

Muffle Furnaces | Standard

FO111C/211C/311C/411C/511C/611C/711C/811C

Operating temp. range 100~1150°C

Temp. adjusting accuracy ±2°C

Internal capacity 1.5L 3.75L 7.5L 9L 11.3L 17.5L 23.6L 30L

8 types of internal capacity selection, equipped with program operation function.

Features

- Support program operation.
- Simple operation with up/down key settings, equipped with a high-operability controller for precise temperature control.
- Temperature, time and indicator values can all be displayed digitally.
- Use a controller with integrated digital settings and overheat protection. Support self-diagnosis functions, overcurrent leakage protection switch and other safety controls in case of anomalies.
- Use R-type thermocouple for long life.
- Equipped with an exhaust port.
- Optional features available, such as exhaust unit, sample trays, nitrogen gas introduction device (with flow meter), temperature output terminal and so on.



Specifications

Model		FO111C	FO211C	FO311C	FO411C	FO511C	FO611C	FO711C	FO811C
Performance	Operating temp. range	100~1150°C							
	Temp. adjusting accuracy	±2°C (at 1150°C)							
Composition	Time to reach maximum temp. at room temp.	Approx. 60 min		Approx. 70 min		Approx. 80 min			
	Exterior material	Cold rolled steel plate with chemical proofing coating							
	Furnace body	Ceramic fiber							
	Sensors	Dual R-type thermocouple							
	Heater	FeCrAl alloy heating wire							
Controllers		1KW	1.5KW	2KW	2.2KW	2.5KW	3KW	3.5KW	4KW
	Exhaust vent	Inner diameter 20mm, upper part							
	Cooling fan blade	Axial flow fan							
	Temp. control method	PID control (10 segments selectable)							
	Temp. Setting/Display	Digital setting/digital display							
	Overheating protection	Integrated controller							
	Overheat protection setting method	Digital Setting							
	Operation functions	Fixed temp. operation, program operation 6 modes with a total of 90 segments (30 segments×1, 15 segments×2, 10 segments×3), auto start and auto stop operation							
	Additional functions	Deviation correction function, power failure compensation function, key lock function							
	Timer	1 min 99 h 59 min and 100 h~999 h 50 min							
Safety device	Self-diagnostic circuit (temperature sensor abnormality, automatic overheat prevention), overheat preventer, leakage protection circuit breaker for over-current, key lock function								
Specifications	Internal dimensions (W×D×H mm)	100×150×100	100×250×150	200×250×150	200×300×150	300×250×150	250×350×200	270×350×250	300×400×250
	External dimensions (W×D×H mm)	346×405×516	346×505×566	446×505×566	446×555×566	506×505×626	506×605×676	506×605×726	506×655×726
	Internal capacity	1.5L	3.75 L	7.5 L	9 L	11.3 L	17.5 L	23.6 L	30 L
	Power supply (50/60Hz) rated current	AC220V 5A	AC220V 7.5A	AC220V 9.5A	AC220V 10.5A	AC220V 12A	AC220V 14A	AC220V 16.5A	AC220V 18.5A
Weight	Approx. 24kg	Approx. 30kg	Approx. 37kg	Approx. 38kg	Approx. 44kg	Approx. 52kg	Approx. 58kg	Approx. 62kg	
Accessories	Exhaust vent cover 1 pcs								
Options	Stand	ON30C			ON61C				
	Others	Setter plate, exhaust unit (AC220V), sample box, N ₂ introduction device (with flow meter), mini printer, data logger, combination warning light (standby/operation/failure), external communication function (RS485), temperature output terminal (4~20mA), external alarm output terminal, time-up output terminal, central monitoring software							

1 Sterilizers

2 Granulation and Spray Dryers

3 Muffle Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purification Systems

8 Water Baths

9 Water Circulators

10 Rotary Evaporators

11 Freeze Dryers and Cooling Traps

12 Stirrers & Shakers

13 Washers

14 Analysis and Test Devices

15 Options

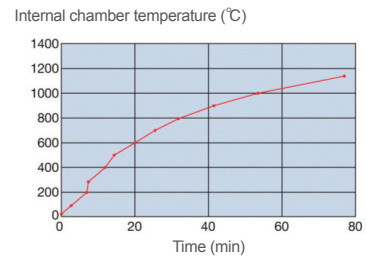
- Automatic Overheating Preventer
- Overheat Preventer
- Self-diagnostic Function
- Key lock Function
- Power Failure Compensation Function
- Overcurrent Leakage Circuit Breaker
- CE Certification



Control panel



Temperature rise characteristic curve (FO311C type)



Exhaust device unit (optional)



Able to quickly exhaust gases generated by rising temperature inside the chamber.
 Piping: flexible pipe, aluminum
 Length 1.5m
 Diameter 50mm
 Exhaust unit power:
 Single phase AC220V 0.15A

Internal chamber



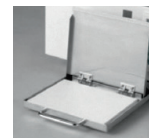
Improved thermal insulation features and temperature distribution accuracy by adopting a reasonable thermal insulation structure.

External temp. output terminal (optional)



- Time-up output
 - Output at auto stop and program end
 - Measured temperature transmission output
- For recording and monitoring internal chamber temperature.
 Temperature output: 4~20mA

Sample tray (optional)



Dimension diagram (mm)



Sterilizers	1
Granulation and Spray Dryers	2
Muffle Furnaces	3
Ovens	4
Incubators	5
Plasma Equipment	6
Water Purification Systems	7
Water Baths	8
Water Circulators	9
Rotary Evaporators	10
Freeze Dryers and Cooling Traps	11
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