

## Network

We, SAMSON Co., Ltd., have been engaged in the manufacture and sales of various Boilers and Food Processing Equipment since our foundation in 1945, and have been enjoying a good reputation from customers in various industrial fields of Japan.

In overseas markets, we have devoted ourselves to exporting our products into mainly Asian countries for a long period and have delivered them to many customers.

After delivery, our authorized distributors in the respective countries have taken care of maintenance services on our equipment through the cooperation from customers.

We are supporting our distributors for the improvement of maintenance technology and we hope our customer can operate our products safely without any trouble.



## SAMSON CO.,LTD.

### International Division (Osaka)

ADDRESS	PMO EX Shin-Osaka 5th floor, 4-2-10 Miyahara, Yodogawa-ku, Osaka, 532-0003 Japan
T E L	+81-6-6152-8135
F A X	+81-6-6152-8128
E - M A I L	overseas@samson.co.jp
WEB SITE	<a href="https://www.samson.co.jp/en/">https://www.samson.co.jp/en/</a>

### SAMSOLUTION INTERNATIONAL CO., LTD.

ADDRESS	7F-8, NO.12, LN.609, SEC.5,CHONGXIN RD., SANCHONG DIST., NEW TAIPEI CITY 24159, TAIWAN(R.O.C.)
T E L	+886-2-2278-3636
F A X	+886-2-2278-3535
WEB SITE	<a href="https://www.samson.co.jp/tw/">https://www.samson.co.jp/tw/</a>

# SAMSOLUTION

For a sustainable future of energy and food

# SAMSOLUTION FOOD SYSTEM

EL Series

Made in **Japan**  
since 1945

Vacuum Cooler



EL-60VSH/100VSH/120VSH/180VSH/240VSH  
EL-150PTH/200PTH

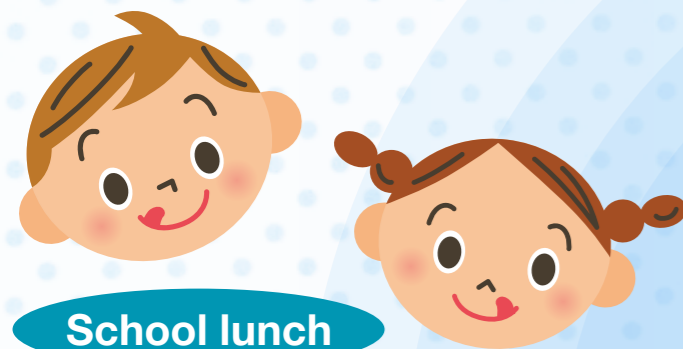


Only dry vacuum pump is used!





**Much safer!**  
**Quick(Rapid) cooling the freshly made**  
**tasty food directly!**



**School lunch**

**To supply safety**  
**school lunch.**

EL can prevent food from bacteria growth because EL pass through a temperature range 20 to 50 °C (active temperature range for bacteria growth) in a short period by rapid cooling.

**90°C**

**Rapid cooling**



**10°C**

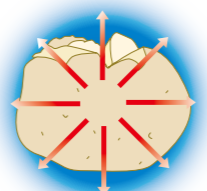


**Meals for**  
**nursing care and**  
**social welfare**

**To supply safety**  
**and delicious meals.**

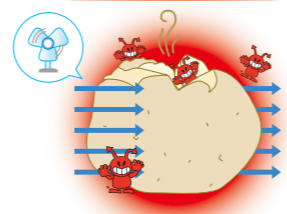
**Advantage of difference in method**

**Vacuum cooler**



Since the vacuum cooler takes heat uniformly from the whole food product, it can cool down from the food core with no heat remained and as a result, you can provide high quality food.

**Cold blower**



The cold blower gathers bacteria in the air and blows it directly on the food, so it is unsanitary.

**Sanitary**

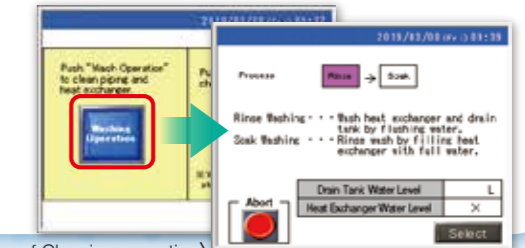
With the dry vacuum pump, the water vapor is directly discharged to the outside via the drain tank.

**It is very sanitary condition.**

**Easy cleaning with a cleaning gun** ...  
 A cleaning gun is equipped as standard. It is easy to wash the inside of the cooling tank, the door, and the drain tank that need routine cleaning.

**Easy cleaning with automatic washing operation**

By one push of switch button, you can clean the inside of piping and heat exchanger which are difficult for hand washed.



(Screen of Cleaning operation)

(Screen of Cleaning process)

**Easiness**

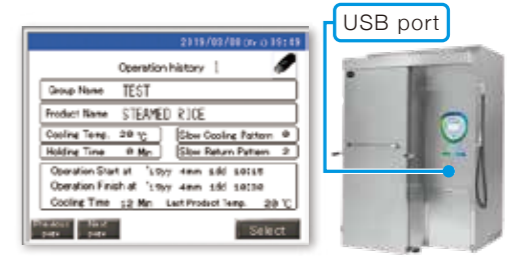
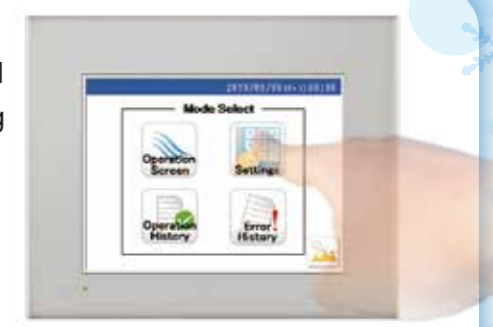
**Easy operation** with color liquid crystal touch panel! You can start frequently used operating patterns with one touch.

**Easy operation with icon**

The screen display improves visibility with easy-to-understand large icons and can be operated easily.

**HACCP is supported by storing operation history**

You can easily read out the data that be memorized the operation contents (setting contents, temperature, time) and error history of the last 50 cases. The operation history can be retrieved outside as screen data (image).



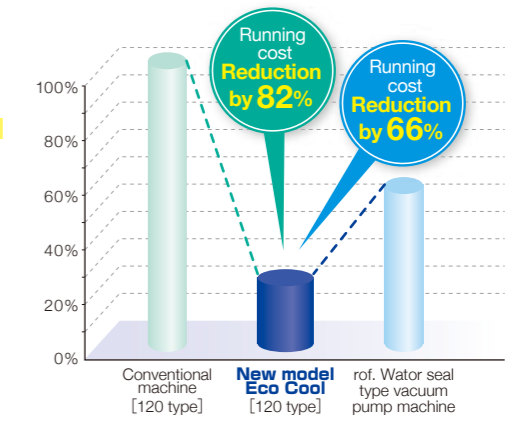
USB port

**Energy saving**

Energy saving design by dry vacuum pump!  
 Running cost reduced by **82% without** steaming! (Compared to conventional models)

Installation conditions	Cooling temperature: 10°C
	Throughput (Cooling Volume): 20 Batch/day, 260 day Operation
	Electricity: 15 JPY/kwh
	Steam: 7 JPY/kg
	Water: 500 JPY/m³

JPY = Japanese Yen



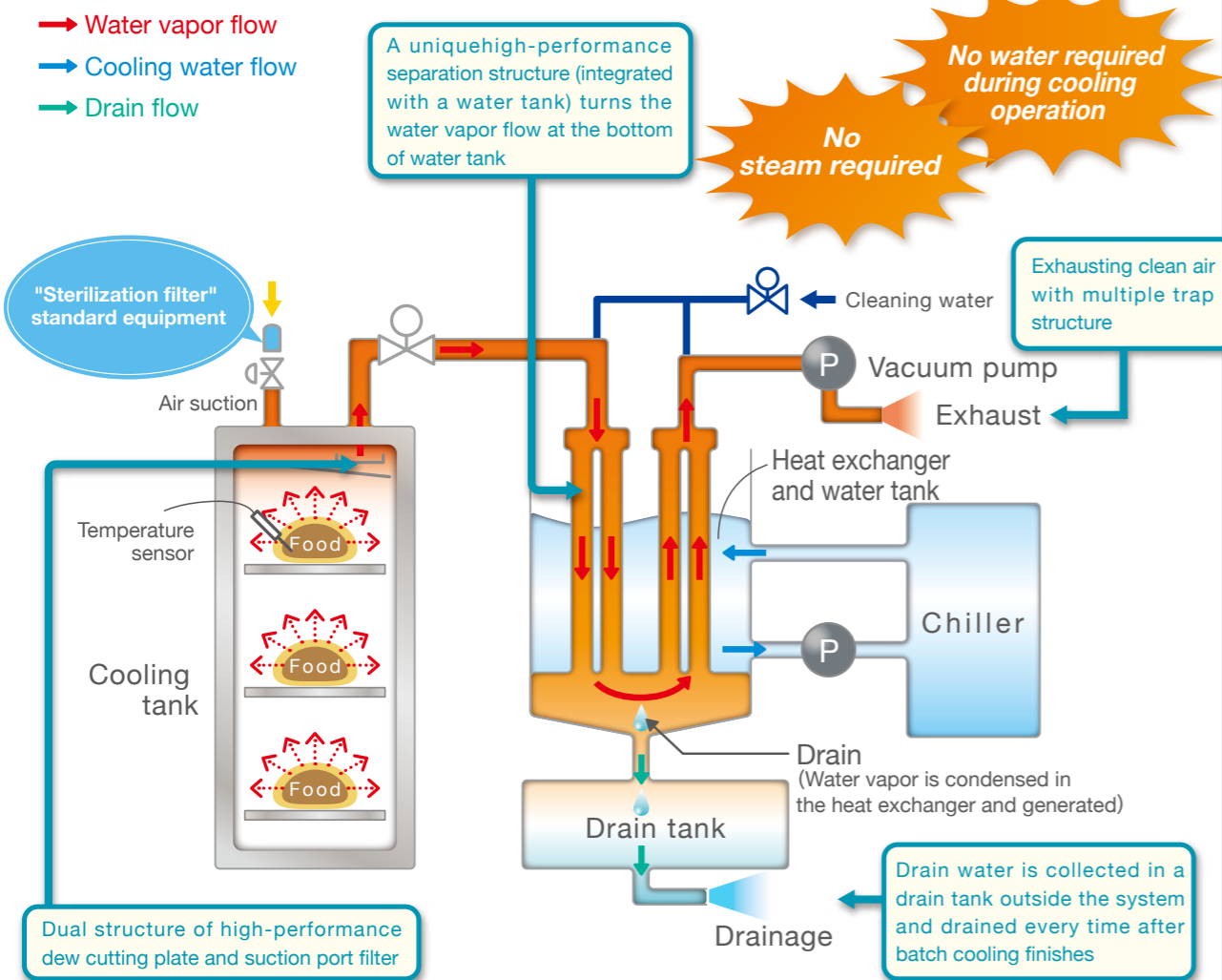
# Very hygienic(sanitary) by clean exhaust!

## Clean flow design to realize the sanitary condition

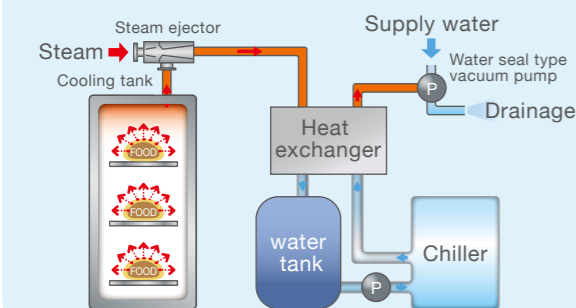
Clean air is exhausted from the dry vacuum pump. Water vapor vaporized from ingredients (food) is drained sufficiently and discharged in a timely, so it is very sanitary because it does not store dirt in vacuum piping and heat exchanger those are difficult to clean up ordinary



### Eco Cool Dry Vacuum System



### Water-seal type vacuum pump system [Demerit of old system]



Since it connects the cooling tank and the drainage through the vacuum pump by one-way, there might be the risk of backflow of dirt due to following reasons.

- Contaminants from foodstuff might come into the vacuum pump and the check valve.
- Stop of water supply might cause a malfunction of the vacuum pump.

### Specification sheet

	Item	Unit	Type of Vacuum Cooler						
			EL-60VSH	EL-100VSH	EL-120VSH	EL-180VSH	EL-240VSH		
Main Body	Standard cooling volume	kg/batch	60	120	180	240			
	Cooling temperature	-	90°C → 10°C Approx 22 min						
	Inside dimensions (W×D×H)	mm	825×650×850	825×970×850	650×900×1,700	1,120×900×1,500	1,120×900×1,700		
	Available Inside dimension (W×D×H)	mm	775×650×750	775×970×750	620×900×1,570	1,090×900×1,370	1,090×900×1,570		
	External Dimensions (W×D×H)	mm	1,425×1,150×1,880	1,430×1,400×1,880	1,665×1,740×2,240	2,650×1,805×2,130	2,650×1,805×2,320		
	Power supply	-	3φ 200V 50Hz						
	Consumption power (50/60Hz)	kW	3.0	4.7	7.4	8.4			
	Capacity of Earth Leakage Circuit Breaker	-	30A	40A	50A	100A			
	Operating weight	kg	1,100	1,400	1,950	2,800	3,000		
	Dry weight	kg	950	1,150	1,650	2,400	2,500		
Chiller	Applicable Chiller	-	10HP	15HP	30HP	40HP			
	External Dimensions (W×D×H)	mm	870×854×1,700	1,610×854×1,800	2,150×1,240×2,190				
	Power Consumption (50/60Hz)	kW	8.0	14.1	15.9				
	Capacity of Earth Leakage Circuit Breaker	-	50A	75A	100A	150A			
	Dry weight	kg	250	410	965				
Connection dia	Main Body side	Waste water drain	A	32	40				
		Vacuum pump drain	A	20	25	40			
		Feed water inlet	A	15		20			
		Cooling water inlet	A	40	50	65			
		Cooling water outlet	A	40	50	65			
	Chiller side	Cooling water inlet	A	25	32	32×2	50		
		Cooling water outlet	A	25	32	50			

1) Standard cooling volume is based on the specific heat of food at 0.8 cal/K·g  
 2) Cooling capacity is based on the outside air temperature below 30 °C. (slow cooling / recovery time etc. are not included.)  
 3) Cooling capacity is based on our test standard. (Measure the center temperature)

# Taste Room

Location of Taste Room :  
 Head Office(kagawa) and Tokyo Building (Tokyo)



**Eager to make more delicious dishes and meals!**

**It is uneasy to buy new production equipment....**

**Can not satisfied with existing manufacturing process!**

**We want to develop a new product!**

**Do you have such problem?**

**Please use Samson Taste Room.**

The Samson Taste Room is a room(place) to cook the dishes in accordance with the needs(requirement) of customers by using various test machines for food production and processing. Customer can check and taste the dishes after cooking. Our experienced professional staff will assist you in making your original products by using our various recipes.

Try SAMSON's

- Kneader
- Steam Cooker
- Kneader Vacuum Cooker
- Pressurized Cooker
- Vacuum Cooler
- Cooking Sterilizer

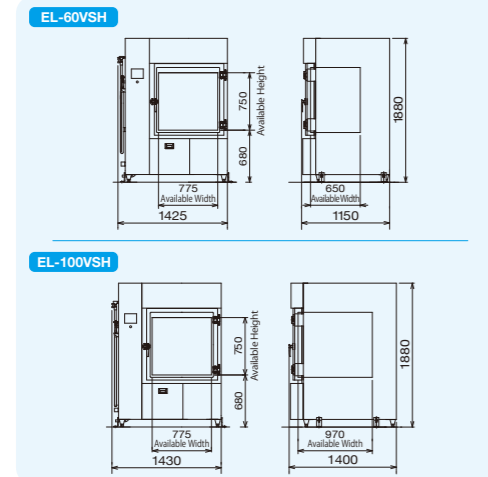
\*Follow the position in photo

We regularly hold various seminars on "food".

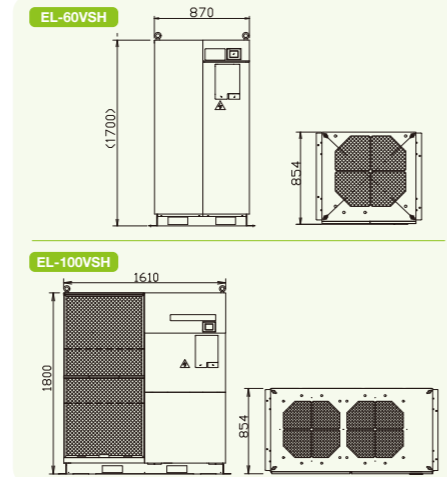


# Packaged design makes it neat and compact!

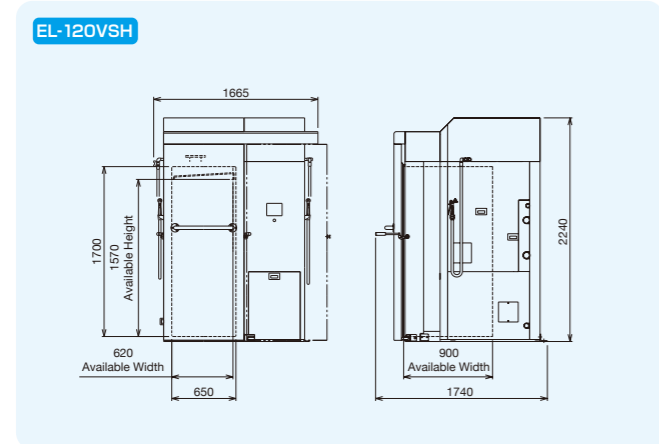
■ Installation Outline (External) Dimension



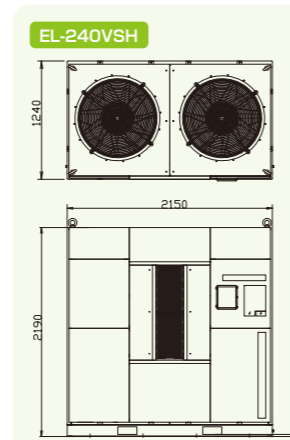
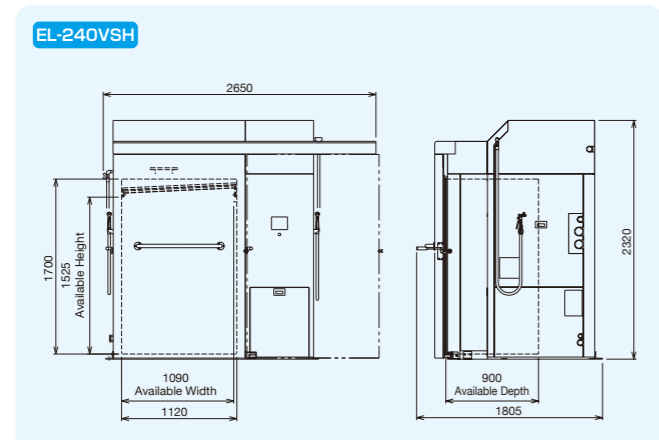
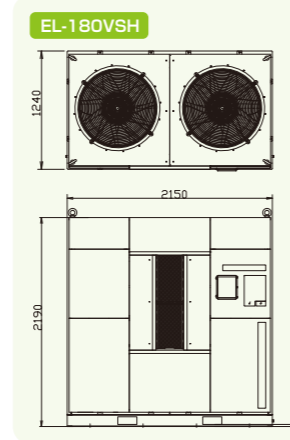
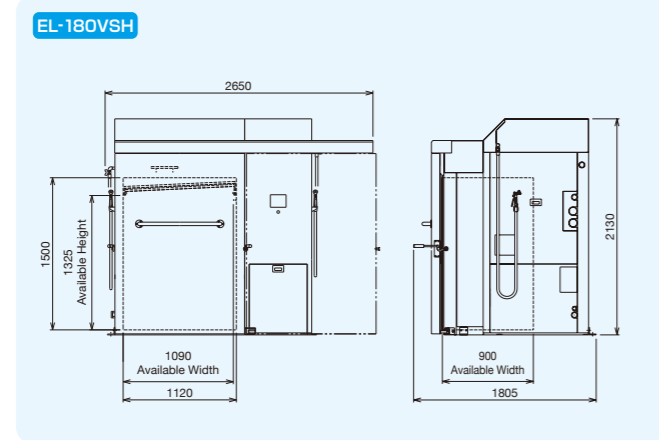
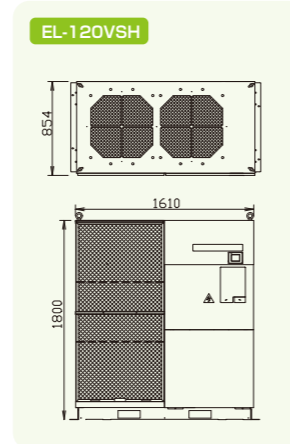
■ Chiller Outline (External) Dimension



■ Installation Outline (External) Dimension



■ Chiller Outline (External) Dimension



# EL-PTH Pass-Through series



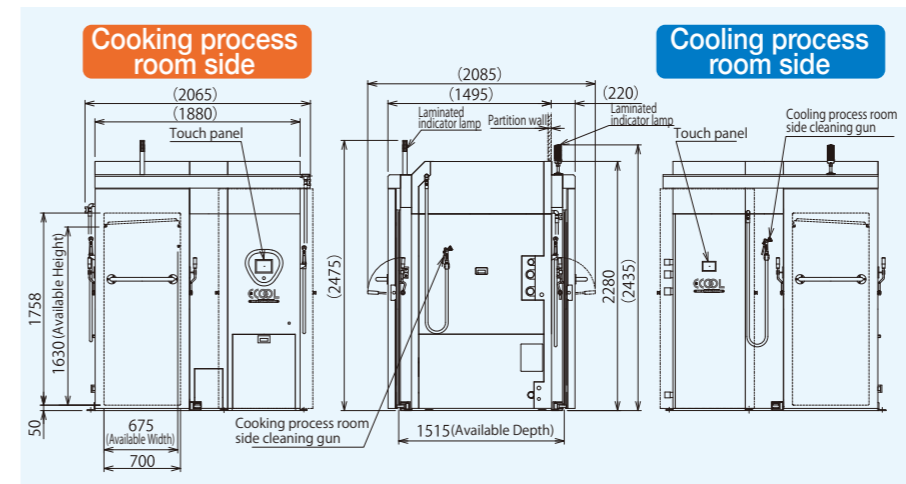
## Pass-Through system

Both front and rear door operations enables the food products to flow in one direction, reduces the risk of contamination and keeps products sanitary after cooling.

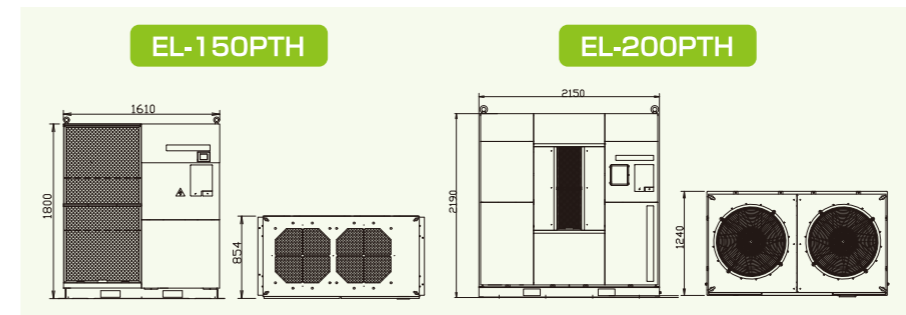
In addition to the features of Eco Cool, the Pass-Through series is equipped with user-friendly functions on both sides of the **cooking** and **cooling** rooms as standard.

- Cleaning gun** → Cleaning gun near the operator could be used to clean the inside of the cooling tank and the backside of the door.
- Laminated indicator lamp** → Equipment status of "Normal operation", "Error", "Cooling complete" are displayed for easy check from a distance.
- Touch panel** → Cooling temperature or equipment status would be displayed on the cooling room side.

■ Installation Outline (External) Dimension



■ Chiller Outline (External) Dimension



■ Specification sheet

Item	Unit	Type of Vacuum cooler			
		EL-150PTH	EL-200PTH		
Standard cooling volume	kg/batch	150	200		
Cooling temperature	—	90°C→10°C Approx 22 min			
Inside dimensions (W×D×H)	mm	700×1,515×1,758			
Available inside dimension (W×D×H)	mm	675×1,515×1,630			
External dimensions (W×D×H)	mm	2,065×2,085×2,280			
Power supply	—	3φ 200V 50/60Hz			
Consumption power (50/60Hz)	kW	7.0/8.7			
Applicable Chiller	—	15HP	30HP		
External dimensions (W×D×H)	mm	1,610×854×1,800	2,150×1,240×2,190		
Consumption power (50/60Hz)	kW	14.1	15.9		
Connection dia	Main Body side	Waste water drain	A	40	
		Vacuum pump drain	A	40	
		Feed water inlet	A	20	
		Cooling water inlet	A	50	
	Chiller side	Cooling water outlet	A	50	
		Cooling water inlet	A	32	32×2
		Cooling water outlet	A	32	50

1) Standard cooling volume is based on the specific heat of food at 0.8cal/K·g  
 2) Cooling capacity is based on the outside air temperature below 30°C.(slow cooling/recovery time etc. are not included.)  
 3) Cooling capacity is based on our test standard. (Measure the center temperature)