HITACHI

air

SCREW WATER CHILLER

Hitachi Screw Water Chiller uses the advanced R134a refrigerant instead of traditional Chlorofluorocarbons (CFCs). Ozone-friendly and highly stable R134a is non-toxic, non-flammable and has no chlorine, so it does not pose harm to the environment.

EASY-TO-USE CONTROL SYSTEM

- Touchscreen Interface displays the operation status of the main machine (voltage, current and temperature) in real time.
- Modbus also works as a main control to facilitate central management.
- Records show operation time for easy monitoring of maintenance periods.
- Programmable Operation allows users to program the machine to turn on or off weekly, hence it increases system management efficiency.

SELF-DIAGNOSE AND INTELLIGENT OPERATION INSPECTION

- Equipped with voltage, current, temperature and pressure-protective functions.
- Prevents failures due to the timely adjustment of the main machine's operation conditions.
- Stores and displays accurate operation data for facilitating easy 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.

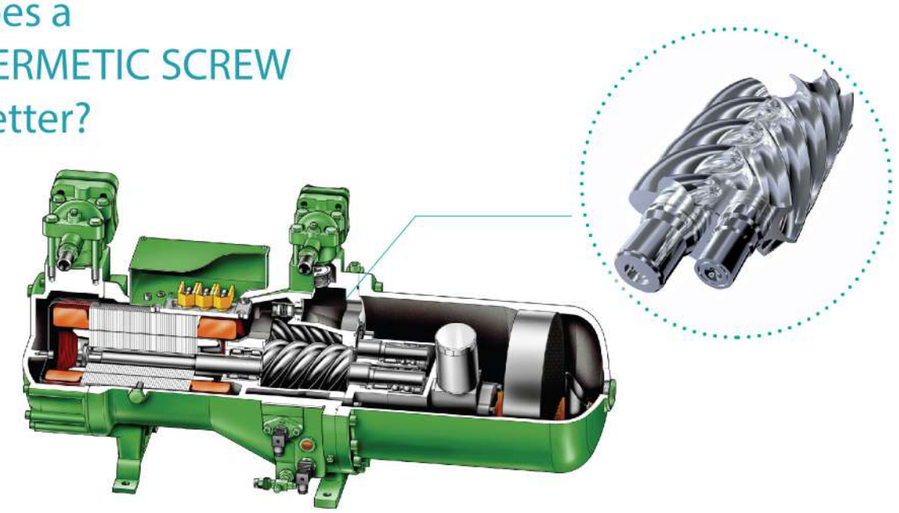
ERGONOMICALLY DESIGNED SHELL AND TUBE-TYPE HEAT EXCHANGER

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 discharge temperatures. Furthermore, this component comprehensively monitors phase failure and reverse.
- It has an opto-electronical oil level switch that regulates the amount of oil in the compressor to ensure its continuous function.

Ideal for:


Factories

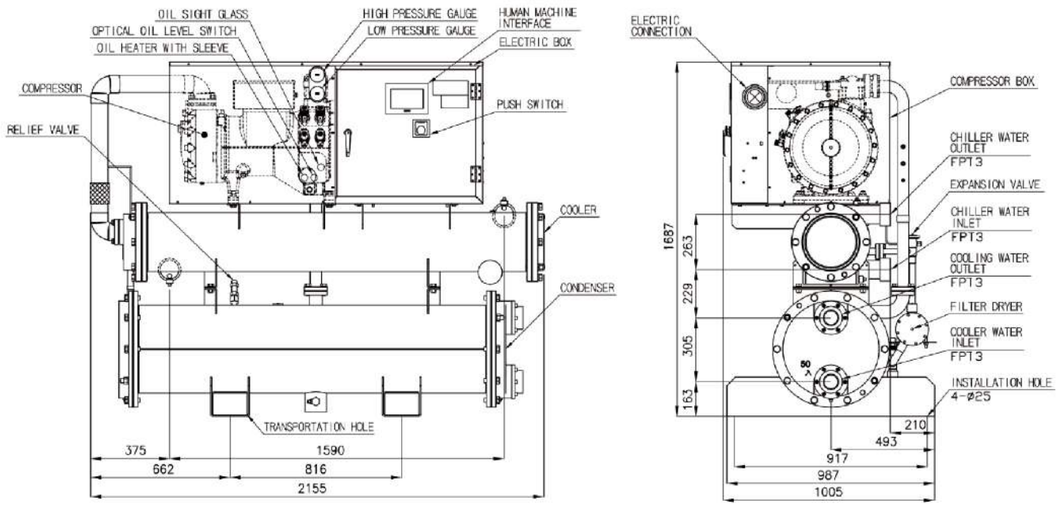

Universities/Malls


Warehouses

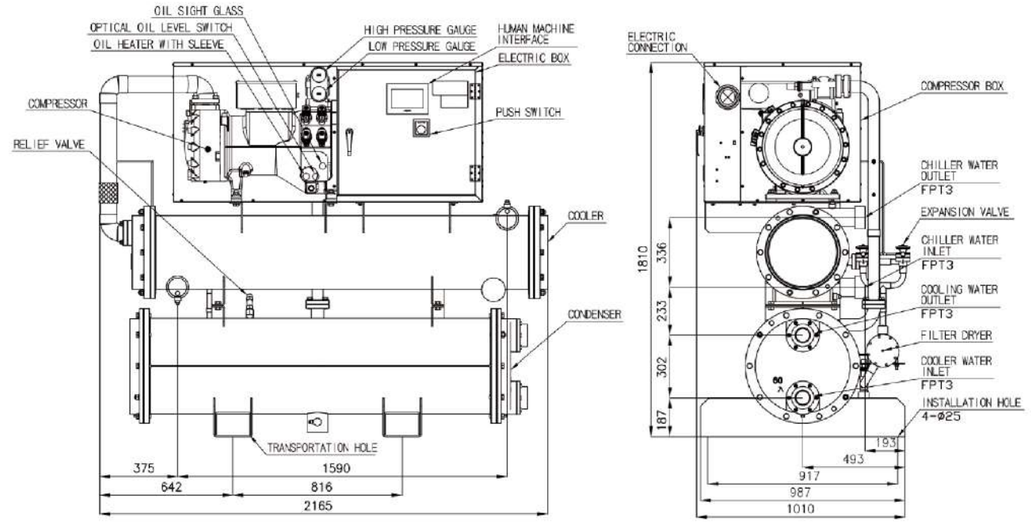

Offices


Supermarkets

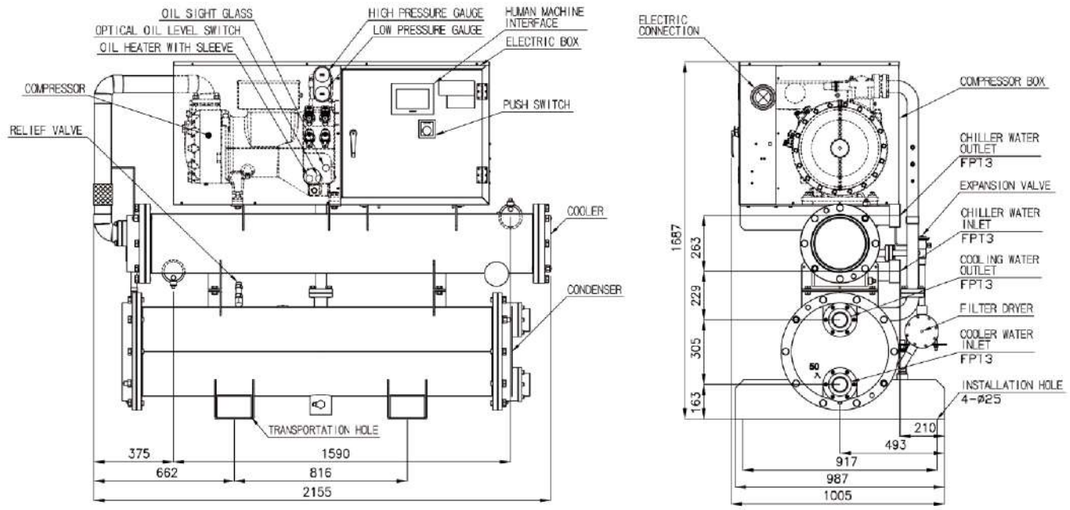
RCU-F402WS



RCU-F602WS



RCU-F502WS

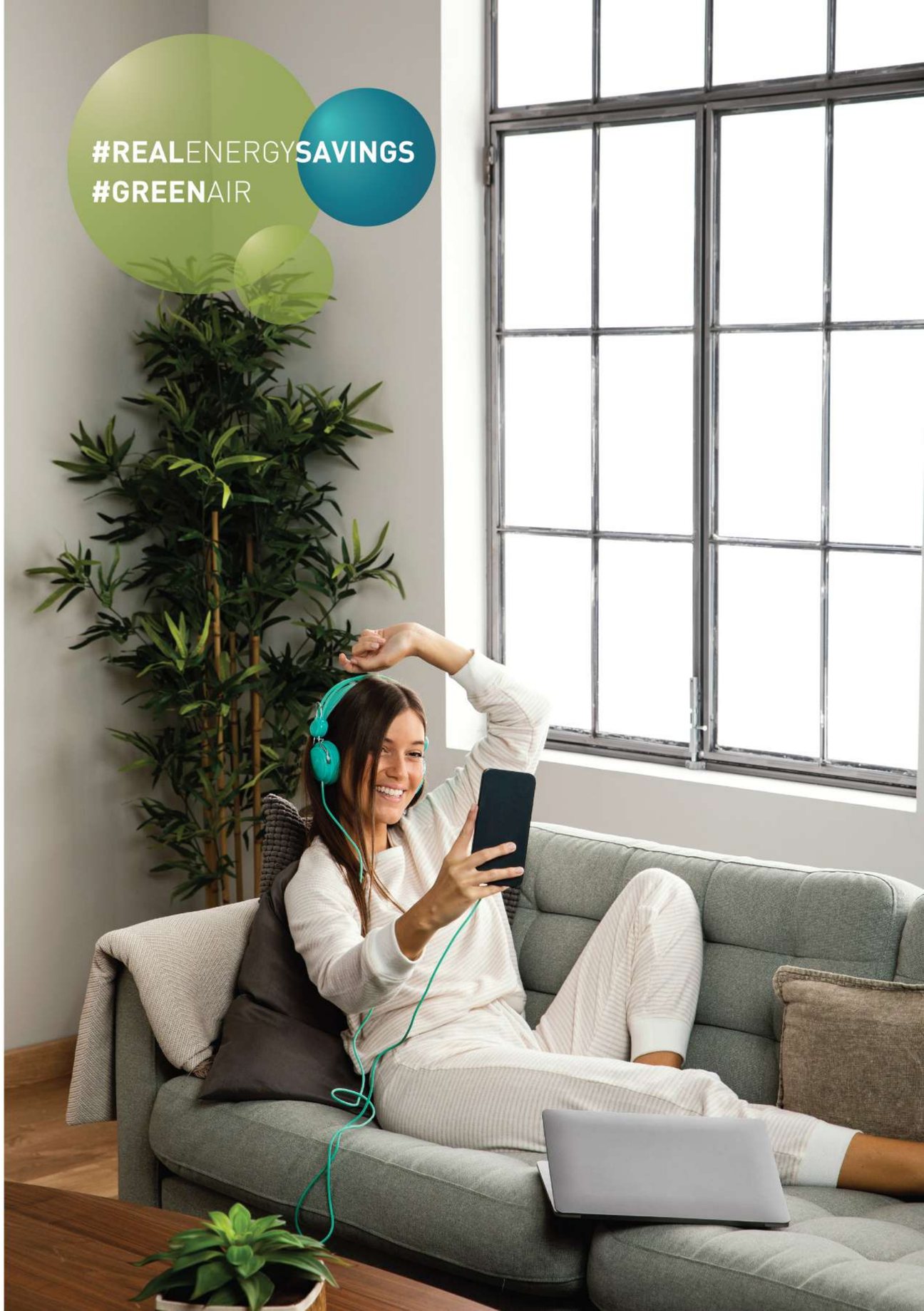


GENERAL UNIT DATA

Model				RCU-F402WS	RCU-F502WS	RCU-F602WS
Cooling Capacity			kW	139.5	180.0	214.0
COP			W/W	4.93	4.47	4.52
Dimension	Width		mm	2,040	2,155	2,165
	Depth		mm	973	1,005	1,010
	Height		mm	1,620	1,687	1,810
Compressor	Type		-	Semi-hemetic Screw		
	Quantity		-	1		
	Crankcase Heater		W/W	200		
Condenser Type			-	Shell and Tube		
Chiller Type			-	Shell and Tube (Dry)		
Expansion Valve Control			-	Thermostastic Expansion Valve		
Refrigerant	Type		-	R134a		
	Quantity		kg	24	36	40
Oil	Type		-	BSE170L		
	Quantity		ℓ	10	15	15
Starting Method			-	Part Winding		
Absorber			-	Vibration Damper for Compressor		
Protection Device			-	High-Low Pressure Switch/Reverse Phase Protection Relay/Oil Level Protection/Anti-Freeze Switch/ Overload Protect/Discharge Temperature Protector/Fuses for Control Circuit/Relief Valve		
Operation Device	Monitoring Devices		-	Human Machine Interface		
	Monitoring Items		-	Chilled Water Outlet Temperature/Chilled Water Stop Temperature/ Setting Running Day/Inspection and Replacement Interval Reminder		
	Capacity Control		%	0,25-100		
Chiller	Connections		-	3FPT		
	Standard Flow		m3/h	23.8	30.7	36.5
	Pressure Drop		mAq	3.6	6.0	4.8
Condenser	Connections		-	3FPT		
	Standard Flow		m3/h	29.8	38.4	45.6
	Pressure Drop		mAq	5.7	6.1	7.1
Power Supply			-	AC, 3φ, 60Hz, 220V/380V/440V		
Electrical Data	Power Input		kW	28.3	40.3	47.3
	Running Current	220V	A	87	124	143
		380V		50	72	83
		440V		44	62	72
	Starting Current	220V		465	633	730
		380V		346	354	510
		440V		310	306	380
Net Weight			kg	1,100	1,400	1,530
Gross Weight			kg	1,200	1,520	1,710

Notes:

1. Cooling capacities and electrical properties are based on CNS12575 (water chilling packages using the vapor compression cycle).
2. Fouling factor: 0.000044m2℃/W。
3. Operating range : Chilled Water Outlet Maximum 15℃/Minimum 5℃ ; Cooling Water Outlet Maximum 38℃/Minimum 21℃
4. The values of the chiller and condenser are for the imperial unit.



True
to Your Comfort ♡

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Johnson Controls

HITACHI
Air conditioning solutions

RCUSW-2401