and recall user settings, External communication terminal (RS485)	
Heater circuit control	Triac zero-cross control		Triac zero-cross control	
Temp. sensor	K-thermocouple (double sensor)		K-thermocouple (double sensor)	
Safe Device				
Safety countermeasures	Self diagnosis functions(sensor, fan, heater, triac, automatic overheating prevention), Independent overheating prevention, Key lock function, Electric leakage breaker, Door switch, Switch for control box		Self diagnosis functions(sensor, fan, heater, triac, automatic overheating prevention), Independent overheating prevention, Key lock function, Electric leakage breaker, Door switch, Switch for control box	
Standard				
Internal dimensions (W×Dmm)	620×750	620×750	620×750	620×750
(Hmm)	900	1200	900	1,200
External dimensions (W×Dmm)	770×965	770×965	770×965	770×965
(Hmm)	1,580	1,880	1,580	1,880
Internal capacity	418 L	558 L	418 L	558 L
Shelf plate with standard load	Approx. 30kg/piece		Approx. 30kg/piece	
Shelf rest step number	27 steps	37 steps	27 steps	37 steps
Shelf rest pitch	30 mm		30 mm	
Power source 50/60Hz	200V	200V	200V	200V
	single phase	Three phase	three phase	three phase
	23A	AC17A	AC17A	19A
weight (Approx.)	175 kg	190 kg	175 kg	190 kg
Accessories				
Shelf plate	Stainless steel wire, 2 pcs.		Stainless steel wire, 2 pcs.	
Shelf bracket	4 pcs.		4 pcs.	

■ Control Panel



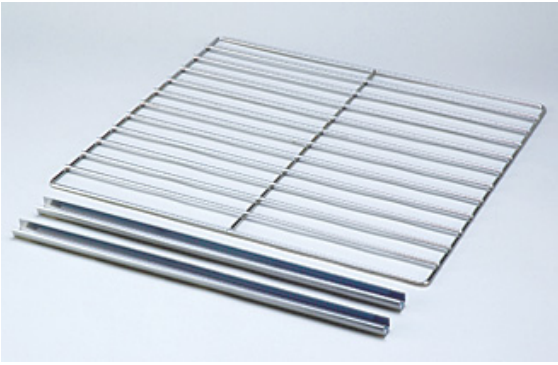
■ Optional items

Remark	Description	Model No.	Product Code
	Stainless wire shelf (with support 2 pcs., loading up to 30 kg/shelf) for DFS710/720 DHS710/810	DFS/DHS Series	211064
	Stainless punching metal shelf (loading up to 15kg/shelf) for DFS710/720 DHS710/810	DFS/DHS Series	211099
•	Observation window (for DFS type only) for DFS710/810	DFS/DHS Series	281078
•	N2 gas supply unit (with flow meter, 1/4 inch tube fitting)	DFS/DHS Series	281079
•	Abnormal alarm display	DFS/DHS Series	281080
•	Emergency stop switch	DFS/DHS Series	281081
•	Manual recovery function from blackout	DFS/DHS Series	281082
•	Additional sensor (JIS K-thermocouple)	DFS/DHS Series	281083
•	Additional cable port (SUS304), 50mm dia	DFS/DHS Series	281084
•	Additional cable port (SUS304), 100mm dia	DFS/DHS Series	281085
•	Exhaust duct (80mm dia)	DFS/DHS Series	281086
•	Exhaust flange	DFS/DHS Series	281087
•	Automatic damper	DFS/DHS Series	281088
•	Analog recorder, 1 point	DFS/DHS Series	281089
•	Analog recorder, 6 points	DFS/DHS Series	281090
•	Power cord (5m./pc)	DFS/DHS Series	281091
•	Temperature output terminal	DFS/DHS Series	281029
•	External alarm terminal	DFS/DHS Series	281030
•	Time-up output terminal	DFS/DHS Series	281031
•	FORWARD	DFS/DHS Series	281501
•	Sheath sensor (Type K thermocouple)	DFS/DHS Series	212946
•	Silicone rubber stopper (1-hole) (for DFS type only)	DFS/DHS Series	212947
•	Data recorder	DFS/DHS Series	212990
•	Adapter set for external communication	DFS/DHS Series	211880
•	Stainless basket shelf (30mm height)	DFS/DHS Series	212925
•	Operation signal output terminal	DFS/DHS Series	212997
•	Event output terminal	DFS/DHS Series	212998

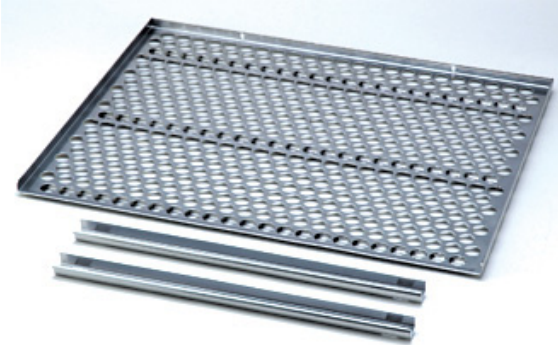
Note:

The item marked "•" in the column of "Remark" shall be ordered together with the main unit.

Shelf (with 2 support)



Stainless Wire (Weight Tolerance 30kg/pc)



Stainless Punching Metal (Weight Tolerance 15kg/pc)