

**HITACHI**



**air**



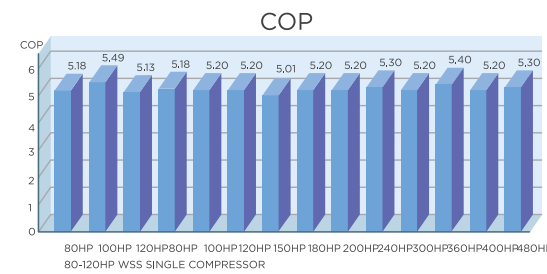
**FLOODED WATER CHILLER**



## ENVIRONMENTALLY FRIENDLY REFRIGERANT SAVES ENERGY

Hitachi Flooded Water Chillers use environment friendly refrigerant R134a in place of traditional Chlorofluorocarbons (CFCs). R134a is a highly stable, low-toxicity and non-flammable refrigerant without chlorine. In using it, we help preserve the environment.

## ENERGY SAVING, HIGH EFFICIENCY



The entire line of Hitachi Water Chillers has COP values greater than 5. This allows the machine to operate for long periods while saving energy. Hitachi Flooded Water Chillers are the smart and economical choice.

## EASY-TO-USE CONTROL & CONVENIENT TO MANAGE



- Touchscreen interface displays the operation status of the main machine (voltage, current, temperature, and pressure) in real time, providing flexibility and convenience of use.
- The RS485 communication interface can be used as a central control to facilitate central management.
- The Programmable Logical Controller (PLC) is used for precise logical control, maintaining a highly efficient, safe and stable operation of the main machine. The conditions of operation can be completely recorded, facilitating management by a system manager.
- Through a current measuring device, operation current can be restricted, which saves energy and improves safety.
- The machine can be set to turn on/off weekly, which further increases the efficiency of system management.



## SELF-DIAGNOSE & INTELLIGENT OPERATION INSPECTION

- Equipped with voltage, current, temperature and pressure protective functions.
- Timely adjustment of operation conditions of the main machine, preventing failures.
- During failure, immediately display and record cause of failure to facilitate service and inspection.

## HIGH PERFORMANCE SCREW COMPRESSOR

These advanced screw compressors, which are imported from Germany, are built to perform efficiently at high speed and use rotary motion for compression. Simple in structure yet exceptionally functional, they do not use unnecessary motions, hence they reduce noise and vibration.

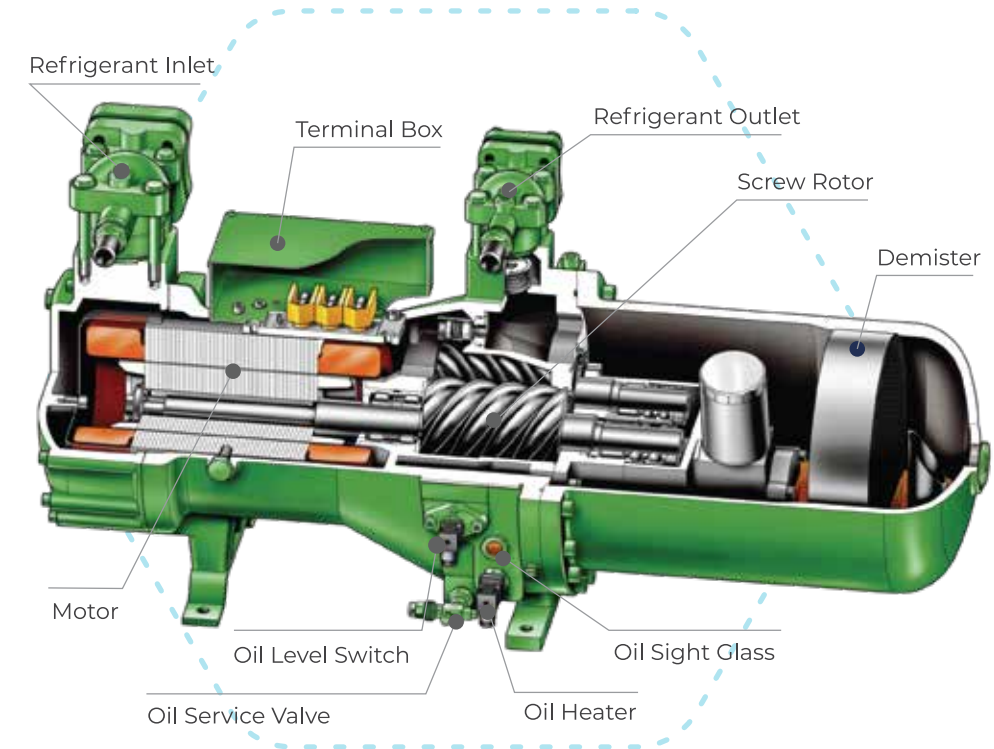
## HIGH EFFICIENCY SHELL & TUBE TYPE

The sophisticated design of the shell and tube further increases the machine's efficiency.

## CONTINUOUS CAPACITY CONTROL

The Continuous Capacity Control function allows users to automatically adjust the operation (25-100%) according to load by precisely controlling the machine's water output temperature.

## Why Does a SEMI-HERMETIC SCREW Work Better?



- Because the motor is encased in the compressor, the machine works quietly.
- It automatically cools the air it takes in, which further increases efficiency, so it does not require frequent maintenance service.
- No oil pumps needed. Lubricant oil is fed into the machine using the difference between the high and low pressure regions of the compressor.
- Reliable operation is guaranteed because the device uses state-of-the-art components such as pump and motors, couplers for transmission and oil-pressure regulating valves.
- It has a shaft seal device that prevents leakages.
- The high-efficiency filter in the compressor, which is less adhesive, effectively reduces oil loss while filtering it.
- It is built with an advanced PTC temperature protector that protects motor coil and discharges temperatures. Furthermore, this component comprehensively monitors phase failure and reverse.
- It has an optoelectronic oil level switch that regulates the amount of oil in the compressor to ensure its continuous function.

## IDEAL FOR



Factories



Universities/Malls



Warehouses

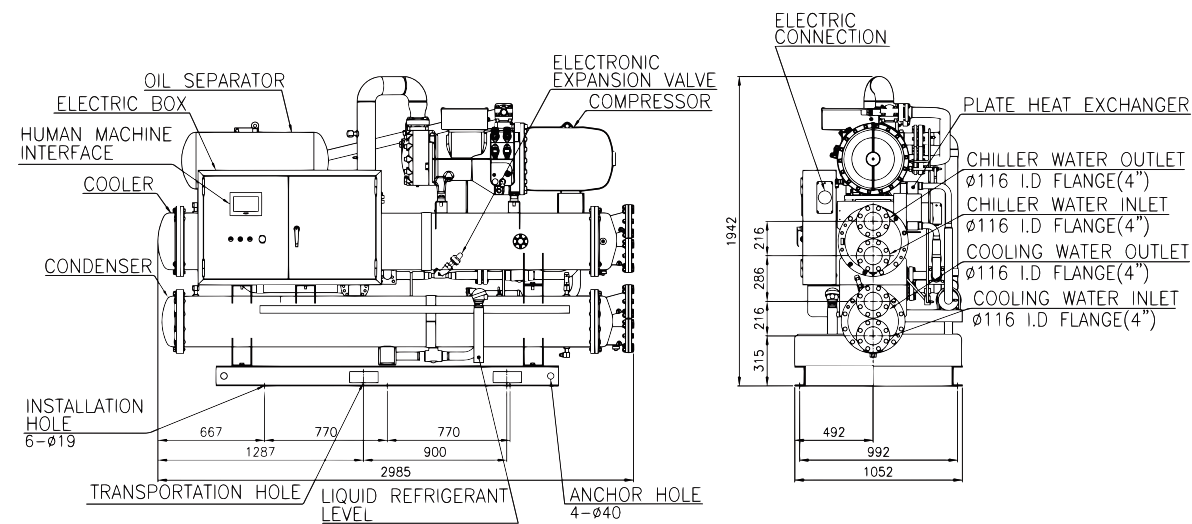


Offices

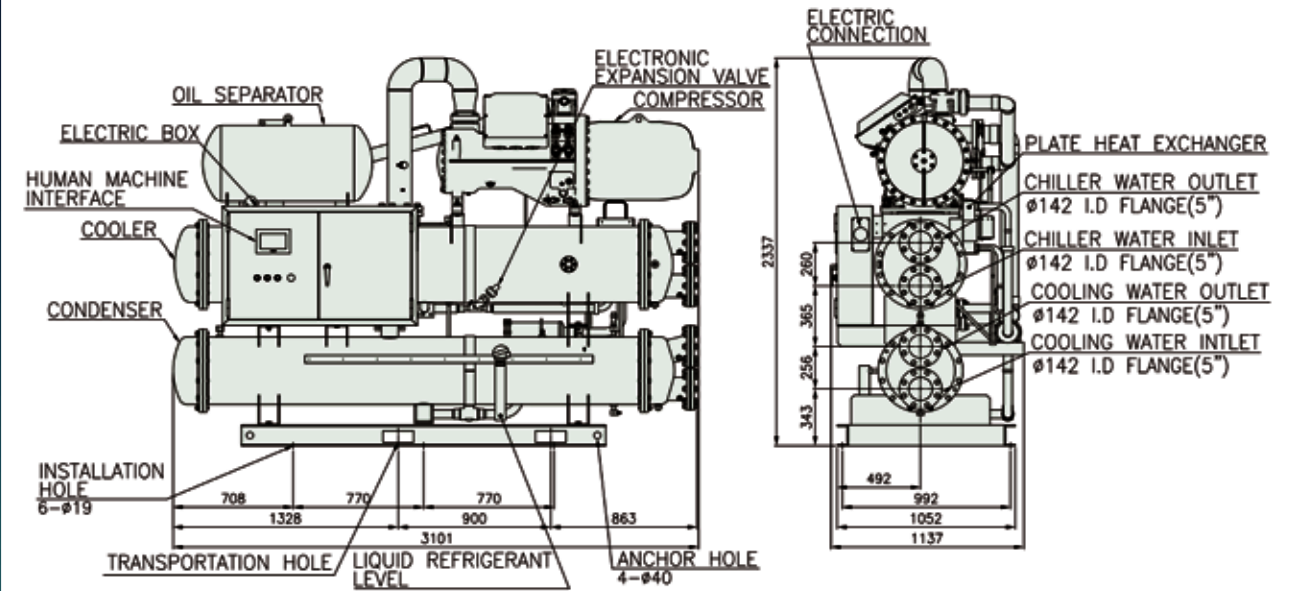


Supermarkets

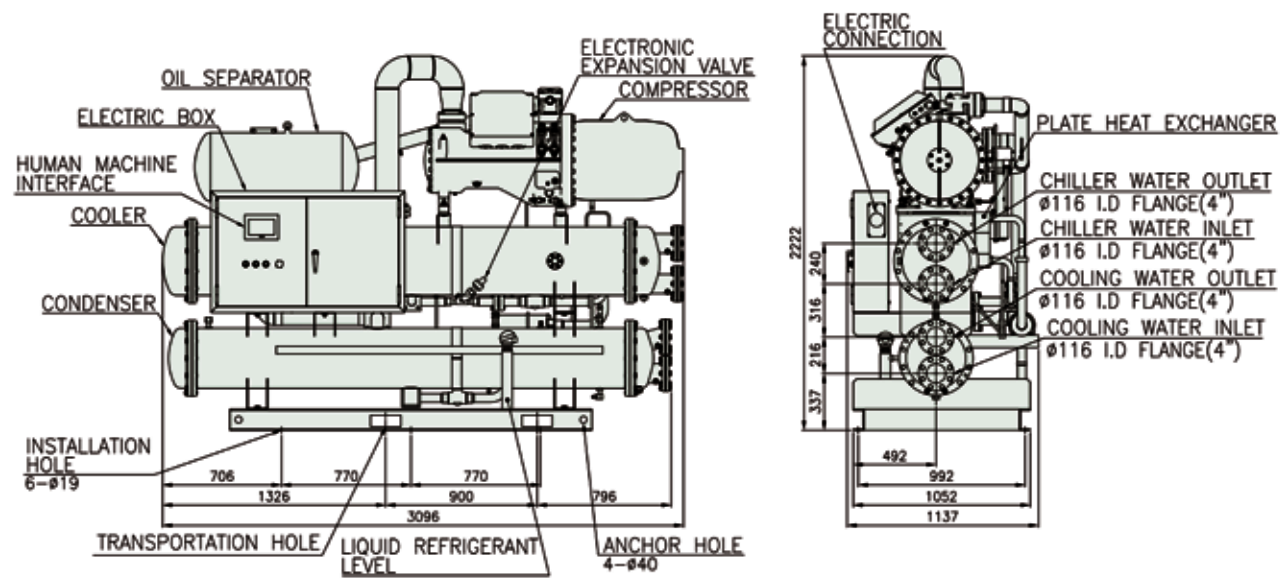
RCU-F801WSS



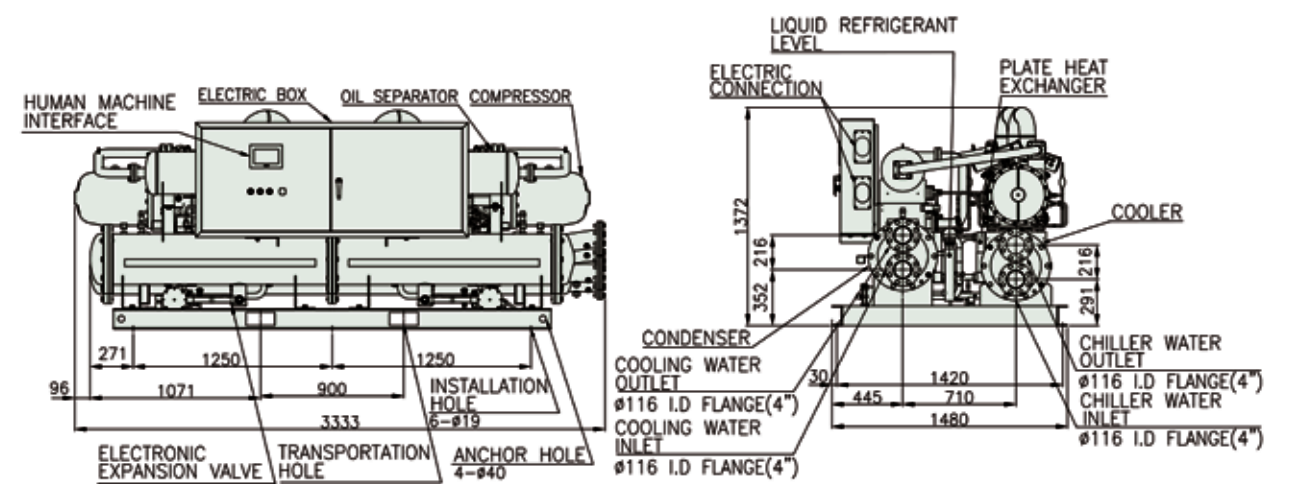
RCU-F1201WSS



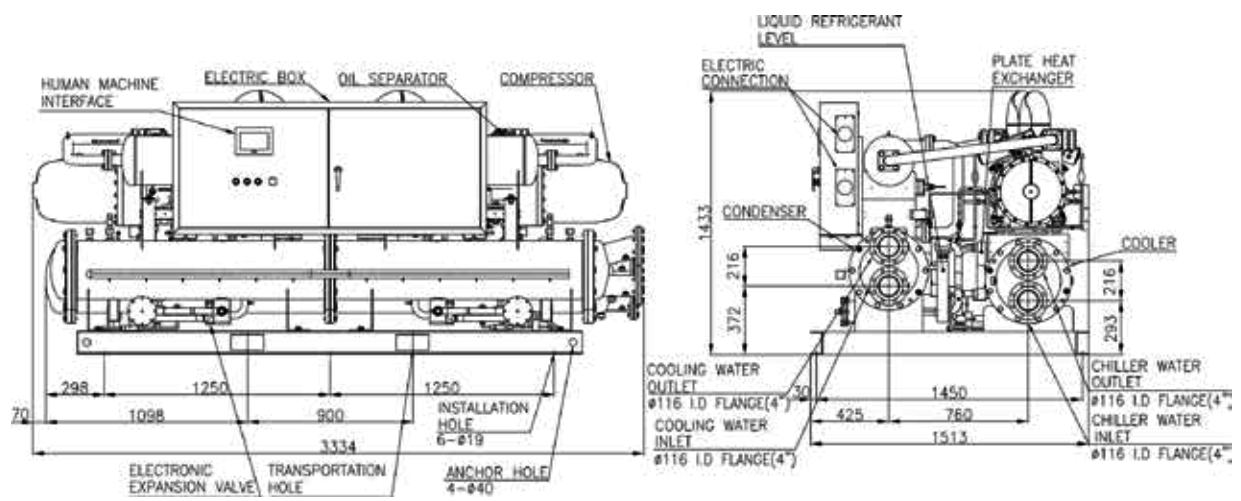
RCU-F1001WSS



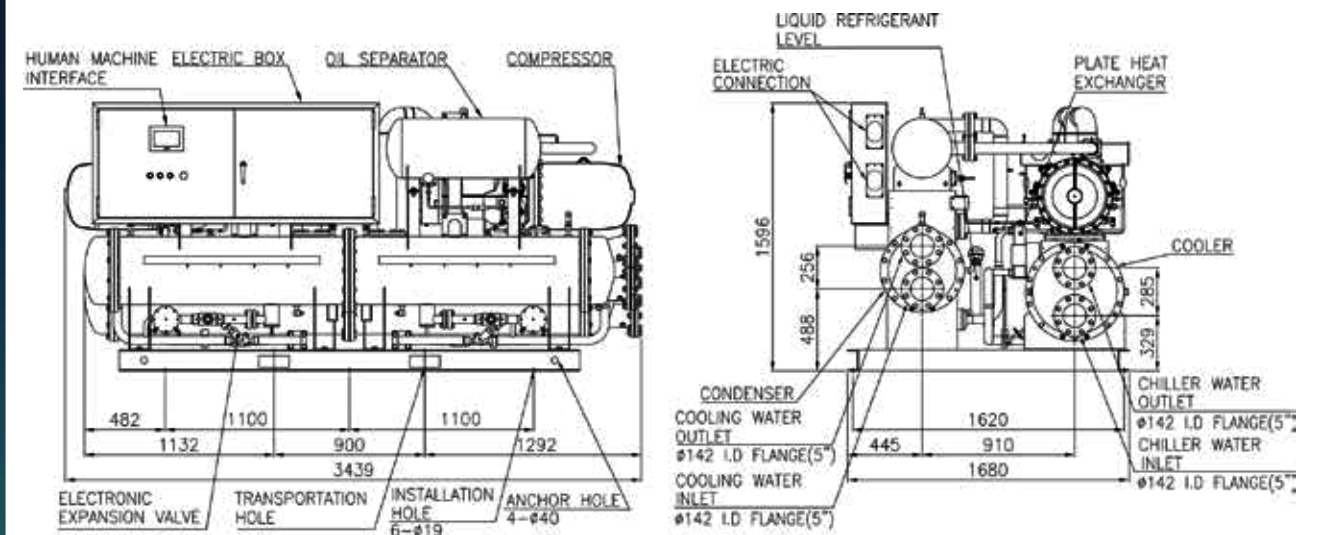
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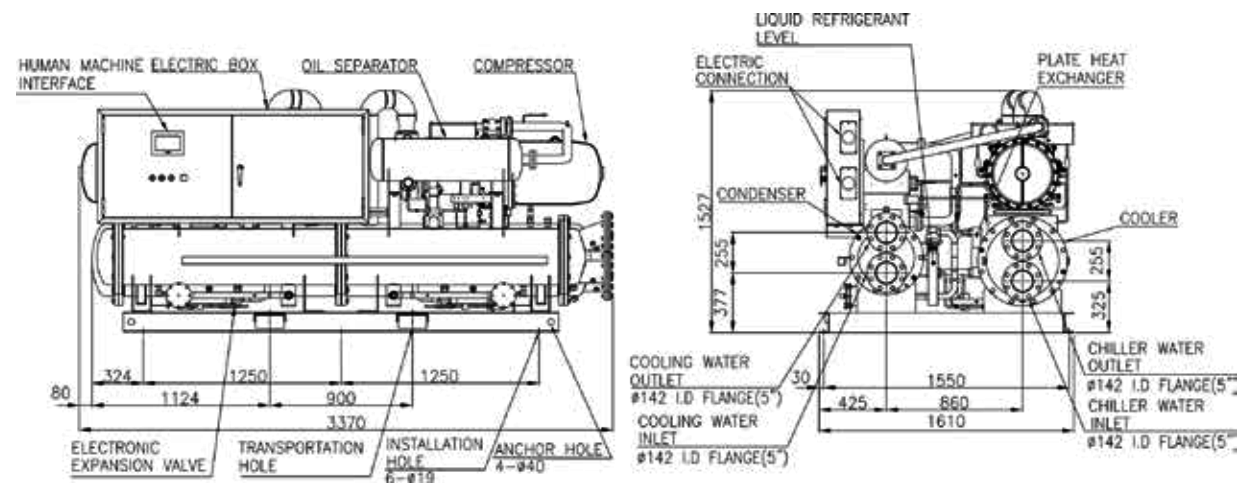
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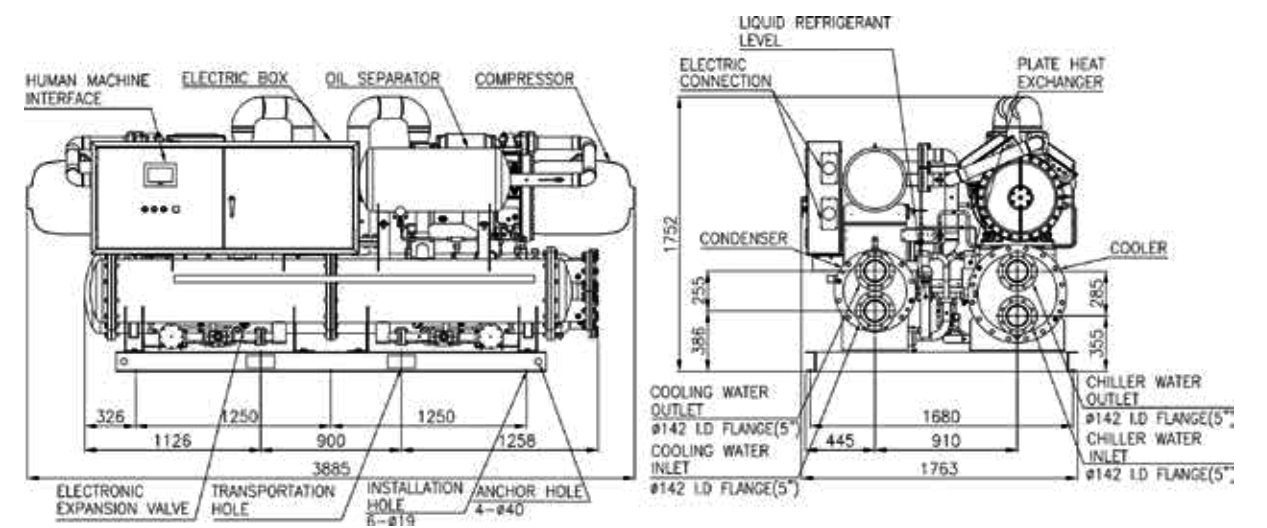
RCU-F1501WSD



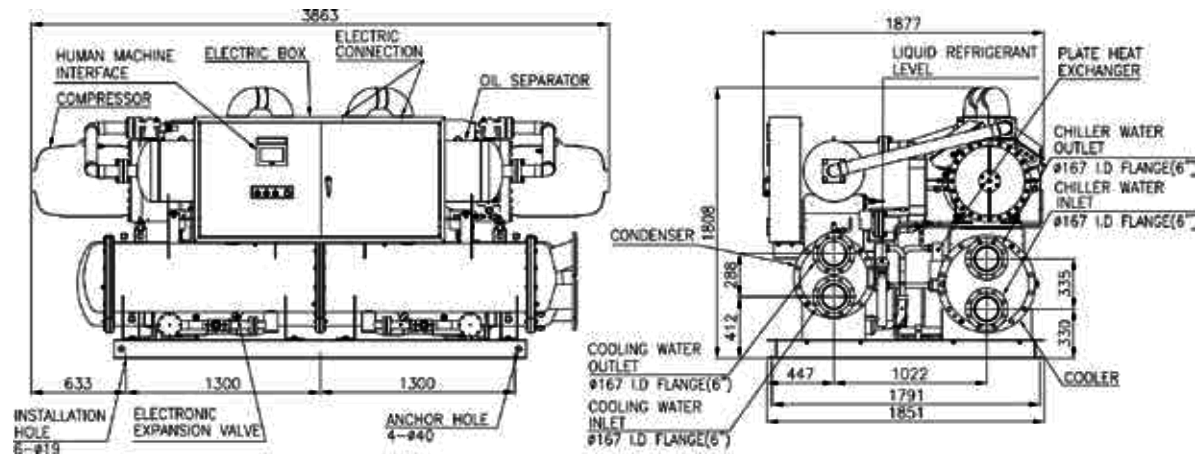
RCU-F1201WSD



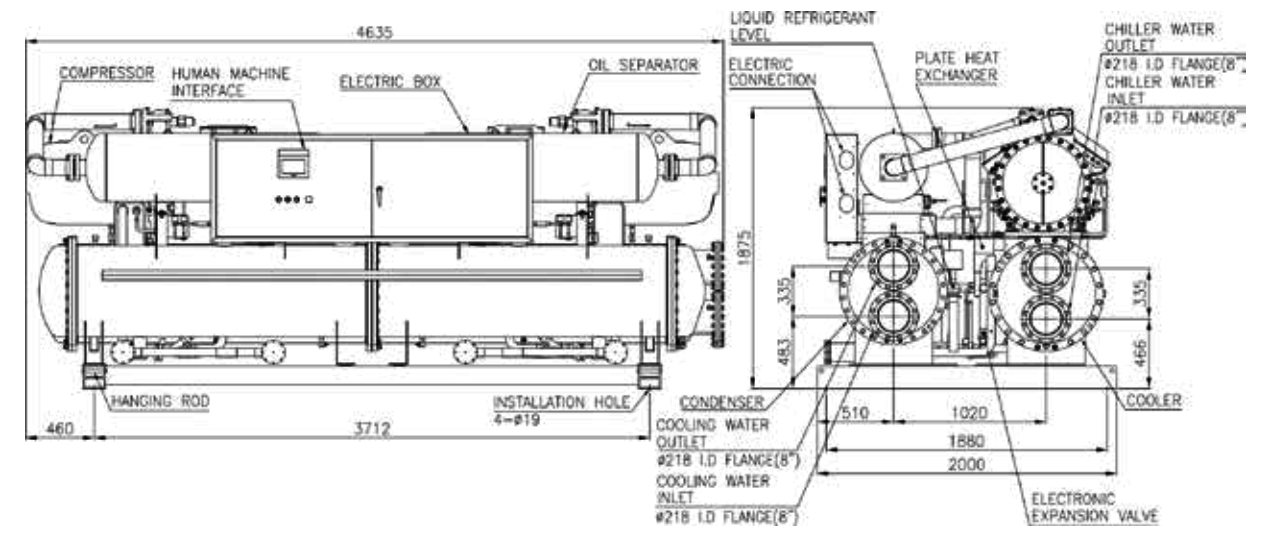
RCU-F1801WSD / RCU-F2001WSD



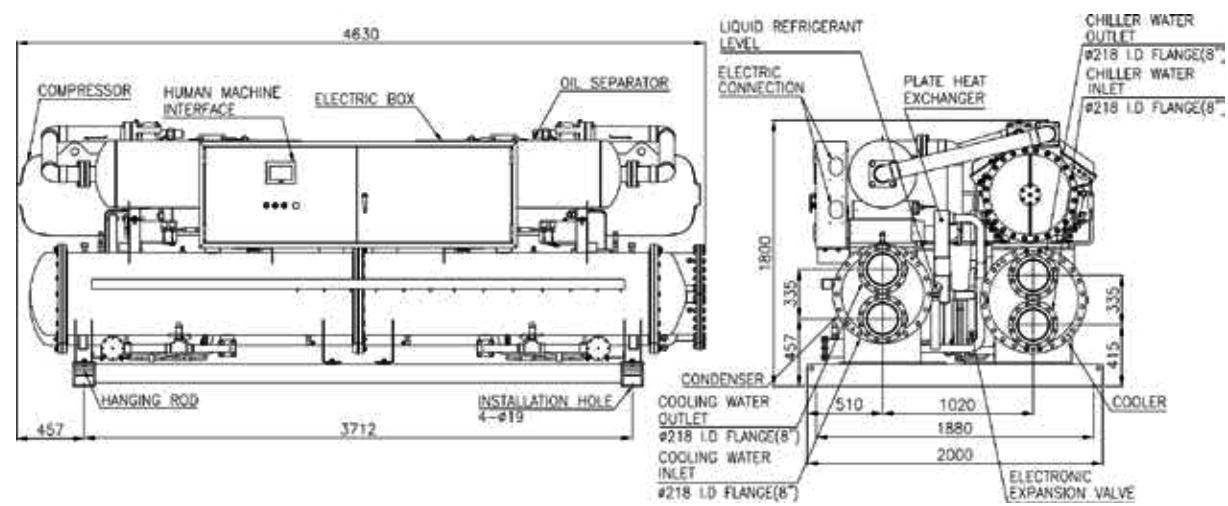
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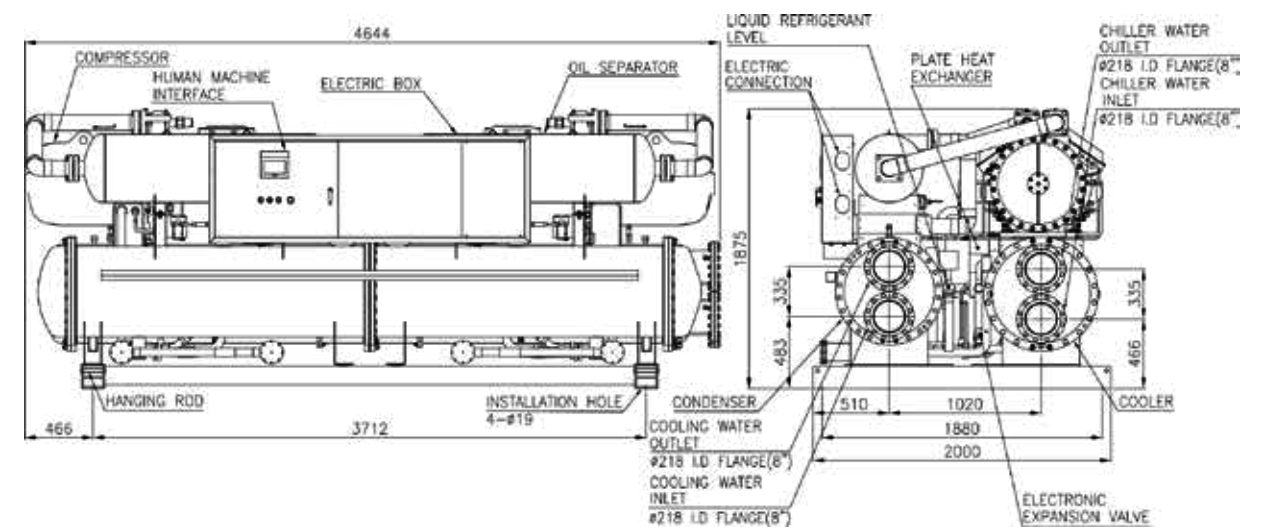
RCU-F3601WSD



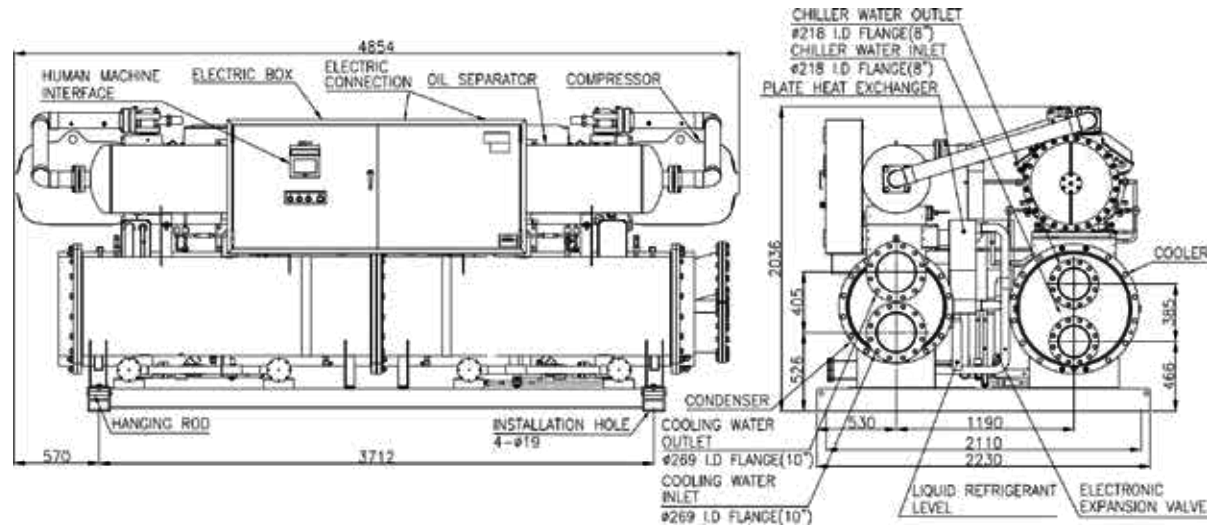
RCU-F3001WSD



RCU-F4001WSD



## RCU-F4801WSD



## GENERAL UNIT DATA

Item	Model	RCU-F801WSS	RCU-F1001WSS	RCU-F1201WSS	RCU-F801WSD	RCU-F1001WSD	RCU-F1201WSD	RCU-F1501WSD	RCU-F1801WSD	RCU-F2001WSD	RCU-F2402WSD	RCU-F3001WSD	RCU-F3601WSD	RCU-F4001WSD	RCU-F4801WSD		
Cooling Capacity	kW	281.3	351.6	422.0	295.0	351.6	422.0	545.0	665.0	719.0	906.0	1,054.8	1,265.8	1,406.4	1,687.8		
COP	W/W	5.18	5.49	5.13	5.18	5.20	5.20	5.01	5.20	5.20	5.30	5.20	5.40	5.20	5.30		
Dimension	Width	mm	2,985	3,098	3,101	3,333	3,334	3,370	3,439	3,885	3,885	3,863	4,630	4,635	4,644	4,854	
	Depth	mm	1,052	1,137	1,137	1,480	1,513	1,610	1,680	1,763	1,763	1,877	2,000	2,000	2,000	2,230	
	Height	mm	1,942	2,222	2,337	1,372	1,433	1,527	1,596	1,752	1,752	1,808	1,800	1,875	1,875	2,036	
Compressor	Type	Semi-hermetic Screw															
	Quantity	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	
	Crankcase Heater	W	200	300	300	200 x 2	200 x 2	200 x 2	200 x 2	300 x 2	300 x 2	300 x 2	300 x 2	300 x 2	300 x 2	300 x 2	
Condenser Type	Shell and Tube																
Chiller Type	Shell and Tube (Flooded)																
Expansion Valve Control	Electronic Expansion Valve																
Refrigerant	Type	R134a															
	Quantity	kg	70	90	120	40 x 2	40 x 2	54 x 2	80 x 2	81 x 2	81 x 2	112 x 2	145 x 2	200 x 2	190 x 2	240 x 2	
Oil	Type	BSE170L															
	Quantity	ℓ	15	22	19	10 x 2	10 x 2	15 x 2	15 x 2	22 x 2	22 x 2	19 x 2	30 x 2	30 x 2	30 x 2	35 x 2	
Starting Method	Part Winding										Y-Δ						
Absorber	Vibration Damper for Compressor																
Protection Device	High Pressure Switch/Low Pressure Switch/Reverse Phase Protection Relay/Anti-Freeze Switch/Overload Protect/Discharge Temperature Protector/Fuses for Control Circuit/Relief Valve/Oil Level Protection																
Operation Device	Monitoring Devices	Human Machine Interface/Programmable Logic Controller(PLC)															
	Monitoring Items	Voltage/Current/Temperature/Pressure/Expansion Valve Position/Liquid Refrigerant Level/Current Limit Setting/Setting Running Day/Inspection and Replacement Interval Reminder															
	Pilot Lamp	Green—Normal / Red—Abnormal / White—Power Supply															
	Capacity Control	%	0, 25-100					0, 12.5-100									
Chiller	Connections	I.D.φ116mm(4) (With Flange)		I.D.φ142mm(5) (With Flange)	I.D.φ116mm(4) (With Flange)		I.D.φ142mm(5) (With Flange)			I.D.φ167mm(6) (With Flange)	I.D.φ218mm(8) (With Flange)						
	Standard Flow	m <sup>3</sup> /h	48.0	60.0	72.0	50.3	60.0	72.0	93.0	113.5	122.6	154.6	180.0	216.0	240.0	288.0	
	Pressure Drop	mAq	5.7	5.3	4.4	6.8	4.5	3.8	5.8	6.6	7.4	6.6	9.6	7.7	9.5	6.9	
Condenser	Connections	I.D.φ116mm(4) (With Flange)		I.D.φ142mm(5) (With Flange)	I.D.φ116mm(4) (With Flange)		I.D.φ142mm(5) (With Flange)			I.D.φ167mm(6) (With Flange)	I.D.φ218mm(8) (With Flange)		I.D.φ269mm(10) (With Flange)				
	Standard Flow	m <sup>3</sup> /h	60.0	75.0	90.0	62.9	75.0	90.0	116.3	141.9	153.4	193.3	225.0	270.0	300.0	360.0	
	Pressure Drop	mAq	4.8	5.1	4.0	4.4	4.8	4.8	5.1	6.0	6.4	7.1	7.2	7.1	7.8	7.3	
Power Supply		AC, 3φ, 60Hz, 220V / 380V / 440V / 460V		AC, 3φ, 60Hz, 380V / 440V / 460V		AC, 3φ, 60Hz, 220V / 380V / 440V / 460V					AC, 3φ, 60Hz, 380V / 440V / 460V						
Electrical Data	Power Input	kW	54.3	64.0	82.2	56.9	67.6	81.0	108.7	127.9	138.3	170.9	202.8	235.0	270.5	318.5	
		Running Current	220V	158	187	—	180	211	245	335	381	412	—	—	—	—	—
			380V	92	108	142	105	122	142	185	221	239	316	354	400	472	563
			440V	79	94	123	91	105	123	161	191	206	273	287	345	408	486
	Starting Current	460V	76	89	117	87	101	117	153	183	198	261	275	330	390	465	
		220V	732	885	—	600	625	750	1,025	1,110	1,170	—	—	—	—	—	
		380V	513	534	742	410	455	500	644	730	740	910	1,040	1,100	1,210	1,380	
		440V	443	490	641	354	393	343	523	570	580	786	755	950	1,045	1,192	
460V	424	441	613	339	376	326	520	513	522	752	722	909	1,000	1,140			
Net Weight	kg	1,850	2,470	2,730	2,250	2,410	3,030	3,660	4,210	4,300	4,440	7,180	8,060	8,120	8,890		
Gross Weight	kg	1,960	2,610	2,890	2,360	2,570	3,220	3,870	4,420	4,500	4,670	7,850	8,900	8,960	9,720		

- Cooling capacities and electrical properties are based on CNS12575 (water chilling packages using the vapor compression cycle).
- Fouling factor: 0.000044m<sup>2</sup>/W °
- Operating range: Chiller Water Outlet Maximum 15°C/Minimum 5°C; Cooling Water Outlet Maximum 38°C/ Minimum 21°C
- The values of chiller and condenser pipe diameter in parentheses are imperial units.
- Specifications in this data are subject to change without prior notice, in order that HITACHI may bring the latest innovations to our customers.

*True*  
to Your Comfort ♡

MANILA OFFICE: TEL.: (02) 8362-4847 FAX: (02) 8362-1769 SERVICE: (02) 8362-3842  
CEBU OFFICE: TEL.: (032) 232-6634 FAX: (032) 231-7533 SERVICE: (032) 232-8831  
DAVAO OFFICE: TEL.: (082) 222-2200 FAX: (082) 222-3982



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Air conditioning solutions