



Fire Safety Storage Cabinet, Type 90

Proven refractory performance to safeguard flammable hazardous materials from fire

Diverse certifications obtained

- Only one in Korea to obtain CE (EN14470-1) certification.
 - Acquired Certificate of Excellent Product from the Public Procurement Service in Korea.
 - Acquired performance certification from the Ministry of SMEs and Startup in Korea.
 - Awarded the 2018 Safe Korean Technology Prize by the Ministry of the Interior and Safety.
- * EN14470-1 verifies that the equipment meets the European safety standards for dangerous goods containers such as fire resistance, internal ventilation, shelf stability, and automatic door closure.

Safe storage from fire

- **High fire resistance**

Fire resistance performance is in accordance with the strictest European standard, with the internal temperature kept below 180K for up to 90 minutes in the event of fire.

- **Fire Response Sealing System**

When the temperature reaches 50°C, the door automatically closes. When the ambient temperature reaches 70±10°C, the exhaust holes and ventilation openings are automatically closed, totally blocking the flow of heat from the outside in the event of fire

- **The right model for the application can be selected**

Possible to suppress fire at the natural ignition point of the dangerous goods being handled.

Model selected considering the prediction time, etc.

- **Chemical resistant interior material**

Excellent chemical resistance even for long-term use with the interior material coated with polyphenol resin.

- **Under bench type height-adjustable (SC3 Under-type Model)**

750 mm/820 mm height can be selected considering the work height when hood is installed at the bottom.

Solid and secure shelf structure

- **Solid shelf structure**

It is a solid structure allowing for up to 80kg to be held per shelf and it can be fixed firmly to the left and right inside walls

- **Safe shelf design**

With 30mm-deep shelf shape for safe storage, it is designed to be safe even if the stored contents are leaked.

- **Right shelf selection**

The built-in shelf is excellent in chemical resistance due to epoxy powder coating. Also, stainless steel shelves and PP trays can be selected. (optional).

Proven fireproof performance!

- **Items Proven by Testing**

30 minutes / 60 minutes / 90 minutes fire resistance performance test.

For fire test according to standards of EN 1363-1, the time required for AT to be kept below 180°C is expressed as fire resistance (EN-14470-1).



Comparison of fire resistance performance based on certification

Patented system with safe exhaust structure

System with optimally designed exhaust structure that effectively removes flammable vapor at normal times while preventing external flames from flowing directly into the interior.



(Patent Registration No. 10-1605164)

Award Excellent Patent
Award (in Korea)

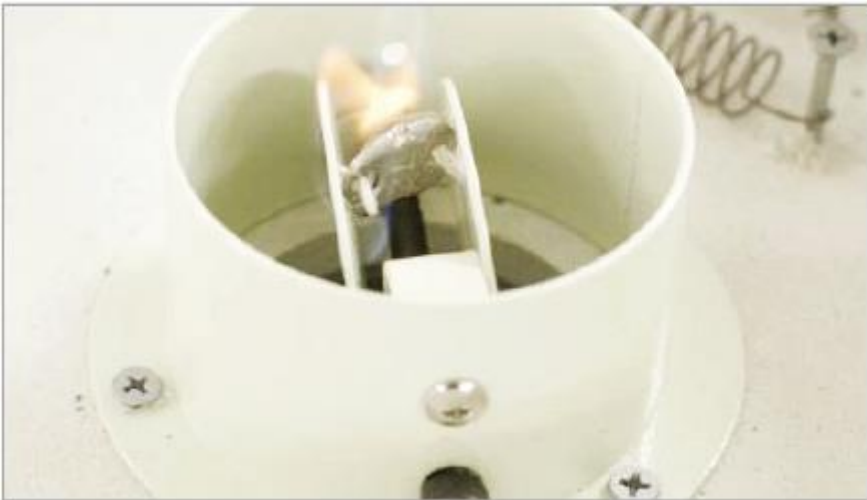
Convenient Reagent In/Out

Equipped with door closure to stop the door at the desired position for easy insertion and removal of flammable reagents.



Automatically sealed ventilation

When the ambient temperature reaches $70\pm 10^{\circ}\text{C}$ in case of surrounding fire, the exhaust opening, and ventilation opening are designed to be automatically closed to completely prevent the inflow of external heat.



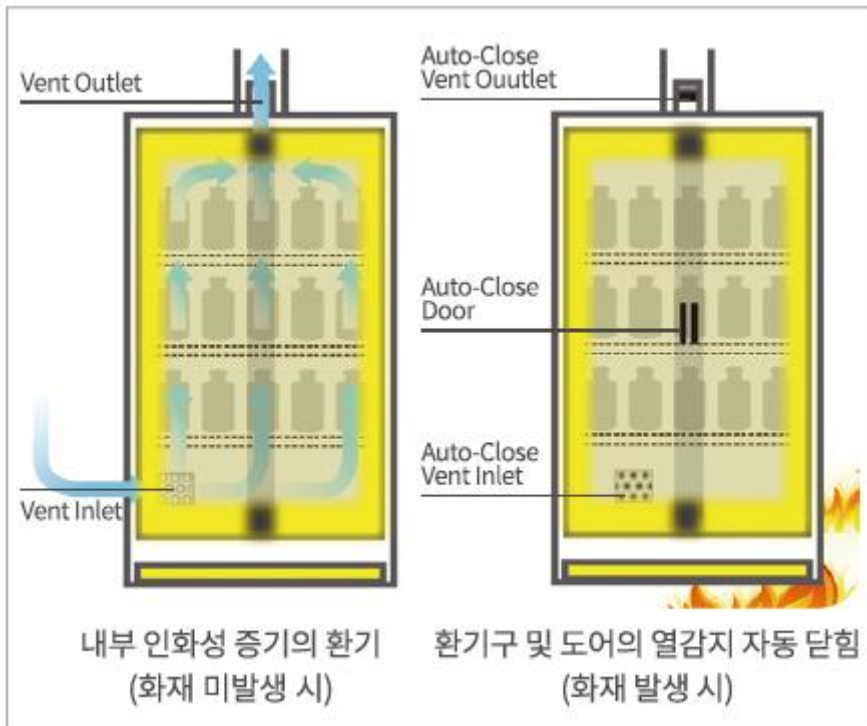
Triple insulation structure

All walls are constructed of the same triple-insulated structure and all gaps are treated with fire-retardant finishes to protect flammable materials in the event of a surrounding fire.



Safe ventilation of flammable vapor

It is possible to discharge gas easily through the vent inlet and vent outlet to prevent accidents due to accumulation of flammable vapor, and to protect the health of the experimenter.



Configurable with lab safety workbench

It is composed of a fume hood and a testing bench bottom, making it excellent for storing hazardous materials and waste liquids.



● **Effluent reservoir**

Safe handling in the event of stored material leakage and prevention of leakage out of the cabinets.



- **Key lock device**

Key lock is provided as standard to block unauthorized access.



- **Safe stored materials handling**

Ergonomic structure with easy access to shelves for user's safety and convenience.



Convenient moving and installation

Forklift fork space for convenient movement.

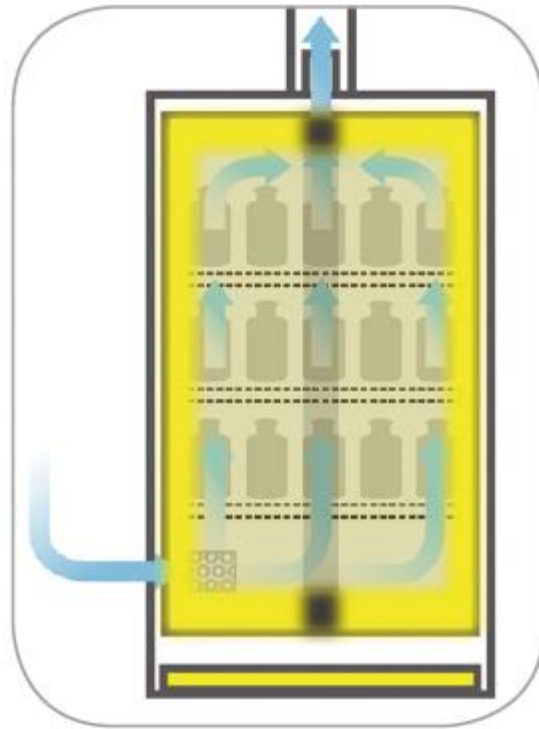
Leveling feet for stable installation.



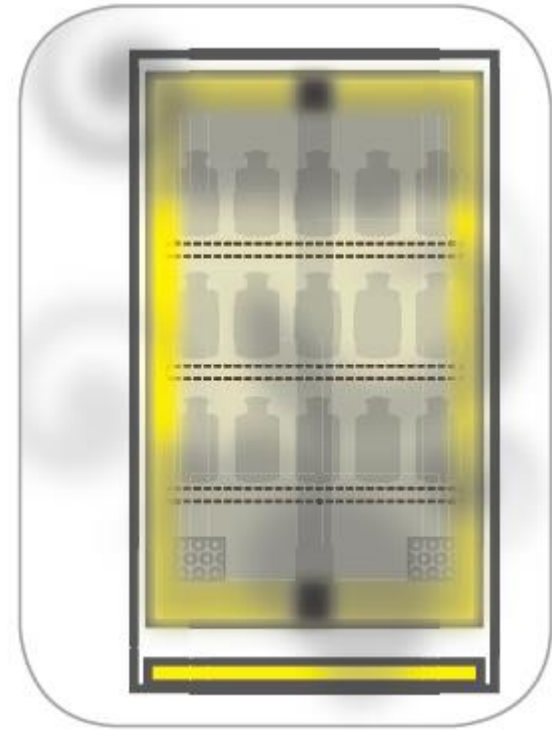
Extraction Module (option)

Filters flammable gas inside the cabinet with a carbon filter without connecting a separate duct.

	EN 14470-1	NFPA 30
Fire resistance performance	0	0
	Fire test according to EN 1363-1, 15 min.- 90 min. (15 min. / 30 min. / 60 min. / 90 min.)	NFPA 251 standard fire resistance test, 10 minute level
Flammable vapor ventilation	0	0
	Flammable vapor ventilation is recommended. Check sound pressure formation inside the cabinet during ventilation.	Ventilation is not recommended. (Recommended to use level of container recommended in NFPA 30.)



Keeps flammable vapors below the LEL concentration and removes odors through ventilation.



It seals the ventilation holes, and an odor occurs inside the storage cabinet .
The risk of ignition is increased as the concentration of flammable vapor increases.

0

0

Safety Cover

Automatic door and ventilation closure during fire test

In the case of a fire test, test with the ventilation hole blocked.
Fire safety not considered when connecting to external ventilation facilities.

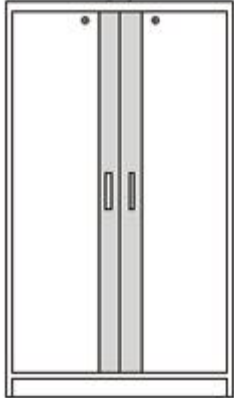

Comparison of EN 14470-1 and NFPA 30 International Standards

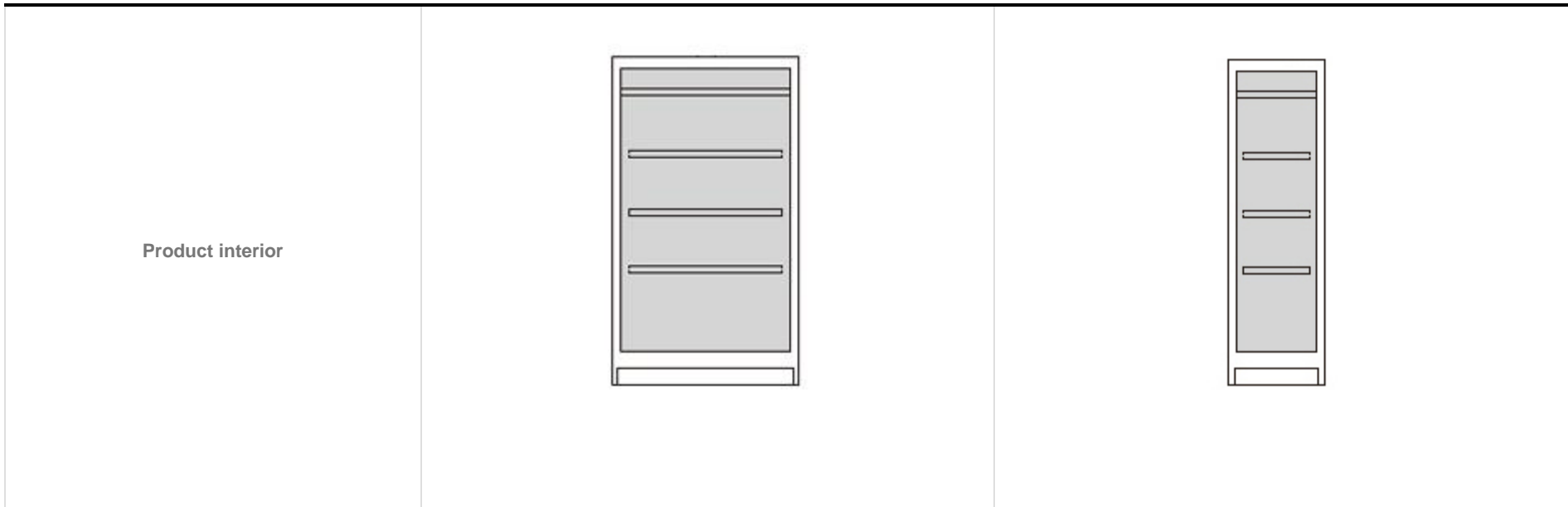
Fire resistance performance 60-minutes type

Type	Model
Stand	SC3-90F-1912D2-C
	SC3-90F-1906D1-C
Under	SC3-90F-0812D2D-C
	SC3-90F-0806D1D-C
	SC3-90F-0812D2S
	SC3-90F-0809D2S
	SC3-90f-0806D1S

※ LC Connected service scheduled for release

Model	SC3-90F-1912D2-C	SC3-90F-1906D1-C
Internal volume (L / cu ft)	763 / 26.9	357 / 12.6
Interior dimensions (W x D x H, mm / inch)	968 x 484 x 1629 / 38.1 x 19.1 x 64.1	453 x 484 x 1629 / 17.8 x 19.1 x 64.1

Exterior dimensions (W x D x H, mm / inch)	1116 x 625 x 1952 / 43.9 x 24.6 x 76.9	1116 x 625 x 1952 / 43.9 x 24.6 x 76.9
Quantity of shelf (standard / max.)	3 / 5	3 / 5
Max. load (kg / lbs)	80 / 176.3	80 / 176.3
CE certification	O	O
Weight (kg / lbs)	1420 / 925.9	220 / 485.0
Cat. No.	AAAF390170	AAAF390140
Product appearance		

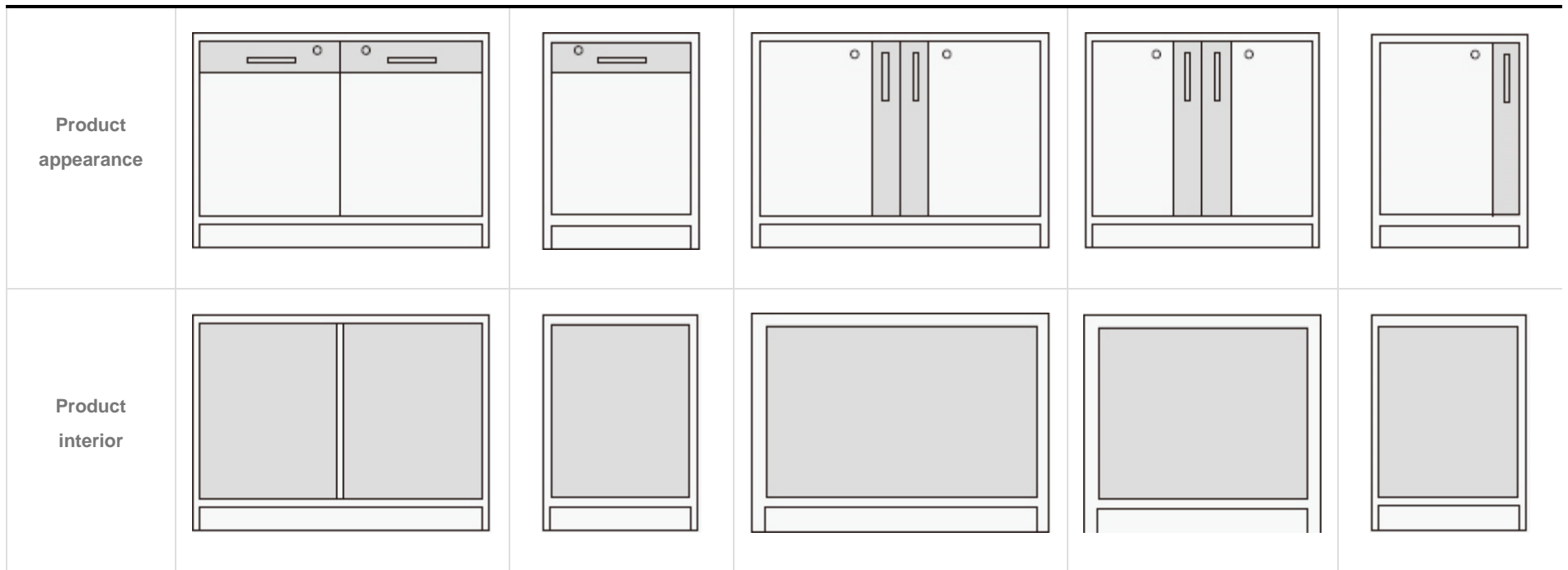


1) Drawer Type is the maximum load for the Drawer.

Specification (Type 90)

Model	SC3-90F-0812D2D-C	SC3-90F-0806D1D-C	SC3-90F-0812D2S	SC3-90F-0809D2S	SC3-90F-0806D1S
Internal volume (L / cu ft)	244 / 8.6	110 / 3.9	228 / 8.1	162 / 5.7	97 3.4

Interior dimensions (W x D x H, mm / inch)	496 x 396 x 622 * 2ea / 19.5 x 15.6 x 24.5 * 2ea	448 x 396 x 622 / 17.6 x 15.6 x 24.5	1048 x 396 x 550 / 41.3 x 15.6 x 21.7	748 x 396 x 550 / 29.4 x 15.6 x 21.7	448 x 396 x 550 / 17.6 x 15.6 x 21.7
Exterior dimensions (W x D x H, mm / inch)	1200 x 560 x 730 (or 820) / 47.2 x 22.0 x 28.7 (or 32.3)	600 x 560 x 730 (or 820) / 23.6 x 22.0 x 28.7 (or 32.3)	1200 x 560 x 730 (or 820) / 47.2 x 22.0 x 28.7 (or 32.3)	900 x 560 x 730 (or 820) / 35.4 x 22.0 x 28.7 (or 32.3)	600 x 560 x 730 (or 820) / 23.6 x 22.0 x 28.7 (or 32.3)
Quantity of shelf	-	-	1	1	1
Max. load (kg / lbs)	40 * 2ea / 88.2 * 2ea	40 / 88.2	40 * 2ea / 88.2 * 2ea	40 / 88.2	40 / 88.2
CE certification	O	O	-	-	-
Weight (kg / lbs)	220 / 485.0	134 / 295.4	210 / 463.0	170 / 374.8	130 / 286.6
Cat. No.	AAAF390130	AAAF390120	AAAF390131	AAAF390151	AAAF390121



1) Drawer Type is the maximum load for the Drawer.

Accessories (Type 90)

Accessory	Description	
	SC3-90F-1912D2-C	SC3-90F-1906D1-C
	(W x D x H, mm / inch)	
Shelf	Epoxy powder coated steel	AAAF35014 (965 x 444 x 30 / 38.0 x 17.5 x 1.2) AAAF35013 (451 x 444 x 30 / 17.8 x 17.5 x 1.2)
	Stainless steel	AAAF35004 (965 x 444 x 30 / 38.0 x 17.5 x 1.2) AAAF35003 (451 x 444 x 30 / 17.8 x 17.5 x 1.2)
Drawer	Epoxy powder coated steel	AAAF35313 (798 x 452 x 100 / 31.4 x 17.8 x 3.9) AAAF35312 (350 x 452 x 100 / 13.8 x 17.8 x 3.9)
	Stainless steel	AAAF35303 (798 x 452 x 100 / 31.4 x 17.8 x 3.9) AAAF35302 (350 x 452 x 100 / 13.8 x 17.8 x 3.9)

Fume Extraction Module 348 x 498 x 343 mm
(EM-33) / 13.7 x 19.6 x 13.5 inch
(230V, 60Hz)

AAAF1536

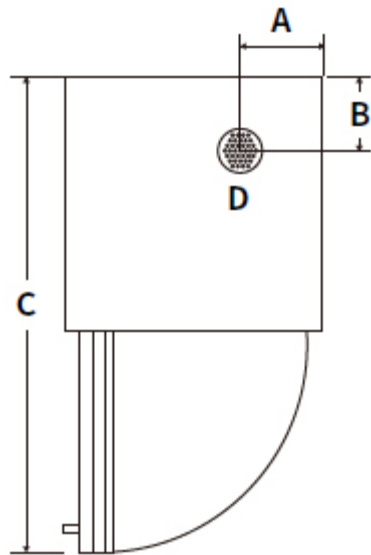
AAAF1536

- ※ Please refer to page 199 for details on EM-33 compatible filter.
- ※ Please refer to page 208 for detailed images of shelf, sump, drawer, and tray.

Dimension (Unit: mm / inch)

Model	A	B	C ¹⁾	D (Diameter)
SC3-90F-1912D2-C	170 / 6.7	160 / 6.3	1135 / 44.7	76 / 3
SC3-90F-1906D1-C	170 / 6.7	160 / 6.3	1135 / 44.7	76 / 3

1) C is the maximum depth when the door is opened.



Upper side

Accessories (Type 90)

Accessory	Description	SC3-90F-0812D2D-C	SC3-90F-0806D1D-C	SC3-90F-0812D2S	SC3-90F-0809D2S	SC3-90F-0806D1S
Plinth (side)	480 x 340 x 350 mm					
	/ 18.9 x 13.4 x 13.8 inch	AAAF15364	AAAF15364	AAAF15364	AAAF15364	AAAF15364
Fume Extraction Module (EM-33)	348 x 498 x 343 mm					
	/ 13.7 x 19.6 x 13.5 inch	AAAF1536	AAAF1536	AAAF1536	AAAF1536	AAAF1536

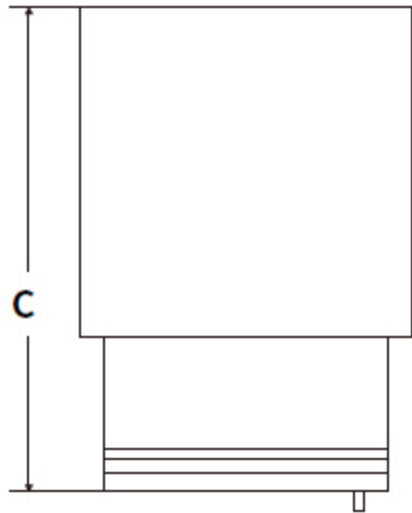
※ Please refer to page 199 for details on EM-33 compatible filter.

※ Please refer to page 208 for detailed images of shelf, sump, drawer, and tray.

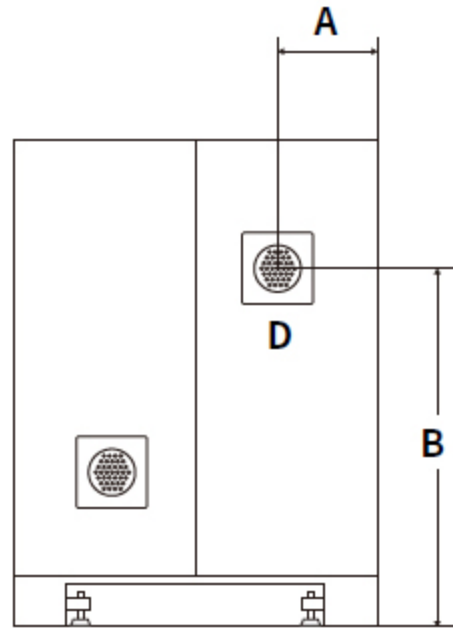
Dimension (Unit: mm / inch)

	Model	A	B	C ¹⁾	D (Diameter)
Under (Drawer)	SC3-90F-0812D2D-C	185 / 7.3	255 / 10.0	840 / 33.1	60 / 2.4
	SC3-90F-0806D1D-C	165 / 6.5	255 / 10.0	840 / 33.1	60 / 2.4
Under (Door)	SC3-90F-0812D2S	185 / 7.3	255 / 10.0	555 / 21.9	60 / 2.4
	SC3-90F-0809D2S	185 / 7.3	255 / 10.0	405 / 15.9	60 / 2.4
	SC3-90F-0806D1S	165 / 6.5	255 / 10.0	511 / 20.1	60 / 2.4

1) C is the maximum depth when the door is opened.



Under (Door):
Upper side



Under (Drawer):
Back side

Bottom Collecting Pump Specification by Model

Model	A
SC3-90F-1912D2-C	962 x 472 x 92 / 37.9 x 18.6 x 3.6
SC3-90F-1906D1-C	451 x 467 x 92 / 17.8 x 18.6 x 3.6
SC3-90F-0812D2D-C	466 x 356 x 147 / 18.3 x 14.0 x 5.8
SC3-90F-0806D1D-C	442 x 356 x 147 / 17.4 x 14.0 x 5.8

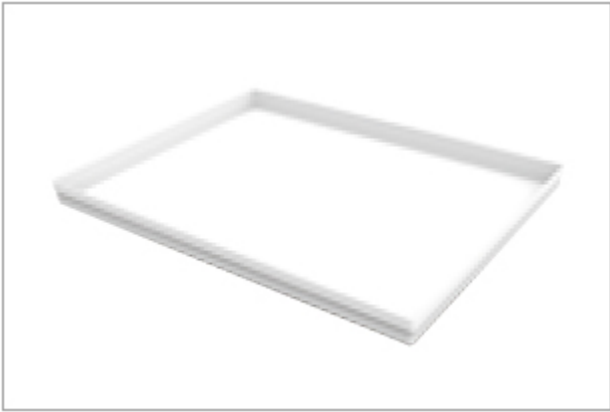
※ Choose one between a epoxy powder coated steel and a stainless steel material



- **Shelf**



- **Bottom Collecting Sump**



- **Tray (PP)**



- **Drawer**

