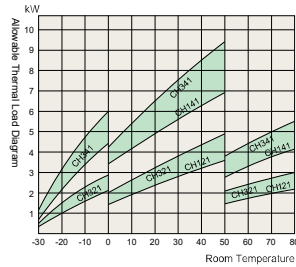
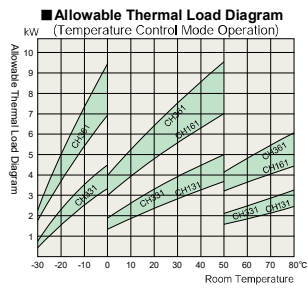


Specifications		Types		CH111P	CH111PA	CH121P	CH121PA	CH131P	CH141P	
Performance※	Temperature Range	- 10℃～+80℃								
	Humidity Range	20%～95%RH								
	Temperature Heat-Up Rate									
	Temperature Dropping Rate	+20℃→- 10℃								
		60 minutes	80 minutes	60 minutes	80 minutes	70 minutes				
	Temperature and Humidity Uniformity									
	Temperature and Humidity Variation Range									
	Temperature and Humidity Resolution									
	Sensors									
Allowable Ambient Temperature	+5℃～+35℃ (+5℃～+30℃ for Air Cooled Units)									
Main Body	Test Chamber Interior Dimensions (W × H × D in mm)	1670×2200×1670			3470×2200×1670		3470×2200×2570		3670×2200×3270	
	Internal Volume (m ³)	6.1			12.7		19.6		26.4	
	Internal Floor Area (m ²)	2.79			5.79		8.92		12.0	
	Overall Dimensions of the Unit (W × H × D in mm)	2455×2405×1800			4255×2405×1800		4255×2405×2700		4455×2405×3400	
	Door Opening Dimensions (mm)									
	Allowable Floor Load									
	Exterior Material									
	Interior Material									
	Thermal Insulation									
Major Equipment	Fans									
	Refrigeration Units (Hermetically Sealed Units)	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled				
	Refrigerants									
	Expansion Method									
	Thermal Heaters									
	Humidifier Heaters									
	Evaporator									
	Display									
Required Facility	Power Supply	200V AC, 3 Phase, 50/60 Hz Fluctuation for Voltage Less Than ± 10%.								
	Standard Electric Current [Max. Consumption] (A)	49					56		93	
	Standard Electric Power (kVA)	17					19.4		32.2	
	Cooling Water (Refrigeration Ton)	1.9	—	1.9	—	3.7				
	Maximum Humidifier Water Flow (liters/hr)	2								
	Humidifying Water									
	Drain Flow									
Protection Devices		Leakage Breaker for Power Supply, Overheat Protector Overload Relay for Refrigeration, Emergency Shut-Off Switch								
Additional Functions		Microcomputer Self-Diagnosis Function, Power Failure Recovery Protection, Function, Output Function for Upper and Lower Limit Temperature, Time Signal Message Function, Pause Function, Humidifier Water Monitoring Function,								
Communication Function										
Standard Feature		Viewing Window (W 350 × H 350 mm), Room Lamps, ϕ54 mm Cable Port, Water Regulating Valve (except for Specification A),								

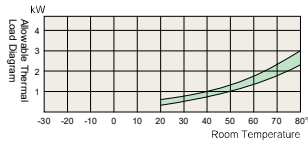
※The indicated performance represents the unit performance measured during thirty minutes of stable operation without test specimens.

※Please be aware that the specification tables may be changed without notice when the units are improved or updated.

※One Refrigeration Ton =13 liters per minute



■ Allowable Thermal Load Diagram
(High Humidity Operation at 90% RH)



* The allowable thermal load will vary depending upon the ambient temperature, cooling water temperature.

* Those indicated in these diagrams are the maximum allowable load under the AUTO running condition.

	CH151P	CH161P	CH311P	CH311PA	CH321P	CH321PA	CH331P	CH341P	CH351P	CH361P
			- 35°C~ + 80°C							
			15%~95%RH							
+ 20°C→ + 80°C										
60 minutes										
			+ 20°C→ - 30°C							
60 minutes			60 minutes	80 minutes	90 minutes	110 minutes	80 minutes	70 minutes	60 minutes	70 minutes
±0.75°C／±5.0%RH										
±0.3°C／±2.5%RH										
±0.1°C／±1.0%RH										
Type-T Thermocouples										
+5°C~ +35°C (+5°C~ +30°C for Air Cooled Units)										
	4370×2200×3470	5270×2200×3470	1670×2200×1670		3470×2200×1670		3470×2200×2570	3670×2200×3270	4370×2200×3470	5270×2200×3470
	33.4	40.2	6.1		12.7		19.6	26.4	33.4	40.2
	15.16	18.29	2.79		5.79		8.92	12.0	15.16	18.29
	5155×2405×3600	6055×2405×3600	2455×2405×1800		4255×2405×1800		4255×2405×2700	4455×2405×3400	5155×2405×3600	6055×2405×3600
Single Swing Door W 850 × H 1820										
600 kg/m ² (Surface Load)										
PVC Coated Steel Plate										
Stainless Steel Plate SUS304 2B Finish										
Rigid Expanded Polyurethane Board (Thickness 65mm)										
Sirocco Fan										
Water Cooled			Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled			
HFC404A										
Pulse Control Electronic Expansion Valve + Automatic Expansion Valve										
Ni-Cr Strip Heaters										
Sheathed Heaters										
Plate Fin Coils										
LCD Display by Graphic Matrix										
200V AC, 3 Phase, 50/60 Hz Fluctuation for Voltage Less Than ± 10%.										
108			56				63	108	123	
37.4			19.4				21.8	37.4	42.6	
7.4			3.7	—	3.7	—	5.5	7.4	11.1	
4			2					4		
Tap Water										
Natural Drain (Open to atmosphere) 20A										
(Double Protection), Overheat Protector for Boil-Dry, High and Low Pressure Limit Switch, Overload Relay for Fan Switch, Circuit Breaker for Thermal Heater, Circuit Breaker for Humidifier Heater, Circuit Breaker for Control Circuit, and Emergency Escape Mechanism										
Keeping Function Prevention with Instant Power Failure, Test Specimen and Power Supply Interlock Function, External Alarm Output Output Terminals, Time Up Signal Output Terminal, Calendar Timer Function, Wait Function, Memory Backup Function, User Test Chamber Temperature and Humidity Display Function, "RUN" Display Function, "TROUBLE" Display Function.										
GP-IB, RS232C or RS422A (Option).										
Ventilation Fan(for air supply and exhaust), Refrigeration Pressure Gauges, Water Purifier, Wick (for Wet-Bulb Temperature Sensor), User's Manual, Inspection Certificate (with performance data), Warranty Document.										

Specifications		Types	CT111P	CT111PA	CT121P	CT121PA	CT131P	CT141P	
Performance※	Temperature Range	- 10℃~+80℃							
	Humidity Range								
	Temperature Heat-Up Rate	+20℃→- 10℃							
		60 minutes	80 minutes	60 minutes	80 minutes	70 minutes			
	Temperature and Humidity Uniformity								
	Temperature and Humidity Variation Range								
	Temperature and Humidity Resolution								
	Sensors								
	Allowable Ambient Temperature	+5℃~+35℃ (+5℃~+30℃ for Air Cooled Units)							
Main Body	Test Chamber Interior Dimensions (W × H × D in mm)	1670×2200×1670			3470×2200×1670		3470×2200×2570	3670×2200×3270	
	Internal Volume (m ³)	6.1			12.7		19.6	26.4	
	Internal Floor Area (m ²)	2.79			5.79		8.92	12.0	
	Overall Dimensions of the Unit (W × H × D in mm)	2455×2405×1800			4255×2405×1800		4255×2405×2700	4455×2405×3400	
	Door Opening Dimensions (mm)								
	Allowable Floor Load								
	Exterior Material								
	Interior Material								
	Thermal Insulation								
Major Equipment	Fans								
	Refrigeration Units (Hermetically Sealed Units)	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled			
	Refrigerants								
	Expansion Method								
	Thermal Heaters								
	Evaporator								
	Display								
Required Facility	Power Supply	200V AC, 3 Phase, 50/60 Hz Fluctuation for Voltage Less Than ± 10%.							
	Standard Electric Current [Max. Consumption] (A)	31					38	59	
	Standard Electric Power (kVA)	10.7					13.2	20.4	
	Cooling Water (Refrigeration Ton)	1.9	—	1.9	—	3.7			
	Drain Flow								
	Protection Devices	Leakage Breaker for Power Supply, Overheat Protector (Double Protection), Overload Relay for Refrigeration, Emergency Shut-off Switch,							
	Additional Functions	Microcomputer Self-Diagnosis Functions, Power Failure Recovery Protection, External Alarm Output Function, Upper Calendar Timer Function, Wait Function, Memory Backup Function,							
	Communication Function								
	Standard Feature	Viewing Window (W350 × H350 mm), Refrigeration Pressure Gauges, Water Regulating Valve							

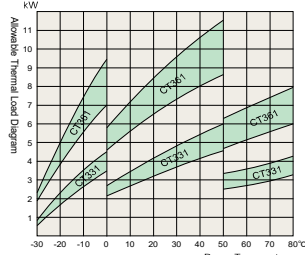
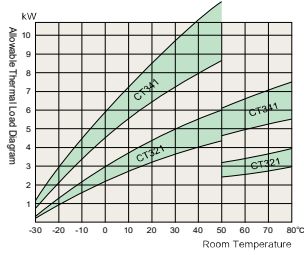
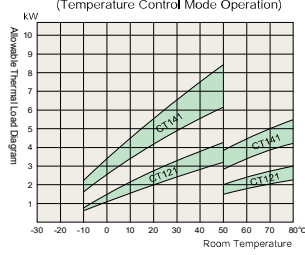
※The indicated performance represents the unit performance measured during thirty minutes of stable operation without test specimens.

※Please be aware that the specification tables may be changed without notice when the units are improved or updated.

※One Refrigeration Ton =13 liters per minute

■ Allowable Thermal Load Diagram

(Temperature Control Mode Operation)



* The allowable thermal load will vary depending upon the ambient temperature, cooling water temperature.
* Those indicated in these diagrams are the maximum allowable load under the AUTO running condition.

	CT151P	CT161P	CT311P	CT311PA	CT321P	CT321PA	CT331P	CT341P	CT351P	CT361P
			−35℃~+80℃							
+20℃→+80℃										
60 minutes										
			+20℃→−30℃							
60 minutes			60 minutes	80 minutes	90 minutes	110 minutes	80 minutes	70 minutes	60 minutes	70 minutes
±0.75℃										
±0.3℃										
±0.1℃										
Type-T Thermocouples										
+5℃~+35℃ (+5℃~+30℃ for Air Cooled Units)										
	4370×2200×3470	5270×2200×3470	1670×2200×1670		3470×2200×1670		3470×2200×2570	3670×2200×3270	4370×2200×3470	5270×2200×3470
	33.4	40.2	6.1		12.7		19.6	26.4	33.4	40.2
	15.16	18.29	2.79		5.79		8.92	12.0	15.16	18.29
	5155×2405×3600	6055×2405×3600	2455×2405×1800		4255×2405×1800		4255×2405×2700	4455×2405×3400	5155×2405×3600	6055×2405×3600
Single Swing Door W850×H1820										
600kg/m ² (Surface Load)										
PVC Coated Steel Plate										
Stainless Steel Plate SUS304 2B Finish										
Rigid Expanded Polyurethane Board (Thickness 65mm)										
Sirocco Fan										
			Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled			
HFC404A										
Pulse Control Electronic Expansion Valve + Automatic Expansion Valve										
Ni-Cr Strip Heaters										
Plate Fin Coils										
LCD Display by Graphic Matrix										
200V AC, 3 Phase, 50/60 Hz Fluctuation for Voltage Less Than ± 10%.										
74			38				46	74	89	
25.8			13.2				15.9	25.6	30.8	
7.4			3.7	—	3.7	—	5.5	7.4	11.1	
Natural Drain (Open to atmosphere) 20A										
High and Low Pressure Limit Switch, Overload Relay for Fan Switch, Circuit Breaker for Thermal Heater, Circuit Breaker for Control Circuit, and Emergency Escape Mechanism										
Keeping Function Prevention with Instant Power Failure, Test Specimen and Power Supply Interlock Function, and Lower Temperature Output Function, Time Signal Output Terminals, Time Up Signal Output Terminal, User Message Function, Pause Function, Test Chamber Temperature Display Function, "RUN" Display Function, "TROUBLE" Display Function.										
GP-IB, RS232C or RS422A (Option).										
Room Lamps, ϕ54mm Cable Port, Ventilation Fan (for air supply and exhaust), (except for Specification A), User's Manual, Inspection Certificate (with performance data), Warranty Document.										