

# NEW The High-efficiency Water-cooled Chiller "H series"

The Water-cooled chiller "H series" with improved efficiency and functionality by several advanced technology.

This series with the world's best standard A-type screw compressor and newly designed shell and tube heat exchanger that have powerful cooling ability, low noise, low vibration, high efficiency and high reliablility is the perfect answer to all your needs!!



- **E**nhanced Line-up -up to 570 HP-
- **T**op Class High COP
- **High-performance A-type Screw Compressor**
- Highly Reliable Shell and Tube Heat Exchanger
- Precise Capacity Control Technology
- **E**xcellent Control Function

## **Products Series**





**Nominal Capacity Range (50Hz)** 

130 kW to 1,758 kW

37.0 USRT to 500.0 USRT

111,800 kcal/h to 1,512,000 kcal/h

RCU-WHYZ(-E)

**Nominal Capacity Range (50Hz)** 

R22

140 kW to 1,825 kW

39.8 USRT to 519.1 USRT

120,400 kcal/h to 1,569,500 kcal/h

## Wide Line-up

To meet the need for air conditioning systems for large facilities and the demand for higher capacity industrial cooling systems, we have added the large screw chillers, the 410–570HP, to our product line-up.

40 50 60 80 100 120 150 180 220 260 300 340 380 410 450 490 530 570 (HP)



**RCUG-WHYZ(-E)** 

40 50 60 80 100 120 150 180 220 260 300 340 380 **410 450 490 530 570** (HP)

RCU-WHYZ(-E)

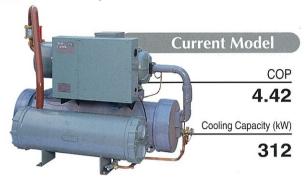


## **Technical Features**

# Top Class High COP

In the new model sereis, the power consumption is largely reduced over the current model series due to newly designed high-efficiency cooling system. Also COP is largely increased from 4.42 in the current 100HP model to 5.13 in the new 100HP model.

#### COP Comparison

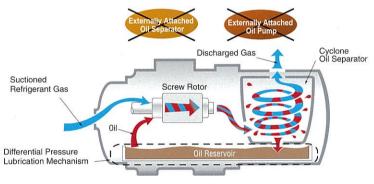




# High-performance A-type Screw Compressor ~ Newly Designed ~







**Operation Image** 

## **Built-in Cyclone Oil Separator**

Low oil carrying-out is realized and reduction of heat transfer efficiency is minimized.

# No outside pump is required due to the reliable differential-pressure oil-feeding system.

This oil-feeding system, which does not use any electrical mechanism, prevents the compressor from being damaged and maintains long-term stable operation.

## High Technology by Internal Manufacture

Because all manufacturing processes, from rotor manufacturing to unit assembly, are done internally, exceptional reliability is achieved.

#### Low Vibration, Low Noise

Without the conventional demister chamber system, no noise is produced during oil separation of discharge gas. A vibration-proof base is not required for the chiller body thanks to the firmly-secured, low-vibration screw compressor.

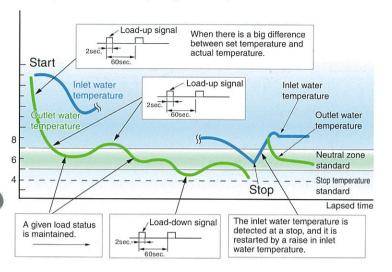
# Highly Reliable Shell and Tube Heat Exchanger — Newly Designed —

- Simple structure and easy for maintenance
- Reduced cost and adapted to satisfy various demands
- Freeze protection thermostat and other safety devices
- Integral and reliable performance

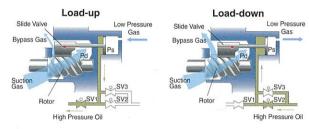
# Precise Capacity Control Technology

## **Continuous Capacity Control**

The temperature of the chilled water outlet can be kept at the set temperature  $\pm 1$ °C by continuous capacity control, so it is suitable for industrial use.



Capacity Controller Structural Outline (HITACHI Patented System)



Pd: Discharge pressure, Ps: Suction pressure, SV1,2,3 : Solenoid valve (\$\sqrt{2}\): Valve open (\$\sqrt{2}\): Valve close

# **E**xcellent Control Function

## Liquid Crystal Screen Display (Optional Accessory)

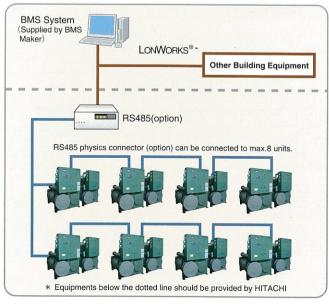
- Big colorful liquid crystal display
- Man-machine conversation screen, display content completely.
- Show data at real time
- Time starting function
- Leave message board (for shift)
- Communication adapter provides Communication with RS485 physics connection to BMS.

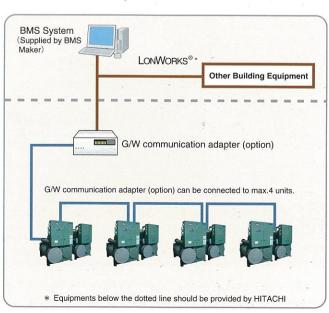


Image of Display

## **Building Management System (BMS)**

Hitachi uses Building Management System through LONWORKS. For chiller air-conditioning, Hitachi provides its own central station system. No complicated work is necessary.





<sup>\*: &</sup>quot;LONWORKS®" are trademarks of Echelon Corporation registered in the United States and other countries.

# **R407C** General Data

Model	Standard		RCUG40WHYZ	RCUG50WHYZ	RCUG60WHYZ	RCUG80WHYZ	
nouci	Liquid Cryst	al Display	RCUG40WHYZ-E	RCUG50WHYZ-E	RCUG60WHYZ-E	RCUG80WHYZ-E	
Power Source			Main (/	AC 3 φ) 380, 415V / 50Hz, C			200
		kW	130	162	197	260	
Nominal Cooling Capacity		USRT	37.0	46.1	56.0	74.4	No.
		kcal/h	111,800	139,320	169,420	223,600	
Condenser Water Flow Rate		m³/h	27.5	34.2	41.5	54.9	100
		m³/h	22.4	27.9	33.9	44.7	553
Chilled Water Flow Rate		m <sup>2</sup> /n	22.4			44.7	-
Capacity Control			Continuous Capacity Control				
cupacity control		%		100~15, 0		100~7.5, 0	
	Height			1,506		1,495	3
Outer Dimensions	Width	mm		1,764		2,759	-
	Depth			910	evine postalo de la companya del companya de la companya del companya de la compa	1,070	10
N . NA	Берит		878	1,000	1,032	1,798	
Net Weight		kg	878			1,700	
	Туре			R40			
Refrigerant	Flow Contr	ol		Electronic Exp	ansion Valve	The second secon	
	Number of	Circuits		1		2	
	Type			Semi-Hermetic	c Screw Type		
Compressor	Model		40ASCCW-Z	50ASCCW-Z	60ASCCW-Z	40ASCCW-Z	
- Inproduction				1		2	
	Quantity			Shell-and-1	Tubo Typo		
Condenser							
Water Cooler				Shell-and-Tube, Dr			
Safety Devices			Thermostat for Comp	irrent Relay, High-Pressure Sv pressor Motor, Fusible Plug, F charge Gas Thermostat, Opel	Freeze Protection Thermos	tat, Reverse Phase	
4 / /	Height	2		1,747	The second second	1,765	
Shipping Dimensions	Width	mm		1,898		2,960	
Ompping Difficilities			A CONTRACTOR OF THE PROPERTY O	1,106		1.250	
	Depth	/			4.450	1,978	
Shipping Weight		kg	999	1,121	1,153	· · · · · · · · · · · · · · · · · · ·	-
Piping Connections	Inlet		With &	78 Inner Diametre Compa	nion Flange	4	
for Condenser	Outlet	Rc	with 9	70 miler Blametre Compa	anon riange	4	
Piping Connections	inlet		3	3	3	With \$\phi\$ 142 Inner Diametre	
for Water Cooler	Outlet	R	3	3	3	Companion Flange	
ioi maioi occioi	Outlet				ATTEMATICAL PROPERTY INC.	- Companion riange	11000
	Standard		RCUG300WHYZ	RCUG340WHYZ	RCUG380WHYZ	RCUG410WHYZ	
Model	Liquid Crys	etal Dieplay	RCUG300WHYZ-E	RCUG340WHYZ-E	RCUG380WHYZ-E	RCUG410WHYZ-E	
	Liquid Oi ya	tai Display		C 3 φ) 380, 415V / 50Hz, C			
Power Source							
		kW	952	1,061	1,170	1,296	
Nominal Cooling Capacity		USRT	270.7	301.7	332.7	368.5	
		kcal/h	818,720	912,460	1,006,200	1,114,560	
Condenser Water Flow Rate		m³/h	198.4	221.0	243.6	270.2	
		m³/h	163.7	182.5	201.2	222.9	
				102.5	201.2		100
Chilled Water Flow Rate				Continuous Con	nacity Control	ZZZ.3	
Chilled Water Flow Rate Capacity Control			100.7	Continuous Cap	pacity Control		
		%	100.7	100~7.5, 0	pacity Control	100~5, 0	
	Height		100.7		pacity Control		
	Height Width		100.1	100~7.5, 0	pacity Control	100~5, 0	
Capacity Control	Width	%		100~7.5, 0 1,879 2,622	pacity Control	100~5, 0 1,879	
Capacity Control Outer Dimensions		% mm		100~7.5, 0 1,879 2,622 1,922		100~5, 0 1,879 3,983 1,922	
Capacity Control Outer Dimensions	Width Depth	%	5,638	100~7.5, 0 1,879 2,622 1,922 5,851	6,064	100~5, 0 1,879 3,983	
Capacity Control  Outer Dimensions  Net Weight	Width Depth Type	% mm kg		100~7.5, 0 1,879 2,622 1,922 5,851	6,064 7C	100~5, 0 1,879 3,983 1,922	
Capacity Control  Outer Dimensions  Net Weight	Width Depth	% mm kg		100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp	6,064 7C	100~5, 0 1,879 3,983 1,922 8,239	
Capacity Control	Width Depth Type	% mm kg		100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp	6,064 7C pansion Valve	100~5, 0 1,879 3,983 1,922	
Capacity Control  Outer Dimensions  Net Weight	Width Depth  Type Flow Cont Number of	% mm kg		100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp	6,064 7C pansion Valve	100~5, 0 1,879 3,983 1,922 8,239	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant	Width Depth  Type Flow Cont Number of Type	% mm kg		100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp	6,064 7C pansion Valve	100~5, 0 1,879 3,983 1,922 8,239	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant	Width Depth  Type Flow Cont Number of Type Model	% mm kg	5,638	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z	6,064 7C pansion Valve c Screw Type	100~5, 0 1,879 3,983 1,922 8,239 3	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor	Width Depth  Type Flow Cont Number of Type	% mm kg	5,638	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic [130ASCCW-Z, 170ASCCW-Z] 2	6,064 7C pansion Valve c Screw Type 170ASCCW-Z	100~5, 0 1,879 3,983 1,922 8,239	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser	Width Depth  Type Flow Cont Number of Type Model	% mm kg	5,638	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-1	6,064 7C pansion Valve c Screw Type 170ASCCW-Z	100~5, 0 1,879 3,983 1,922 8,239 3	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser	Width Depth  Type Flow Cont Number of Type Model	% mm kg	5,638 130ASCCW-Z	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-T	6,064 7C pansion Valve c Screw Type 170ASCCW-Z Tube Type y Expansion Type	100~5, 0 1,879 3,983 1,922 8,239 3 100ASCCW-Z, 130ASCCW-Z	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler	Width Depth  Type Flow Cont Number of Type Model	% mm kg	130ASCCW-Z  Three-Phase Overcu	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-1	6,064 7C Dansion Valve C Screw Type 170ASCCW-Z Tube Type Ty Expansion Type witch, Low-Pressure Switc	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler	Width Depth  Type Flow Cont Number of Type Model Quantity	% mm kg	130ASCCW-Z  Three-Phase Overcu	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-T Shell-and-Tube, Drurrent Relay, High-Pressure Spressor Motor, Fusible Plug, Scharge Gas Thermostat, Ope	6,064 7C Dansion Valve C Screw Type 170ASCCW-Z Tube Type Ty Expansion Type witch, Low-Pressure Switc	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase sssure Relief Valve	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler  Safety Devices	Width Depth  Type Flow Cont Number of Type Model Quantity  Height	% mm kg	130ASCCW-Z  Three-Phase Overcu	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-T Shell-and-Tube, Dr urrent Relay, High-Pressure St pressor Motor, Fusible Plug, Ischarge Gas Thermostat, Ope	6,064 7C Dansion Valve C Screw Type 170ASCCW-Z Tube Type Ty Expansion Type witch, Low-Pressure Switc	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase sssure Relief Valve 2,239	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler  Safety Devices	Width Depth  Type Flow Cont Number of Type Model Quantity  Height Width	% mm kg	130ASCCW-Z  Three-Phase Overcu	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-T Shell-and-Tube, Drurrent Relay, High-Pressure Spressor Motor, Fusible Plug, Ischarge Gas Thermostat, Ope 2,239 1,464 x 2 Modules	6,064 7C Dansion Valve C Screw Type 170ASCCW-Z Tube Type Ty Expansion Type witch, Low-Pressure Switc	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239 1,464 x 3 Modules	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler  Safety Devices	Width Depth  Type Flow Cont Number of Type Model Quantity  Height	% mm kg	5,638  130ASCCW-Z  Three-Phase Overcu Thermostat for Comp Protection Relay, Dis	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z Shell-and-T Shell-and-Tube, Dr urrent Relay, High-Pressure Spressor Motor, Fusible Plug, Ischarge Gas Thermostat, Ope 2,239 1,464 x 2 Modules 2,247	6,064 7C Pansion Valve C Screw Type 170ASCCW-Z Tube Type Ty Expansion Type Witch, Low-Pressure Switc Freeze Protection Thermoseration Hour-Meter and Pressure Switce	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase sssure Relief Valve 2,239 1,464 x 3 Modules 2,247	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler	Width Depth  Type Flow Cont Number of Type Model Quantity  Height Width	% mm kg	130ASCCW-Z  Three-Phase Overcu	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-T Shell-and-Tube, Drurrent Relay, High-Pressure Spressor Motor, Fusible Plug, Ischarge Gas Thermostat, Ope 2,239 1,464 x 2 Modules	6,064 7C Dansion Valve C Screw Type 170ASCCW-Z Tube Type Ty Expansion Type witch, Low-Pressure Switc	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239 1,464 x 3 Modules	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler  Safety Devices  Shipping Dimensions  Shipping Weight	Width Depth  Type Flow Cont Number of Type Model Quantity  Height Width	% mm kg mm kg mm kg	5,638  130ASCCW-Z  Three-Phase Overcu Thermostat for Comp Protection Relay, Dis	100~7.5, 0 1,879 2,622 1,922 5,851  R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, Dr urrent Relay, High-Pressure Sr pressor Motor, Fusible Plug, I scharge Gas Thermostat, Ope 2,239 1,464 x 2 Modules 2,247 6,523	6,064 7C pansion Valve c Screw Type 170ASCCW-Z Tube Type ry Expansion Type witch, Low-Pressure Switce Freeze Protection Thermoseration Hour-Meter and Presentation Hour-Me	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase sssure Relief Valve 2,239 1,464 x 3 Modules 2,247	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler  Safety Devices  Shipping Dimensions  Shipping Weight  Piping Connections	Width Depth  Type Flow Cont Number of Type Model Quantity  Height Width Depth	% mm kg erol f Circuits	5,638  130ASCCW-Z  Three-Phase Overcu Thermostat for Comp Protection Relay, Dis	100~7.5, 0 1,879 2,622 1,922 5,851 R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z Shell-and-T Shell-and-Tube, Dr urrent Relay, High-Pressure Spressor Motor, Fusible Plug, Ischarge Gas Thermostat, Ope 2,239 1,464 x 2 Modules 2,247	6,064 7C pansion Valve c Screw Type 170ASCCW-Z Tube Type ry Expansion Type witch, Low-Pressure Switce Freeze Protection Thermoseration Hour-Meter and Presentation Hour-Me	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase sssure Relief Valve 2,239 1,464 x 3 Modules 2,247	
Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser  Water Cooler  Safety Devices  Shipping Dimensions  Shipping Weight	Width Depth  Type Flow Cont Number of Type Model Quantity  Height Width Depth	% mm kg mm kg mm kg	5,638  130ASCCW-Z  Three-Phase Overcu Thermostat for Comp Protection Relay, Dis	100~7.5, 0 1,879 2,622 1,922 5,851  R40 Electronic Exp 2 Semi-Hermetic 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, Dr urrent Relay, High-Pressure Sr pressor Motor, Fusible Plug, I scharge Gas Thermostat, Ope 2,239 1,464 x 2 Modules 2,247 6,523	6,064 7C pansion Valve c Screw Type 170ASCCW-Z Tube Type ry Expansion Type witch, Low-Pressure Switce Freeze Protection Thermoseration Hour-Meter and Presentation Hour-Me	100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  h, Oil Heater, Internal stat, Reverse Phase sssure Relief Valve 2,239 1,464 x 3 Modules 2,247	



	RCUG100WHYZ	RCUG120WHYZ	RCUG150WHYZ	RCUG180WHYZ	RCUG220WHYZ	RCUG260WHYZ	
	RCUG100WHYZ-E	RCUG120WHYZ-E	RCUG150WHYZ-E	RCUG180WHYZ-E	RCUG220WHYZ-E	RCUG260WHYZ-E	
		Main (	AC 3 φ ) 380, 415V / 50Hz,	Control (AC 1 \( \phi \)) 220, 240\( \psi \)	/ / 50Hz		
	323	392	485	589	688	820	
	91.8	111.5	137.9	167.5	195.6	233.2	
	277,780	337,120	417,100	506,540	591,680	705,200	
	68.1	82.6	102.3	124.1	143.4	171.0	
	55.6	67.4	83.4	101.3	118.3	141.0	
			Continuous C	apacity Control			
1.00	100~	-7.5, 0	100-	~5, 0	100~	-7.5, 0	
	1,	495	1,6	685	1,810	1,879	
	2,	759	3,	170	2,622	2,622	
	1,	070	1,2	220	1,922	1,922	
	2,053	2,165	3,570	3,748	5,204	5,420	
			R4	07C			
			Electronic Ex	pansion Valve			
		2		3	ALCS CONTRACT	2	
			Semi-Herme	tic Screw Type			
	50ASCCW-Z	60ASCCW-Z	50ASCCW-Z	60ASCCW-Z	100ASCCW-Z	100ASCCW-Z, 130ASCCW	
		2		3		2	
			Shell-and	-Tube Type			
			Shell-and-Tube, D	ry Expansion Type			
0		Thermostat for Comp	pressor Motor, Fusible Plug	Switch, Low-Pressure Switch, Freeze Protection Thermoperation Hour-Meter and Properties of the Switch	stat, Reverse Phase		
	1,	765	1,998		2,239		
		960	3,320		1,464 x 2 Modules		
	1,	250	1,358		2,247		
	2,233	2,345	3,851	4,029	5,876	6,092	
	4	4	1401 01401 00	·	With /116 Inner Diam	etro Companion Flance	
		4	with φ 142 Inner Diam	Diametre Companion Flange With $\phi$ 116 Inner Diametre Companior			

	RCUG450WHYZ	RCUG490WHYZ	RCUG530WHYZ	RCUG570WHYZ				
	RCUG450WHYZ-E	RCUG490WHYZ-E	RCUG530WHYZ-E	RCUG570WHYZ-E				
	Main (AC	3 φ) 380, 415V / 50Hz,	Control (AC 1 \( \phi \)) 220, 240	OV / 50Hz				
	1,428	1,537	1,646	1,758				
in d	406.0	437.0	468.0	500.0				
	1,228,080	1,321,820	1,415,560	1,512,000				
	297.6	320.2	342.9	366.0				
	245.6	264.3	283.1	302.4				
		Continuous Ca	apacity Control					
		100~	-5, 0					
		1,8	179					
		3,9	183					
		1,9	22					
5172	8,457	8,670	8,883	9,096				
		R40	)7C					
		Electronic Ex	pansion Valve					
			3					
		Semi-Hermet						
	130ASCCW-Z	130ASCCW-Z, 170ASCCW-Z	130ASCCW-Z, 170ASCCW-Z	170ASCCW-Z				
			3					
	Shell-and-Tube Type							
	Shell-and-Tube, Dry Expansion Type							
	Three-Phase Overcurrent Relay, High-Pressure Switch, Low-Pressure Switch, C Thermostat for Compressor Motor, Fusible Plug, Freeze Protection Thermostat, Protection Relay, Discharge Gas Thermostat, Operation Hour-Meter and Pressu							
	2,239							
			Modules					
MISE IN		2,2	247					
	9,465	9,678	9,891	10,104				
	With <i>ϕ</i> 116 Inner Diametre Companion Flange							
		With & 142 Inner Diam	etre Companion Flange					

#### NOTES:

- The nominal cooling capacities are based on the following conditions.
   Chilled Water Inlet / Outlet Temperature:
   12°C / 7°C
   Condenser Water Inlet / Outlet Temperature:
   30°C / 35°C
- Working Range
   Condenser Water Outlet Temperature:
   22°C to 37°C
   Condenser Water Temperature Difference:
   3.5°C to 10°C
   Chilled Water Outlet Temperature:
   5°C to 20°C
   Chilled Water Temperature Difference:
   2.5°C to 10°C
- 3. Communication adapter connecting the unit to BMS (Building Management System) is an optional accessory, please contact with HITACHI or HITACHI distributor if required.
- The unit with liquid crystal display differs from the unit with segment code display in electric box, however, both have the same outer dimensions.

# **R22** General Data

Model	Standard		RCU40WHYZ	RCU50WHYZ	RCU60WHYZ	RCU80WHYZ	
Liquid Crystal Display		RCU40WHYZ-E	RCU50WHYZ-E	RCU60WHYZ-E	RCU80WHYZ-E		
Power Source				3 φ) 380, 415V / 50Hz, (			
		kW	140	172	213	279	
Nominal Cooling Capacity		USRT	39.8	48.9	60.6	79.3	
		kcal/h	120,400	147,920	183,180	239,940	
Condenser Water Flow Rate	е	m³/h	28.6	35.3	44.0	57.3	
Chilled Water Flow Rate m³/h			24.0	59.2	37.0	48.0	
Canacity Control				Continuous Ca	apacity Control		
Capacity Control		%		100~7.5, 0	100		
	Height			1,506		1,495	
Outer Dimensions	Width	mm		1,764		2,759	1000
outer Dimensions	Depth			910		1,070	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Берит		878	1,000	1,032	1,798	1
let Weight		kg	0/0	The state of the s		1,790	-
	Туре			R2			
Refrigerant	Flow Cont	rol		Electronic Exp	pansion Valve		100
	Number o	f Circuits		1		2	
	Туре			Semi-Hermeti	ic Screw Type		
Compressor	Model		40ASCCW-Z	50ASCCW-Z	60ASCCW-Z	40ASCCW-Z	1111
	Quantity			1		2	
ondenser	a.a.a. nity			Shell-and-	Tube Type		
/ater Cooler				Shell-and-Tube, Di		SULPACE TO SERVICE	
Safety Devices			Thermostat for Compre	ent Relay, High-Pressure Svessor Motor, Fusible Plug, Farge Gas Thermostat, Ope	witch, Low-Pressure Switce Freeze Protection Thermo-	stat, Reverse Phase	
	Height	1282383		1,747		1,765	THE.
Shipping Dimensions	Width	mm		1,898		2,960	
mpping Dimonolone	Depth			1,106		1,250	
Netheral Language NA Callada	Берит	ka	000		1,153	1,978	
Shipping Weight		kg	999	1,121	1,155		
Piping Connections	Inlet	Rc	With <i>ϕ</i> 78	Inner Diametre Compani	ion Flange	4	
or Condenser	Outlet	110				4	
Piping Connections	Inlet		3	3	3	With	
or Water Cooler	Outlet	R	3	3	3	Companion Flange	
					D0110001111177	DOUL440WIN/7	10000
		TOTAL STREET,	RCU300WHYZ	RCU340WHYZ	RCU380WHYZ	RCU410WHYZ	1000
Model	Standard						
		stal Display	RCU300WHYZ-E	RCU340WHYZ-E	RCU380WHZY-E	RCU410WHYZ-E	
		stal Display	RCU300WHYZ-E Main (AC	<b>RCU340WHYZ-E</b> 3 φ ) 380, 415V / 50Hz,	<b>RCU380WHZY-E</b> Control (AC 1 φ ) 220, 2	<b>RCU410WHYZ-E</b> 240V / 50Hz	
ower Source		stal Display	RCU300WHYZ-E	RCU340WHYZ-E 3 φ ) 380, 415V / 50Hz, 1,094	RCU380WHZY-E Control (AC 1 φ ) 220, 2 1,217	RCU410WHYZ-E 240V / 50Hz 1,328	
Power Source			RCU300WHYZ-E Main (AC	<b>RCU340WHYZ-E</b> 3 φ ) 380, 415V / 50Hz,	<b>RCU380WHZY-E</b> Control (AC 1 φ ) 220, 2	<b>RCU410WHYZ-E</b> 240V / 50Hz	
Power Source		kW	RCU300WHYZ-E Main (AC 971	RCU340WHYZ-E 3 φ ) 380, 415V / 50Hz, 1,094	RCU380WHZY-E Control (AC 1 φ ) 220, 2 1,217	RCU410WHYZ-E 240V / 50Hz 1,328	
Power Source	Liquid Crys	kW USRT kcal/h	RCU300WHYZ-E Main (AC 971 276.1	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1	RCU380WHZY-E Control (AC 1 φ ) 220, 2 1,217 346.0	RCU410WHYZ-E 240V / 50Hz 1,328 377.7	
ower Source  Iominal Cooling Capacity  Condenser Water Flow Rate	Liquid Crys	kW USRT kcal/h m³/h	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4	RCU380WHZY-E Control (AC 1 φ ) 220, 2 1,217 346.0 1,046,620	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650	
lower Source  Condenser Water Flow Rate Chilled Water Flow Rate	Liquid Crys	kW USRT kcal/h	RCU300WHYZ-E  Main (AC  971  276.1  835,060	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4	
Power Source  Jominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate	Liquid Crys	kW USRT kcal/h m³/h m³/h	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4	
Power Source  Jominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate	Liquid Crys	kW USRT kcal/h m³/h	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate  Chilled Water Flow Rate  Capacity Control	Liquid Crys	kW USRT kcal/h m³/h m³/h	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate  Chilled Water Flow Rate  Capacity Control	Liquid Crys e Height Width	kW USRT kcal/h m³/h m³/h	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate  Capacity Control	Liquid Crys	kW USRT kcal/h m³/h m³/h %	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922	
ower Source  Iominal Cooling Capacity  Condenser Water Flow Rate Capacity Control  Outer Dimensions	Liquid Crys e Height Width	kW USRT kcal/h m³/h m³/h	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983	
Tower Source  Jominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions	Liquid Crys e Height Width	kW USRT kcal/h m³/h m³/h %	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922	
Power Source  Iominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Jet Weight	e  Height Width Depth	kW USRT kcal/h m³/h m³/h % mm	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922 8,239	
Power Source  Iominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Jet Weight	e  Height Width Depth  Type	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Net Weight	e  Height Width Depth  Type Flow Cont Number of	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R: Electronic Ex	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922 8,239	
Power Source  Jominal Cooling Capacity  Condenser Water Flow Rate  Chilled Water Flow Rate  Capacity Control  Outer Dimensions  Net Weight  Refrigerant	e  Height Width Depth  Type Flow Cont Number of	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R: Electronic Ex	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve  ic Screw Type	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922 8,239	
Cower Source  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Let Weight  Refrigerant	e  Height Width Depth  Type Flow Cont Number of Type Model	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve  ic Screw Type	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922 8,239	
Cower Source  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Refrigerant  Compressor	e  Height Width Depth  Type Flow Cont Number of	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R: Electronic Ex 2 Semi-Hermet 130ASCCW-Z 2	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve ic Screw Type 170ASCCW-Z	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922 8,239 3	
ower Source  Iominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Ilet Weight  Compressor  Condenser	e  Height Width Depth  Type Flow Cont Number of Type Model	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0	RCU340WHYZ-E 3 \$\phi\$) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R: Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve ic Screw Type 170ASCCW-Z	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922 8,239 3	
ower Source  Iominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Ilet Weight  Compressor  Condenser	e  Height Width Depth  Type Flow Cont Number of Type Model	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0  5,638	RCU340WHYZ-E 3 ∮) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R2 Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve ic Screw Type 170ASCCW-Z -Tube Type rry Expansion Type	RCU410WHYZ-E 240V / 50Hz 1,328 377.7 1,141,650 272.4 228.4 100~5, 0 1,879 3,983 1,922 8,239 3 100ASCCW-Z, 130ASCCW-Z	
Cower Source  Iominal Cooling Capacity  Condenser Water Flow Rate Capacity Control  Outer Dimensions  Net Weight  Compressor  Condenser  Vater Cooler	e  Height Width Depth  Type Flow Cont Number of Type Model Quantity	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0  5,638  Three-Phase Overcurr Thermostat for Compre	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R2 Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D rent Relay, High-Pressure St essor Motor, Fusible Plug, harge Gas Thermostat, Ope	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve  ic Screw Type 170ASCCW-Z  -Tube Type rry Expansion Type witch, Low-Pressure Switc Freeze Protection Thermo	RCU410WHYZ-E 240V / 50Hz  1,328 377.7 1,141,650 272.4 228.4  100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  ch, Oil Heater, Internal listat, Reverse Phase essure Relief Valve	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Duter Dimensions  Net Weight  Compressor  Condenser  Water Cooler  Safety Devices	e  Height Width Depth  Type Flow Cont Number of Type Model Quantity  Height	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0  5,638  Three-Phase Overcurr Thermostat for Compre	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R: Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D rent Relay, High-Pressure St essor Motor, Fusible Plug, harge Gas Thermostat, Ope	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve  ic Screw Type 170ASCCW-Z  -Tube Type rry Expansion Type witch, Low-Pressure Switc Freeze Protection Thermo	RCU410WHYZ-E 240V / 50Hz  1,328 377.7 1,141,650 272.4 228.4  100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  ch, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Duter Dimensions  Net Weight  Compressor  Condenser  Water Cooler  Safety Devices	e  Height Width Depth  Type Flow Cont Number of Type Model Quantity	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0  5,638  Three-Phase Overcurr Thermostat for Compre	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R2 Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D rent Relay, High-Pressure St essor Motor, Fusible Plug, harge Gas Thermostat, Ope 2,239 1,464 x 2 Modules	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve  ic Screw Type 170ASCCW-Z  -Tube Type rry Expansion Type witch, Low-Pressure Switc Freeze Protection Thermo	RCU410WHYZ-E 240V / 50Hz  1,328 377.7 1,141,650 272.4 228.4  100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  ch, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239 1,464 x 3 Modules	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Duter Dimensions  Net Weight  Compressor  Condenser  Water Cooler  Safety Devices	e  Height Width Depth  Type Flow Cont Number of Type Model Quantity  Height	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0  5,638  Three-Phase Overcurr Thermostat for Compre	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R: Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D rent Relay, High-Pressure St essor Motor, Fusible Plug, harge Gas Thermostat, Ope	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve  ic Screw Type 170ASCCW-Z  -Tube Type rry Expansion Type witch, Low-Pressure Switc Freeze Protection Thermo	RCU410WHYZ-E 240V / 50Hz  1,328 377.7 1,141,650 272.4 228.4  100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  ch, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Net Weight  Compressor  Condenser Water Cooler  Safety Devices  Shipping Dimensions	e  Height Width Depth  Type Flow Cont Number of Type Model Quantity  Height Width	kW USRT kcal/h m³/h m³/h % mm kg	RCU300WHYZ-E  Main (AC  971  276.1  835,060  199.1  167.0  5,638  Three-Phase Overcurr Thermostat for Compre	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R2 Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D rent Relay, High-Pressure St essor Motor, Fusible Plug, harge Gas Thermostat, Ope 2,239 1,464 x 2 Modules	RCU380WHZY-E Control (AC 1 φ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve  ic Screw Type 170ASCCW-Z  -Tube Type rry Expansion Type witch, Low-Pressure Switc Freeze Protection Thermo	RCU410WHYZ-E 240V / 50Hz  1,328 377.7 1,141,650 272.4 228.4  100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  ch, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239 1,464 x 3 Modules	
Model Power Source Nominal Cooling Capacity Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control Outer Dimensions Net Weight Refrigerant Compressor Condenser Water Cooler Safety Devices Shipping Dimensions Shipping Weight Piping Connections for Condenser	e  Height Width Depth  Type Flow Cont Number of Type Model Quantity  Height Width	kW USRT kcal/h m³/h m³/h % mm kg trol of Circuits	RCU300WHYZ-E  Main (AC 971 276.1 835,060 199.1 167.0  5,638  130ASCCW-Z  Three-Phase Overcurr Thermostat for Compre Protection Relay, Disch	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R2 Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D rent Relay, High-Pressure Sr essor Motor, Fusible Plug, harge Gas Thermostat, Ope 2,239 1,464 x 2 Modules 2,247	RCU380WHZY-E Control (AC 1 ∮) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve ic Screw Type 170ASCCW-Z  -Tube Type witch, Low-Pressure Swite Freeze Protection Thermo pration Hour-Meter and Pro-	RCU410WHYZ-E 240V / 50Hz  1,328 377.7 1,141,650 272.4 228.4  100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  2th, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239 1,464 x 3 Modules 2,247 9,247	
Power Source  Nominal Cooling Capacity  Condenser Water Flow Rate Chilled Water Flow Rate Capacity Control  Outer Dimensions  Net Weight  Refrigerant  Compressor  Condenser Water Cooler  Safety Devices  Shipping Dimensions  Shipping Weight  Piping Connections	e  Height Width Depth  Type Flow Con' Number of Type Model Quantity  Height Width Depth	kW USRT kcal/h m³/h m³/h % mm kg trol of Circuits	RCU300WHYZ-E  Main (AC 971 276.1 835,060 199.1 167.0  5,638  130ASCCW-Z  Three-Phase Overcurr Thermostat for Compre Protection Relay, Disch	RCU340WHYZ-E 3 φ) 380, 415V / 50Hz, 1,094 311.1 940,840 224.4 188.1 Continuous Ca 100~7.5, 0 1,879 2,622 1,922 5,851 R; Electronic Ex 2 Semi-Hermet 130ASCCW-Z, 170ASCCW-Z 2 Shell-and-Tube, D rent Relay, High-Pressure Sr essor Motor, Fusible Plug, Inarge Gas Thermostat, Ope 2,239 1,464 x 2 Modules 2,247 6,523	RCU380WHZY-E Control (AC 1 ∮ ) 220, 2 1,217 346.0 1,046,620 249.5 209.3 apacity Control  6,064 22 pansion Valve ic Screw Type 170ASCCW-Z  -Tube Type rry Expansion Type witch, Low-Pressure Switch Freeze Protection Thermo eration Hour-Meter and Pro- 6,736 etre Companion Flange	RCU410WHYZ-E 240V / 50Hz  1,328 377.7 1,141,650 272.4 228.4  100~5, 0 1,879 3,983 1,922 8,239  3  100ASCCW-Z, 130ASCCW-Z 3  ch, Oil Heater, Internal stat, Reverse Phase essure Relief Valve 2,239 1,464 x 3 Modules 2,247 9,247	



	RCU100WHYZ	RCU120WHYZ	RCU150WHYZ	RCU180WHYZ	RCU220WHYZ	RCU260WHYZ				
	RCU100WHYZ-E	RCU120WHYZ-E	RCU150WHYZ-E	RCU180WHYZ-E	RCU220WHYZ-E	RCU260WHYZ-E				
		Main (AC	3 φ) 380, 415V / 50Hz,	Control (AC 1 \( \phi \)) 220, 24	0V / 50Hz					
1/1	344	425	516	637	713	842				
100	97.8	120.8	146.7	181.1	202.7	239.5				
10 C	295,840	365,500	443,760	547,820	613,180	724,120				
	70.7	87.4	106.1	130.9	146.2	172.7				
	59.2	73.1	88.7	109.5	122.6	144.8				
			Continuous Ca	pacity Control						
	100~	7.5, 0	100-	-5, 0	100~	7.5, 0				
	1,4	195	1,6	85	1,810	1,879				
	2,7	759	3,1	70	2,622	2,622				
	1,0	070	1,2	20	1,922	1,922				
	2,053	2,165	3,570	3,748	5,204	5,420				
5.16.			R	22						
	Electronic Expansion Valve									
		2			2					
			Semi-Hermeti	c Screw Type						
	50ASCCW-Z	60ASCCW-Z	50ASCCW-Z	60ASCCW-Z	100ASCCW-Z	100ASCCW-Z, 130ASCCW-				
	2	2		3	2					
	Shell-and-Tube Type									
			Shell-and-Tube, Di	1 73 (17)						
	Three-Phase Overcurrent Relay, High-Pressure Switch, Low-Pressure Switch, Oil Heater, Internal Thermostat for Compressor Motor, Fusible Plug, Freeze Protection Thermostat, Reverse Phase Protection Relay, Discharge Gas Thermostat, Operation Hour-Meter and Pressure Relief Valve									
No.	1,7	65	1,998		2,239					
	2,9	60	3,320		1,464 x 2 Modules					
	1,2	50	1,358		2,3	247				
5	2,233	2,345	3,851	4,029	5,874	6,092				
-	4	4	Mar. 1440 L 51		Maril Calabi Di	The second				
	4	4	$\phi$ 142 Inner Diam	etre Companion Flange	With \$\phi\$ 116 Inner Diametre Companion Flang					

With  $\phi$  142 Inner Diametre Companion Flange

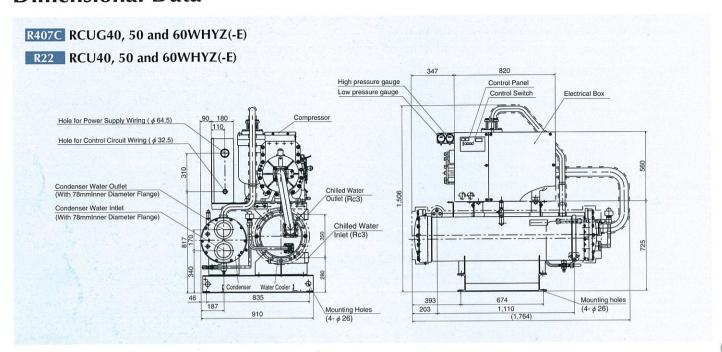
	RCU450WHYZ	RCU490WHYZ	RCU530WHYZ	RCU570WHYZ				
	RCU450WHYZ-E	RCU490WHYZ-E	RCU530WHYZ-E	RCU570WHYZ-E				
	Main (AC 3 φ) 380, 415V / 50Hz, Control (AC 1 φ) 220, 240V / 50Hz							
	1,457	1,579	1,703	1,825				
	414.2	449.0	484.0	519.1				
	1,253,020	1,357,940	1,464,580	1,569,500				
	298.7	323.8	349.3	374.2				
	250.6	271.5	292.9	313.8				
		Continuous Ca						
		100~						
		1,8	379					
39		3,9	183					
		1,9	22					
	8,457	8,670	8,883	9,096				
		R	22					
		Electronic Exp						
		3						
		Semi-Hermet						
	130ASCCW-Z	130ASCCW-Z, 170ASCCW-Z		170ASCCW-Z				
	3							
	Shell-and-Tube Type							
	Shell-and-Tube, Dry Expansion Type							
	Thermostat for Com	pressor Motor, Fusible Plug,	Switch, Low-Pressure Switch, Freeze Protection Thermosta eration Hour-Meter and Press	t, Reverse Phase				
	2,239							
		1,464 x 3	Modules					
		2,2	.47					
	9,465	9,678	9,891	10,104				

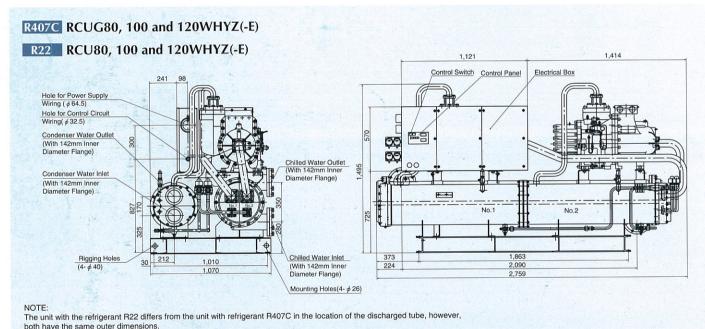
With  $\phi$  142 Inner Diametre Companion Flange

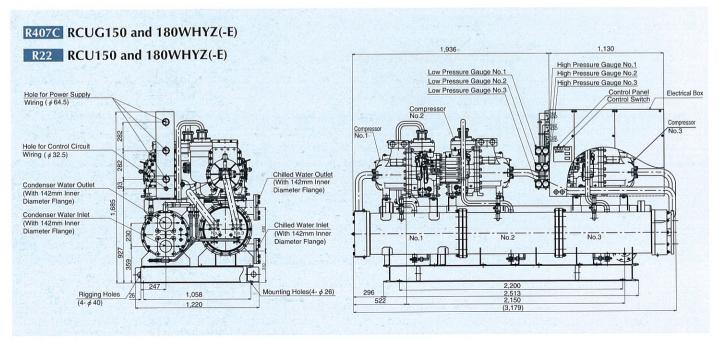
#### NOTES:

- The nominal cooling capacities are based on the following conditions.
   Chilled Water Inlet / Outlet Temperature:
   12°C / 7°C
   Condenser Water Inlet / Outlet Temperature:
   100°C / 05°C
- 2. Working Range
  Condenser Water Outlet Temperature:
  22°C to 40°C
  Condenser Water Temperature Difference:
  3.5°C to 10°C
  Chilled Water Outlet Temperature:
  5°C to 20°C
  Chilled Water Temperature Difference:
  2.5°C to 10°C
- Communication adapter connecting the unit to BMS (Building Management System) is an optional accessory, please contact with HITACHI or HITACHI distributor if required.
- The unit with liquid crystal display differs from the unit with segment code display in electric box, however, both have the same outer dimensions.

## **Dimensional Data**

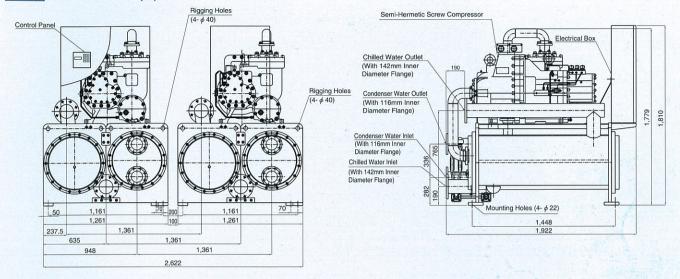






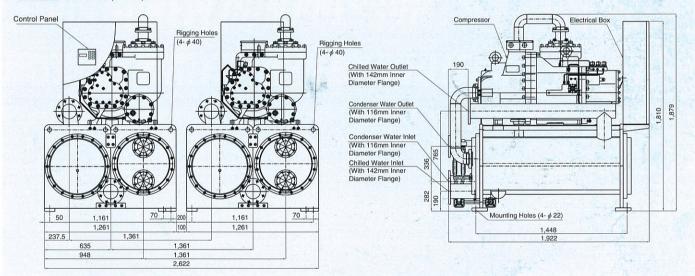
### R407C RCUG220WHYZ(-E)

#### R22 RCU220WHYZ(-E)



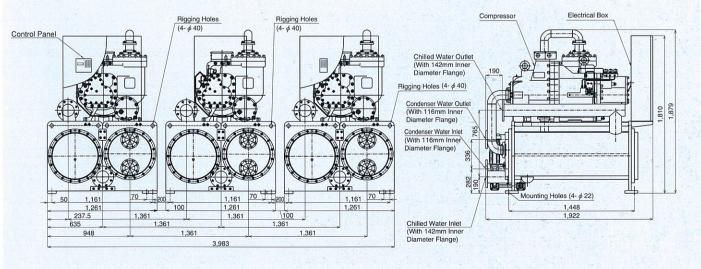
#### R407C RCUG260, 300, 340 and 380WHYZ(-E)

#### R22 RCU260, 300, 340 and 380WHYZ(-E)



#### R407C RCUG410, 450, 490, 530 and 570WHYZ(-E)

#### R22 RCU410, 450, 490, 530 and 570WHYZ(-E)



# **HITACHI**

# **@**Hitachi Appliances, Inc.

URL: http://www.hitachi-ap.com

Specifications in this catalogue are subject to change without notice in order that HITACHI may bring the latest innovations to their customers.

Distributed By:





ISO 14001