

Johnson Controls - Hitachi Air Conditioning

Manufactured by:

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Distributed by:

HITACHI

WZPY SERIES

WATER COOLED SCREW TYPE-WATER CHILLERS

R134a



Quality Management  
System Certification  
ISO9001



Environment al Management  
System Certification ISO14001



Occupational Health And Safety  
Management System Certification  
OHSAS18001





## Optionize Your Solution with Hitachi Water Cooled Chiller

Incorporating proprietary cutting edge technology, Hitachi's Water Cooled Chiller combines high efficiency performance and stable.

New model chiller lineup featuring a G-type semi-hermetic twin-screw compressor using the environmentally-friendly R134a refrigerant.

In addition to low noise, low vibration, high efficiency and high performance, the new models come with a user-friendly touch panel type liquid crystal screen display that allows you to check operation status at a glance and has a full range of control functions.

As the perfect answer to user needs, Hitachi's chillers are designed to cover a broad range of applications from air conditioning of buildings to cooling of factories.



**Air Conditioning  
at Office Buildings**



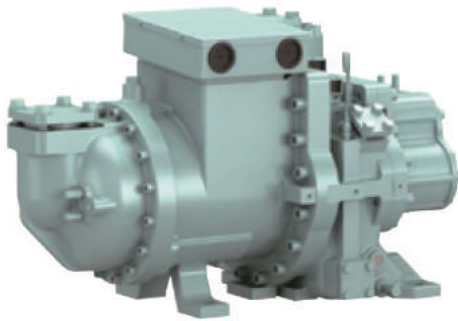
**Process Cooling  
at Factory**



### Adopting Hitachi R134a Screw Compressor

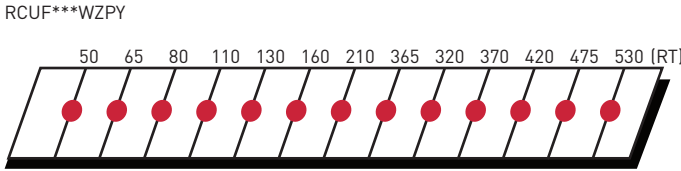
Since 1972 when we started manufacturing them, we have delivered more than 200,000 Hitachi twin-screw compressors to countries around the world where they continue to meet essential air conditioning needs.

Our new water-cooled chillers adopt G-type semi-hermetic twin-screw compressors that only available to R134a refrigerant .



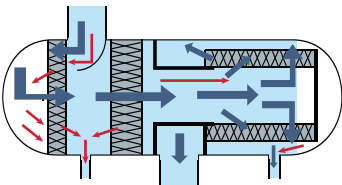
### Wide Line-up

To meet the need of air conditioning systems for large facilities and the demand for higher capacity industrial cooling systems.



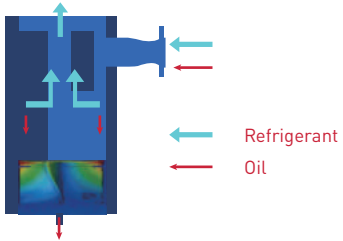
### Oil Separator

**Current Model**



Filter Oil Separator  
High Pressure Drop,  
More Energy Consumption

**New Model**



Cyclone Oil Separator  
Low Pressure Drop,  
Less Energy Consumption

# R134a

Environmentally friendly  
HFC134a refrigerant

R134a G-type twin-screw  
compressor

High efficiency shell-and-tube  
flooded evaporator

User-friendly touch LCD Panel

**Nominal capacity range:**  
**190~1862kw**  
**50~530RT**



### Better Performance And Energy Saving

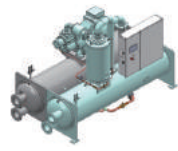
Hitachi's new water-cooled chiller(WZPY Series) adopts more efficient semi-hermetic twin-screw compressor and better shell-and tube flooded evaporator brings you significant energy saving experience under stable and durable operation.

**Current Model**



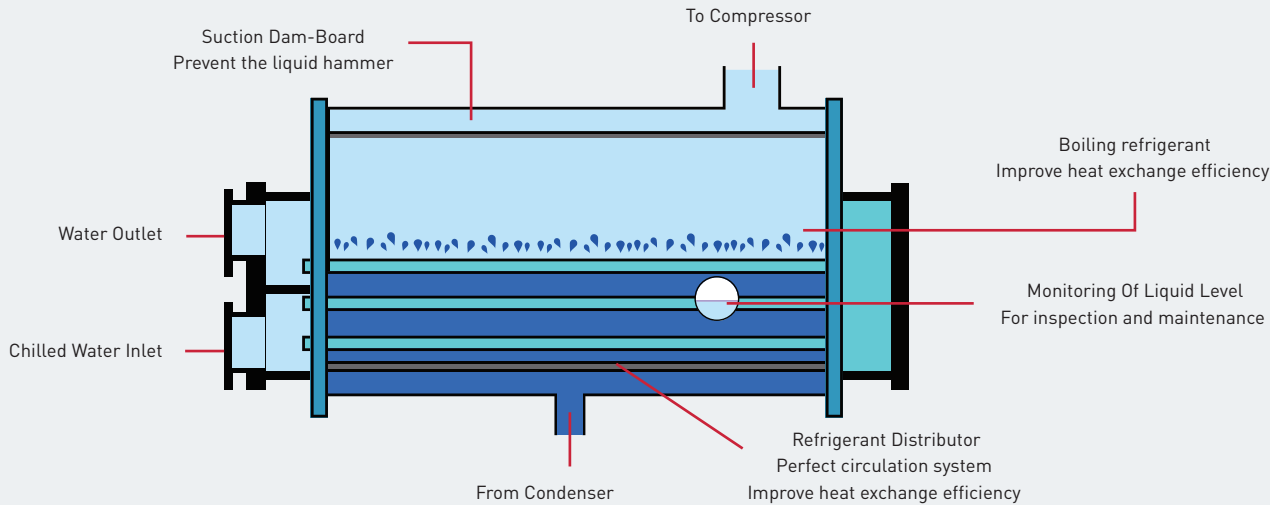
Cooling  
Capacity (kW)  
805  
COP  
5.60

**New Model**



Cooling  
Capacity (kW)  
931  
COP  
6.40  
14%

### High Efficiency Flooded Type Evaporator



## Intelligent Control

### Clear User-friendly LCD touch console

The display makes it easy to view the current operating status and simplify the setting procedure.

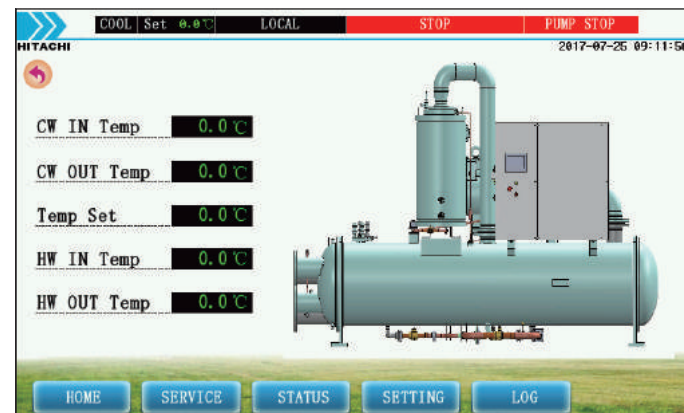
Various parameters can be confirmed at a glance.

Regardless of operating status, the console allows you to set a variety of operation modes.

A warning log function makes it possible to recall the latest 10 recent warning events.

The user interface is provided in both English and Chinese.

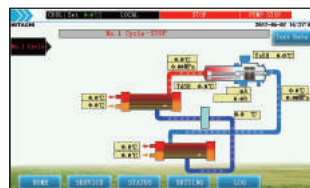
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## Compressor Page



## Status Page



## Parameter Setting Page

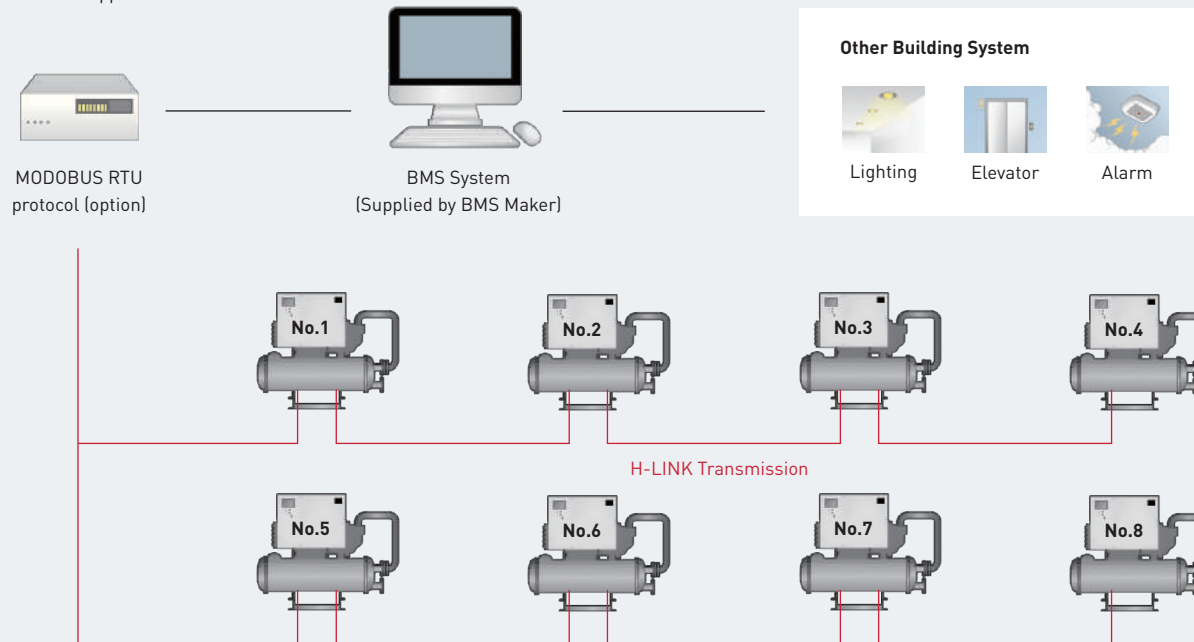


## Setting Page



## Building Management System (BMS)

A BMS-connecting interface  
can be supplied



Through H-LINK transmission, at most of 8 chillers of the same model can be connected to cascade a maximum volume of 4240RT.

## Specification/Parameter

Model			RCUF50WZPY	RCUF65WZPY	RCUF80WZPY	RCUF110WZPY	RCUF130WZPY
Power Source			Main[A C3φ]380,415V/50Hz,Control[AC1φ]220,240V/50Hz				
Nominal cooling capacity		kW	190	238	298	383	478
		USRT	54	68	85	109	136
		kcal/h	163,400	204,680	256,280	329,380	411,080
Power input		kW	32.2	40.3	50.5	64.9	81.0
COP		VVW	5.90	5.90	5.90	5.90	5.90
Capacity control		—	Continuous capacity control				
		%	100-25,0				
Outer dimensions	Length	mm	2,200		3,950		
	Width	mm	1,350				
	Height	mm	1,600				
Net weight		kg	1,900	2,000	3,250	3,400	3,550
Refrigerant	Type	—	R134a (charged)				
	Number of circuits	—	1	1	2	2	2
Compressor	Type	—	Semi-Hermetic Screw Type (R134a only)				
	Model	GSCCW**Z	50	60	40	50	60
	Quantity	Set	1	1	2	2	2
Condenser		—	Shell-and-Tube Type				
Piping connections for water side heat exchanger	Inlet	—	DN65		DN125		
	Outlet	—	DN65		DN125		
Evaporator		—	Shell-and-Tube Flooded Type				
Piping connections for water side heat exchanger	Inlet	—	DN65		DN125		
	Outlet	—	DN65		DN125		
Safety devices		—	Three-Phase Over current Relay, High-Pressure Switch, High and Low-Pressure Control, Oil Heater, Internal Thermostat for Compressor Motor, Freeze Protection Control, Reverse Phase Protection Control, Discharge Gas Overheat Protection, Compressor frequent ON/OFF control ,Pressure Relief Valve, Overcurrent Relay and Water Pressure Difference Switch.				
Shipping Dimensions	Length	mm	2,345		4,105		
	Width	mm	1,435				
	Height	mm	1,689				
Shipping weight		kg	1,920	2,020	3,290	3,440	3,590

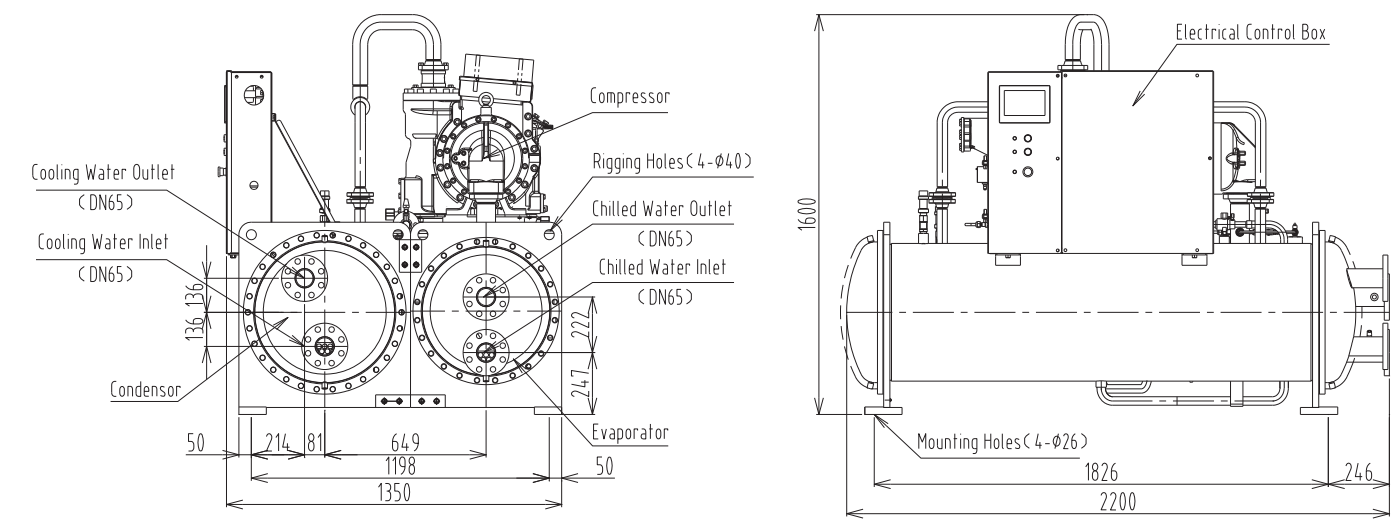
Model		RCUF160WZPY	RCUF210WZPY	RCUF265WZPY	RCUF320WZPY	RCUF370WZPY	RCUF420WZPY	RCUF475WZPY	RCUF530WZPY	
Power Source		Main[A C3φ]380,415V/50Hz,Control[AC1φ]220,240V/50Hz								
Nominal cooling capacity		kW	559	745	931	1117	1303	1490	1676	1862
		USRT	159	212	265	318	371	424	477	530
		kcal/h	480,740	640,700	800,660	960,620	1,120,580	1,281,400	1,441,360	1,601,320
Power input		kW	87.3	116.4	145.5	174.6	203.7	232.8	261.8	290.9
COP		WW	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
Capacity control		—	Continuous capacity control							
		%	100-25.0							
Outer dimensions	Length	mm	3,373			4,804	5,404	4,804	5,304	4,804
	Width	mm	1,715			1,949				
	Height	mm	2,311			2,419				
Net weight		kg	3,974	4,443	4,670	7,548	8,155	8,486	8,817	8,940
Refrigerant	Type	—	R134a [charged]							
	Number of circuits	—	1	1	1	2	2	2	2	2
Compressor	Type	—	Semi-Hermetic Screw Type (R134a only)							
	Model	GSCCW**Z	150	200	250	150	200+150	200	250+200	250
	Quantity	Set	1	1	1	2	1+1	2	1+1	2
Condenser		—	Shell-and-Tube Type							
Piping connections for water side heat exchanger	Inlet	—	DN150			DN200				
	Outlet	—	DN150			DN200				
Evaporator		—	Shell-and-Tube Flooded Type							
Piping connections for water side heat exchanger	Inlet	—	DN150			DN200				
	Outlet	—	DN150			DN200				
Safety devices		—	Three-Phase Over current Relay, High-Pressure Switch, High and Low-Pressure Control, Oil Heater, Internal Thermostat for Compressor Motor, Freeze Protection Control, Reverse Phase Protection Control, Discharge Gas Overheat Protection, Compressor frequent ON/OFF control ,Pressure Relief Valve, Overcurrent Relay and Water Pressure Difference Switch.							
Shipping Dimensions	Length	mm	3,520			4,959	5,559	4,959	5,459	4,959
	Width	mm	1,800			2,034				
	Height	mm	2,400			2,508				
Shipping weight		kg	4,004	4,473	4,700	7,598	8,215	8,536	8,877	8,990

Notes:

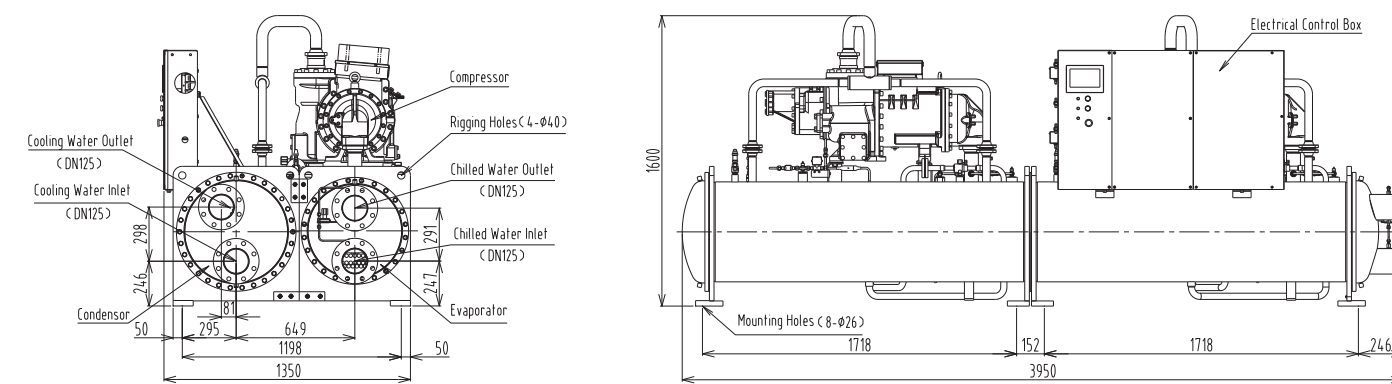
1. The nominal cooling capacities are based on the GB/T18430.1  
Evaporator Water outlet temperature/water flow rate: 7°C/0.172m³/[h.kW]  
Condenser Water inlet temperature/water flow rate: 30°C/0.215m³/[h.kW]  
The fouling factor of evaporator is 0.018m².C/kW, the fouling factor of condenser is 0.044m².C/kW
2. Working Range:  
Condenser Water outlet temperature : 22°C ~ 40°C  
Evaporator Water outlet temperature : 5°C ~ 20°C [RCUF50~130WZPY]  
4°C ~ 15°C [RCUF160~530WZPY]
3. Power Source:  
Main Power Source [3φ]      Control Power Supplies [1φ]  
380V 50Hz                      220V 50Hz  
415V 50Hz                      240V 50Hz

Dimensional Data

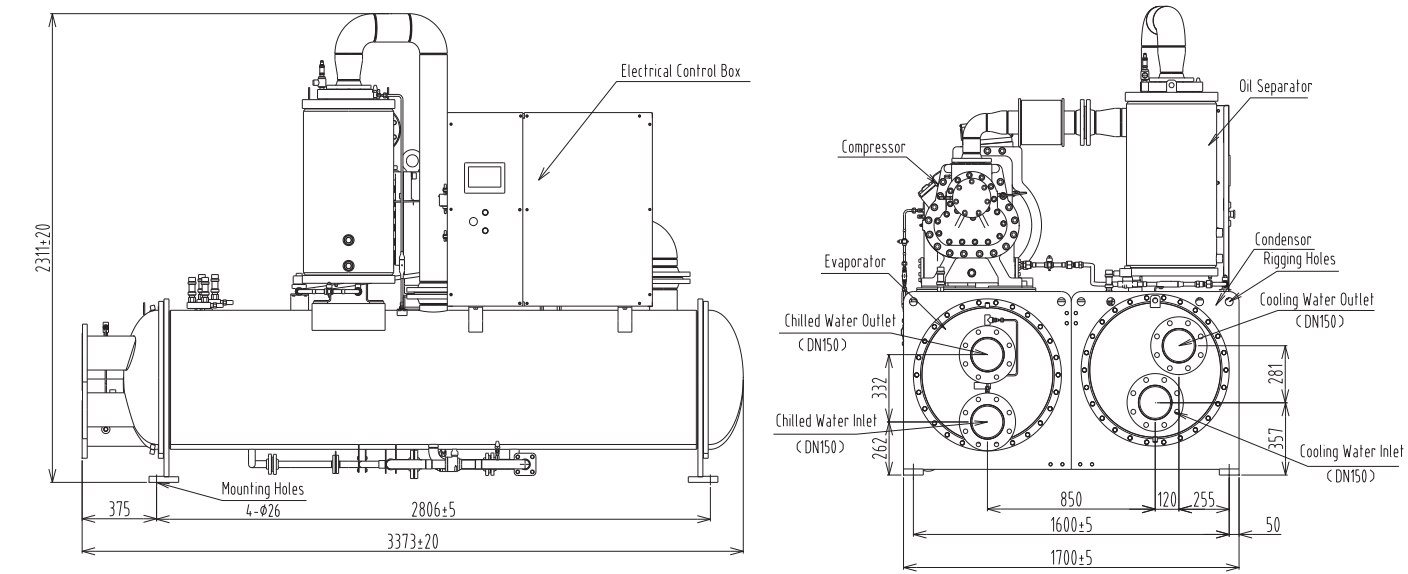
RCUF50 / 65WZPY



RCUF80 / 110 / 130WZPY



RCUF160 / 210 / 265WZPY



RCUF320 / 370 / 420 / 475 / 530WZPY

