

Johnson Controls - Hitachi Air Conditioning

Manufactured by:

Johnson Controls-Hitachi Wanbao Air Conditioning (Guangzhou) Co.,Ltd.
Address:No.1108.ChengAo East Road, Conghua,Guangzhou City, Guangdong Province,China
Homepage Site: <http://www.jci-hitachi.com/ga>

Distributed by:

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



Optimize Your Solution with Hitachi Water Cooled Chiller

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

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



Better Performance And Energy Saving

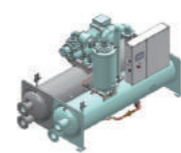
Hitachi's new water-cooled chiller(WZPY Series) adopts more efficient semi-hermetic twin-screw compressor and better shell-and tube flooded evaporator brings you significant energy saving experience under stable and durable operation.

Current Model



Cooling Capacity (kW) 805
COP 5.60

New Model



Cooling Capacity (kW) 931
COP 6.40 ↗ 14%

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.

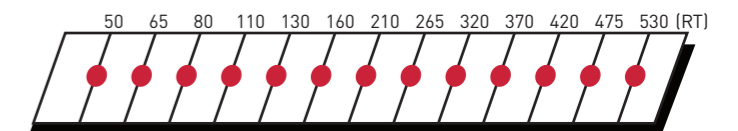
Our new water-cooled chillers adopt G-type semi-hermetic twin-screw compressors that only available to R134a refrigerant .



Wide Line-up

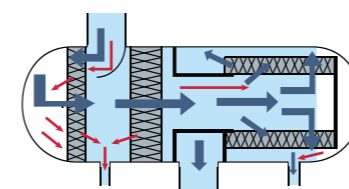
To meet the need of air conditioning systems for large facilities and the demand for higher capacity industrial cooling systems.

RCUF***WZPY



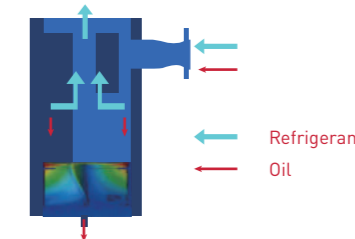
Oil Separator

Current Model



Filter Oil Separator
High Pressure Drop,
More Energy Consumption

New Model



Cyclone Oil Separator
Low Pressure Drop,
Less Energy Consumption

R134a

0 ozone depletion potential (ODP)
HFC134a refrigerant

R134a G-type twin-screw compressor

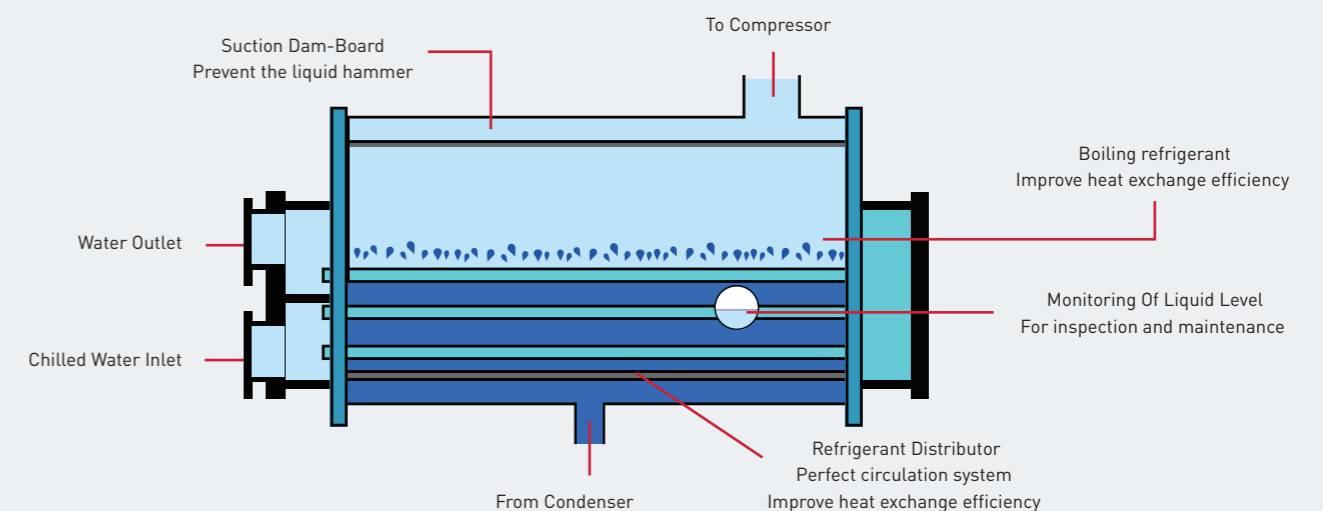
High efficiency shell-and-tube flooded evaporator

User-friendly touch LCD Panel

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



High Efficiency Flooded Type Evaporator

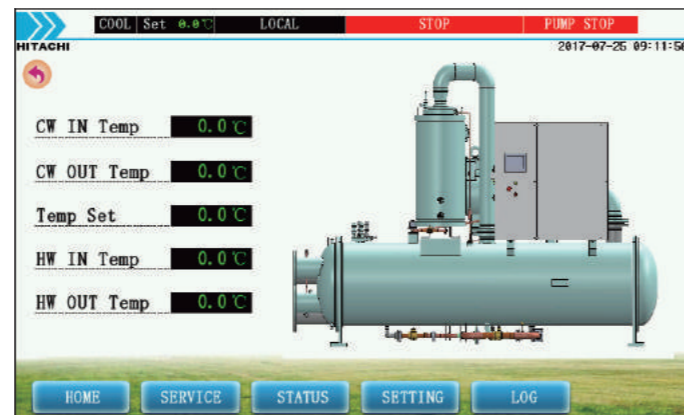


Intelligent Control

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.

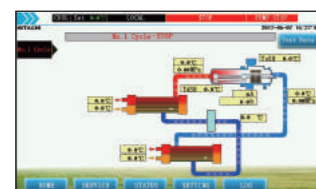
Main Page



Compressor Page



Status Page



Parameter Setting Page

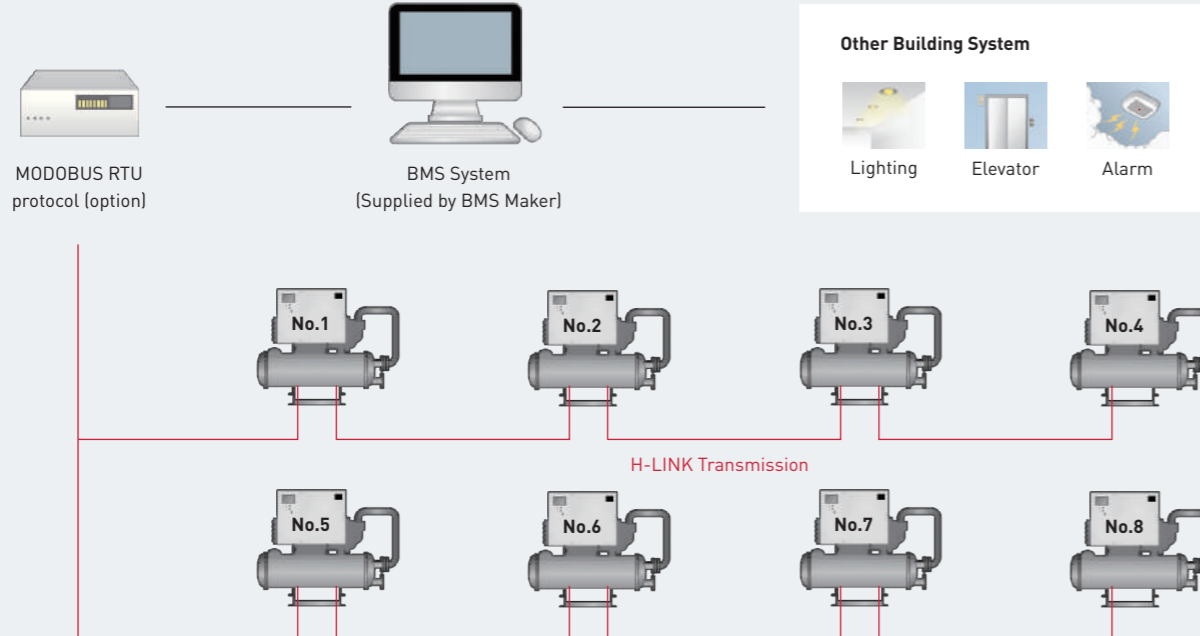


Setting Page



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

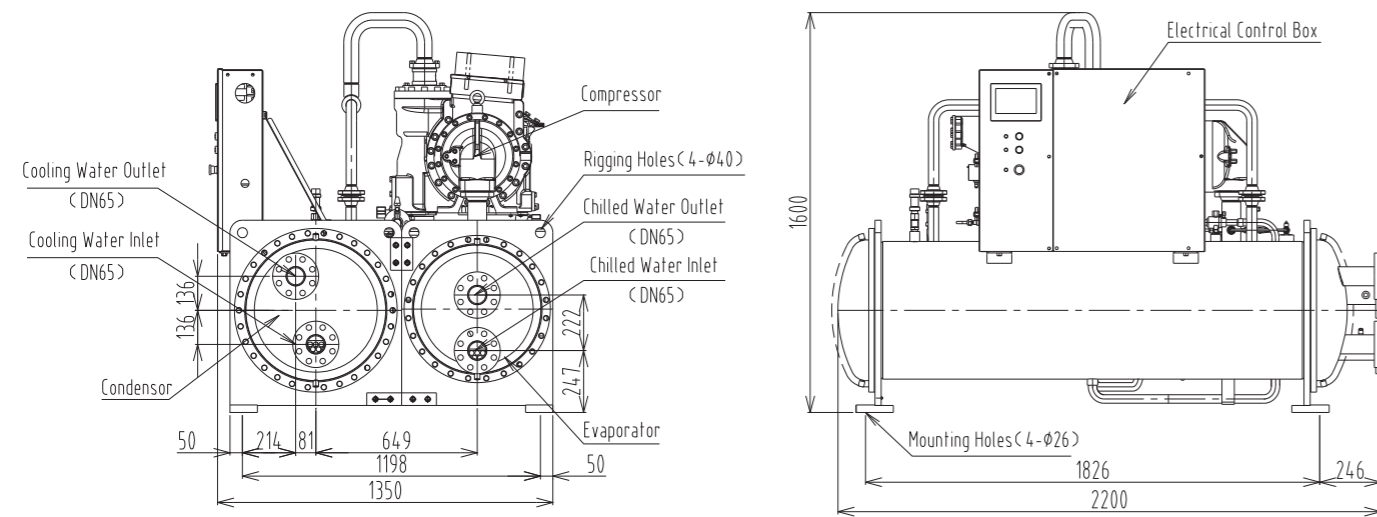
Model		RCUF50WZPY	RCUF65WZPY	RCUF80WZPY	RCUF110WZPY	RCUF130WZPY
Power Source		Main(A C3φ)380,415V/50Hz,Control(AC1φ)220,240V/50Hz				
Nominal cooling capacity	kW	190	238	298	383	478
	USRT	54	68	85	109	136
Power input	kcal/h	163,400	204,680	256,280	329,380	411,080
	kW	32.2	40.3	50.5	64.9	81.0
COP	WW	5.90	5.90	5.90	5.90	5.90
	—	Continuous capacity control				
Capacity control	%	100-25.0				
	Length	2,200		3,950		
	Width	1,350				
Outer dimensions	Height	1,600				
	mm	1,600				
Net weight	kg	1,900	2,000	3,250	3,400	3,550
	Type	R134a (charged)				
Refrigerant	Number of circuits	1	1	2	2	2
	Type	Semi-Hermetic Screw Type (R134a only)				
Compressor	Model	GSCCW**Z	50	60	40	50
	Quantity	Set	1	1	2	2
Condenser	—	Shell-and-Tube Type				
	Piping connections for water side heat exchanger	Inlet	DN65		DN125	
Evaporator	—	Shell-and-Tube Flooded Type				
	Piping connections for water side heat exchanger	Inlet	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	2,345			4,105
Width		1,435				
Height		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	
Power input	kcal/h	480,740	640,700	800,660	960,620	1,120,580	1,281,400	1,441,360	1,601,320	
	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	
	—	Continuous capacity control								
Capacity control	%	100-25.0								
	Length	3,373			4,804		5,404		4,804	
	Width	1,715					1,949		2,419	
Outer dimensions	Height	2,311					2,419			
	mm	2,311					2,419			
Net weight	kg	3,974	4,443	4,670	7,548	8,155	8,486	8,817	8,940	
	Type	R134a (charged)								
Refrigerant	Number of circuits	1	1	1	2	2	2	2	2	
	Type	Semi-Hermetic Screw Type (R134a only)								
Compressor	Model	GSCCW**Z	150	200	250	150	200+150	200	250+200	
	Quantity	Set	1	1	1	2	1+1	2	1+1	
Condenser	—	Shell-and-Tube Type								
	Piping connections for water side heat exchanger	Inlet	DN150			DN150		DN200		DN200
Evaporator	—	Shell-and-Tube Flooded Type								
	Piping connections for water side heat exchanger	Inlet	DN150			DN150		DN200		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	3,520			4,959		5,559		4,959
Width		1,800					2,034		2,508	
Height		2,400					2,508			
Shipping weight	kg	4,004	4,473	4,700	7,598	8,215	8,536	8,877	8,990	

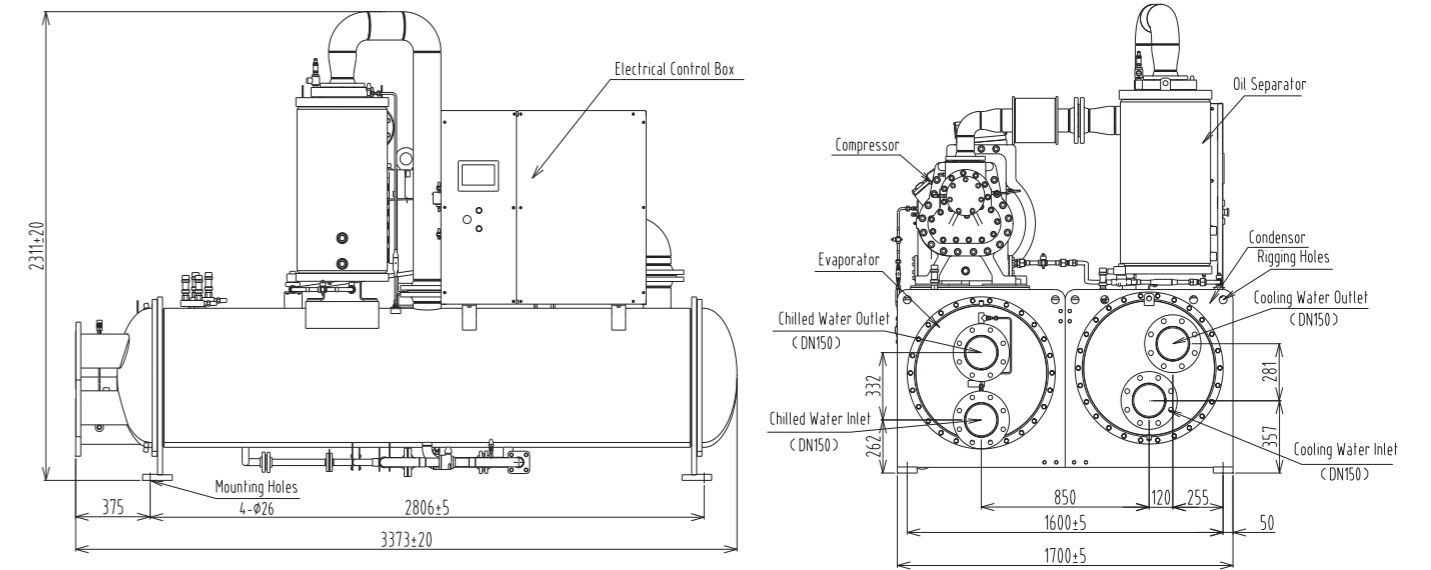
Notes:
 1. The nominal cooling capacities are based on the GB/T18430.1
 Evaporator Water outlet temperature/water flow rate: 7°C/0.172m³/h.kW
 Condenser Water inlet temperature/water flow rate: 30°C/0.215m³/h.kW
 The fouling factor of evaporator is 0.018m².C/kW, the fouling factor of condenser is 0.044m².C/kW.
 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

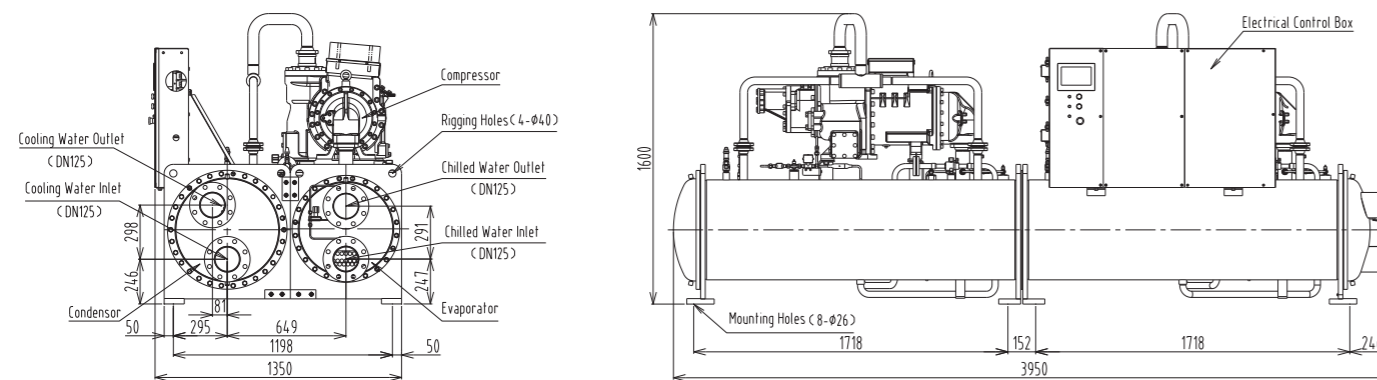
RCUF50 / 65WZPY



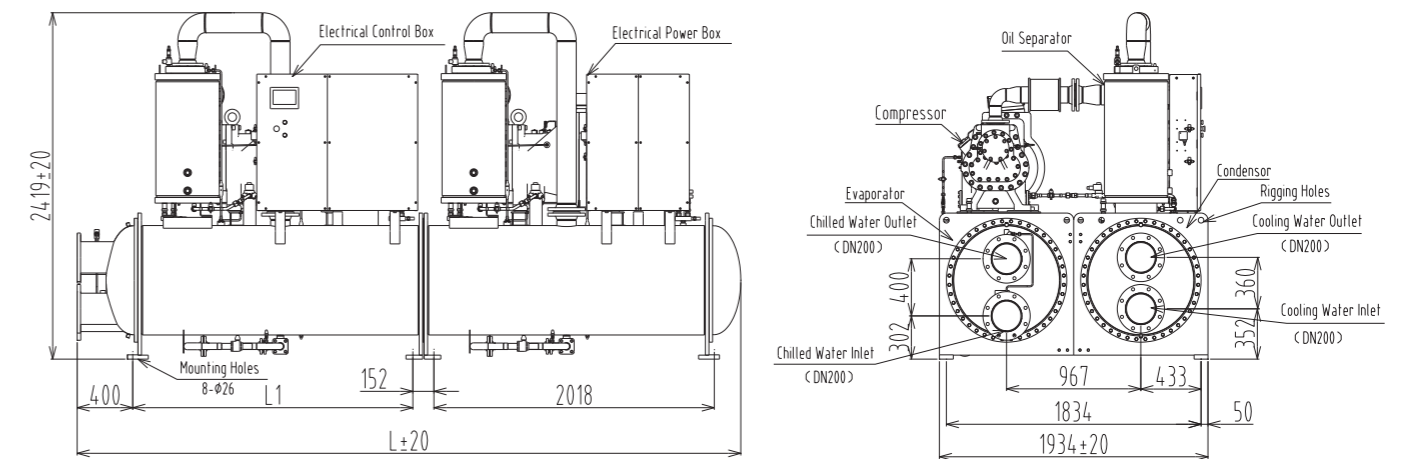
RCUF160 / 210 / 265WZPY



RCUF80 / 110 / 130WZPY



RCUF320 / 370 / 420 / 475 / 530WZPY



Unit type	L	L1
RCUF320WZPY	4804	2018
RCUF370WZPY	5404	2618
RCUF420WZPY	4804	2018
RCUF475WZPY	5304	2518
RCUF530WZPY	4804	2018