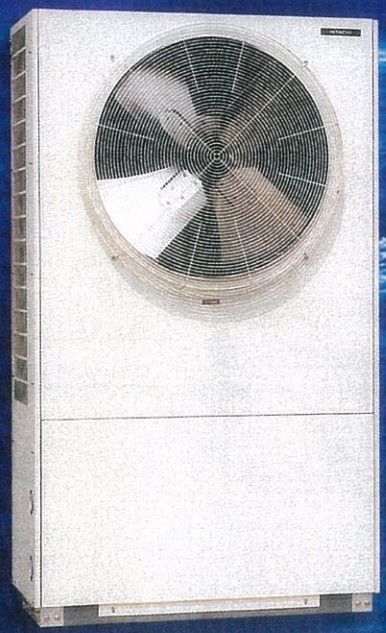
HITACHI
Inspire the Next

HITACHI AIR-COOLED WATER CHILLERS



Models:

RCU-56A	RCU-86A
RCU-106A	RCU-166A
RCU-206A	

Nominal Capacity Range

11,200	kcal/h	to	44,800	kcal/h	at 50Hz
13,000	W	to	52,100	W	
44,400	Btu/h	to	177,800	Btu/h	

FEATURES

HITACHI Air-Cooled Water Chillers has been developed for outdoor installation, featuring economical and reliable air conditioning systems covering residential, commercial and industrial cooling requirements.

READY-TO-OPERATE

All units are completely piped, charged, wired and tested with actual heat load before shipment and units are ready to operate only by connecting water piping and power wiring.

HIGH EFFICIENCY

By the combination of super slit-finned tube condenser and brazed plate heat exchanger cooler, highly-efficient cooling operation has been achieved.

ADVANCED COOLER WITH BRAZED PLATE HEAT EXCHANGER

Due to the benefit of brazed plate heat exchanger, the occupied volume can be reduced in a large scale and even get better cooling capacity.

CLEAN WATER COOLER

Because using brazed plate heat exchanger cooler in material of stainless steel and pure copper to eliminate rust and corrosion. Providing a reliable source of water that meets the highest purity requirements for industry use.

RUST AND CORROSION PREVENTION

All covers are in material of galvanized steel with electrodeposition synthetic resin and baking paints. And all cover's fixing screws are in stainless steel to prevent rust and corrosion occurred.

REDUCED INSTALLATION SPACE

Thinly compact and completely packaged in weather-proof cabinet design to offer quick and low cost transportation and installation even for narrow locations.

SILENCER FOR DISCHARGED AIR

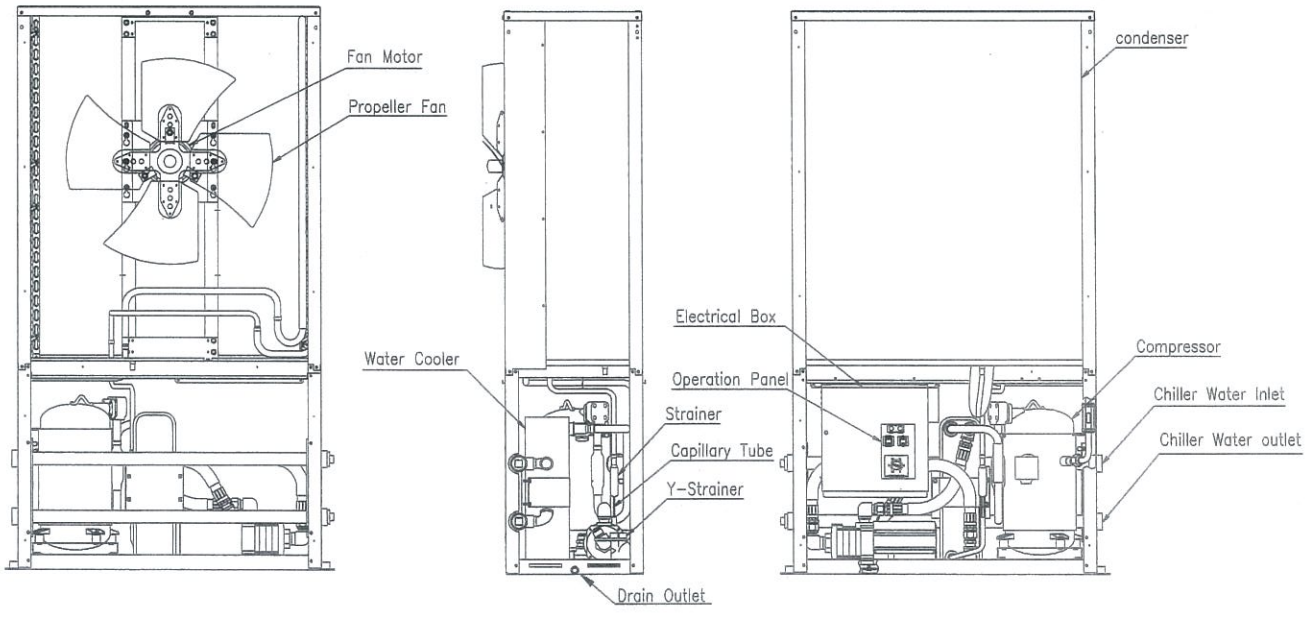
The optimum design with high efficiency fan and forward curve air discharge will reduce sound.

REMOTE CONTROL CONNECTING TERMINAL

Reserved connecting terminals for remote control usage. It is easily for remote controlling from indoor control switch or fan coil units' control switch.

CONVENIENT CONTROL MODE SELECT

The unit has a Control Mode Selection Switch to furnish "Local Control" or "Remote Control" modes switching. When proceeding service or maintenance works, the "Local Control" mode can provide convenient ON/OFF operating control and also isolate remote control circuit to prevent accident.



GENERAL DATA

Item (unit) \ Model				RCU-56A	RCU-86A	RCU-106A	RCU-166A	RCU-206A
Nominal Cooling Capacity at 35°C Outdoor Temperature	50Hz		kcal/h W Btu/h	11200 13000 44400	18400 21400 73000	22200 25800 88100	38200 44400 151700	44800 52100 177800
Capacity Control			%	100-0	100-0	100-0	100-50-0	100-50-0
Starting System				Direct-On-Line Starting				
Cabinet Color				Synthetic Resin Painted on Galvanized Steel Plates Beige				
Outer Dimensions		Height	mm (ft-in)	1950 (6-4 12/16)	1950 (6-4 12/16)	1950 (6-4 12/16)	1982 (6-6 1/16)	1982 (6-6 1/16)
		Depth	mm (ft-in)	455 (1-5 15/16)	585 (1-11 1/16)	585 (1-11 1/16)	685 (2-2 15/16)	685 (2-2 15/16)
		Width	mm (ft-in)	900 (2-11 7/16)	1070 (3-6 1/8)	1070 (3-6 1/8)	1797 (5-10 3/4)	2140 (7-0 1/4)
Net Weight			kg (lbs)	250 (551)	340 (749)	360 (793)	660 (1455)	700 (1543)
Refrigerant Number of Circuits				1	1	1	2	2
Compressor Model Quantity				Hermetic Scroll 483DH-77D1 1	Hermetic Scroll 901EH-144D3 1	Hermetic Scroll 1101EH-170D3 1	Hermetic Scroll 901EH-144D3 2	Hermetic Scroll 1101EH-170D3 2
Control of Refrigerant Flow				Capillary Tube				
Condenser				Multi-Pass Cross Finned Tube				
Condenser Fan Motor Quantity			kW (hp)	0.3 (0.40) 1	0.4 (0.53) 1	0.4 (0.53) 1	0.4 (0.53) 2	0.4 (0.53) 2
Water Cooler				Brazed Plate Heat Exchanger				
Pump	Head		mAq	19.5	29.5	28	22	32
Chiller water	Standard Flow Rate		m^3/h	2.24	3.68	4.44	7.64	8.96
	Pressure Drop		mAq	9.1	10.2	11.2	12.7	17.9
	Unit outside Head		mAq	10.4	19.3	16.8	9.3	14.1
Safety Devices				Over-Current Relay, Thermostat, High Pressure Switch, Low Pressure Switch, Freeze Protection Thermostat, and Fuses for Control Circuit				
Connections Water Cooler Inlet & Outlet Outer Diameters				FPT 1-1/4"	FPT 1-1/2"	FPT 1-1/2"	FPT 2"	FPT 2"
Wiring Holes			mm (in)	62 (2 7/16)	62 (2 7/16)	62 (2 7/16)	62 (2 7/16)	62 (2 7/16)
Approximate Packing List		Height	mm (ft-in)	2112 (6-11 1/8)	2014 (6-7 5/16)	2014 (6-7 5/16)	2160 (7-1 1/16)	2160 (7-1 1/16)
		Depth	mm (ft-in)	596 (1-11 7/16)	726 (2-4 9/16)	726 (2-4 9/16)	830 (2-8 11/16)	830 (2-8 11/16)
		Width	mm (ft-in)	1034 (3-4 11/16)	1204 (3-11 3/8)	1204 (3-11 3/8)	1941 (6-4 7/16)	2284 (7-5 7/8)
		Measurements	m^3	1.30	1.76	1.76	3.47	4.09
Shipping Weight			kg (lbs)	285 (628)	380 (837)	400 (881)	700 (1543)	740 (1631)

NOTES : 1. Cooling capacity is based on JIS standard B8613-1987 :

Chilled Water Inlet Temperature : 12°C (53.6°F)

Chilled Water Outlet Temperature : 7°C (44.6°F)

Condenser Air Inlet Temperature : 35°C (95.0°F)

2. Power Source:

Main (3 φ) Control (1 φ)

380V, 50Hz 220V, 50Hz

415V, 50Hz 240V, 50Hz

GENERAL DATA

WORKING RANGE

°C (°F)

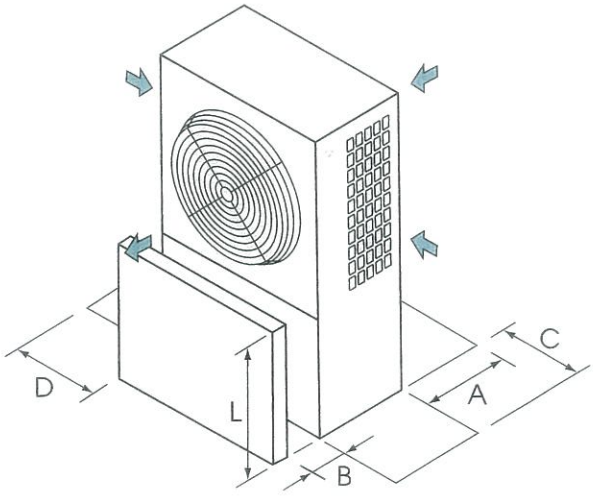
Chilled Water Outlet Temperature		Condenser Air Inlet Temperature	
Maximum	Minimum	Maximum	Minimum
15 (59)	5 (41)	43 (109.4)	10 (50)

NOTE : Chilled water flow rate range shall be 100%~150% from standard flow rate.

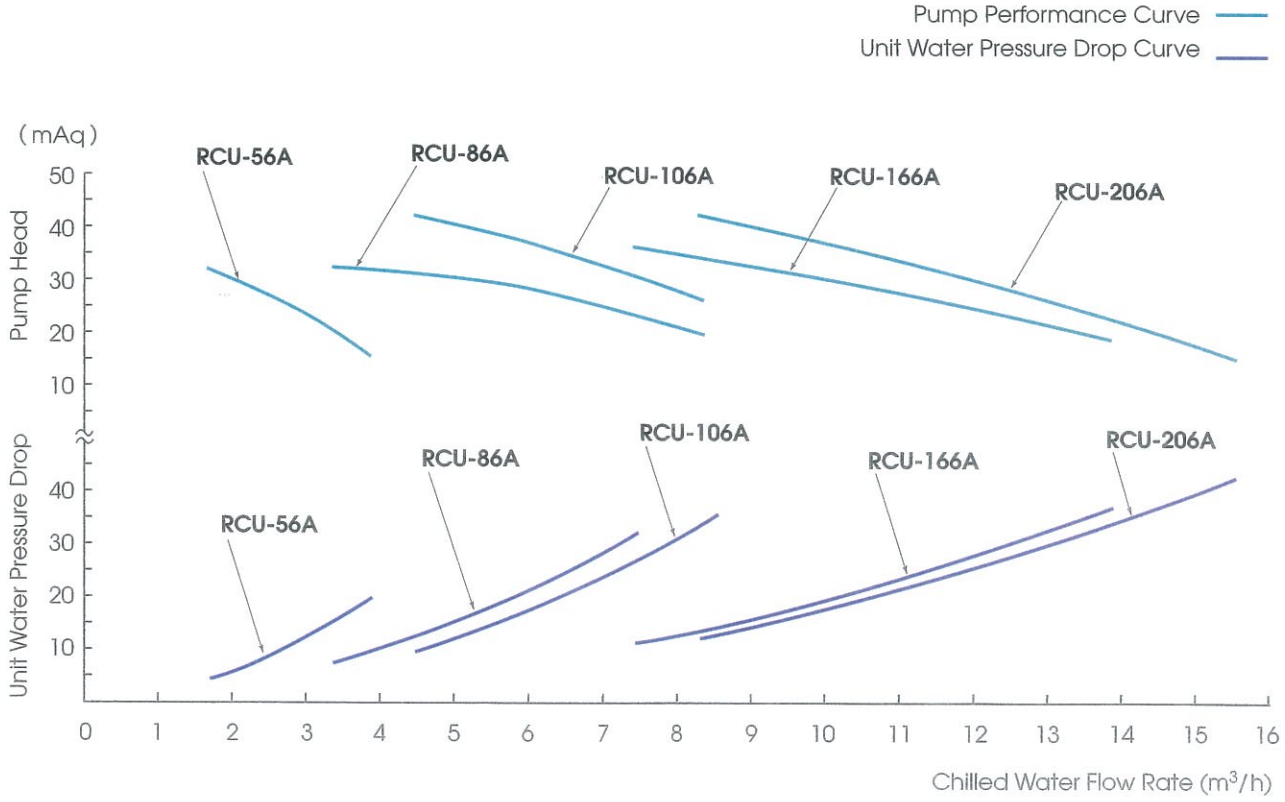
OPERATION SPACE

Model	Dimensions (Unit : mm)				
	A	B	C	D	L
RCU-56A	1000	0	500	500	1000
RCU-86A	1000	0	500	500	1000
RCU-106A	1000	0	500	500	1000
RCU-166A	1000	0	500	500	1000
RCU-206A	1000	0	500	500	1000

NOTE :
The dimension B is indicated that the wall could be near unit's lower cover. But the wall still shall be kept not to block the air discharge.

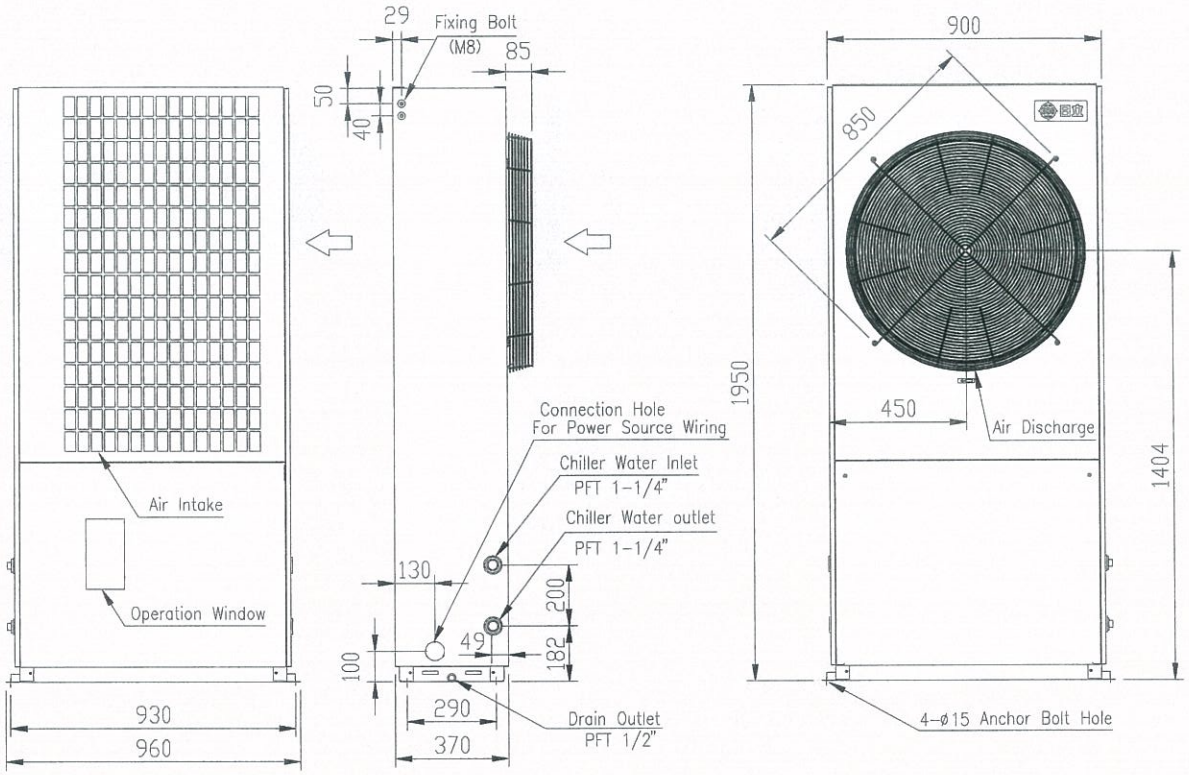


PUMP HEAD CURVES AND UNIT WATER PRESSURE DROP CURVES

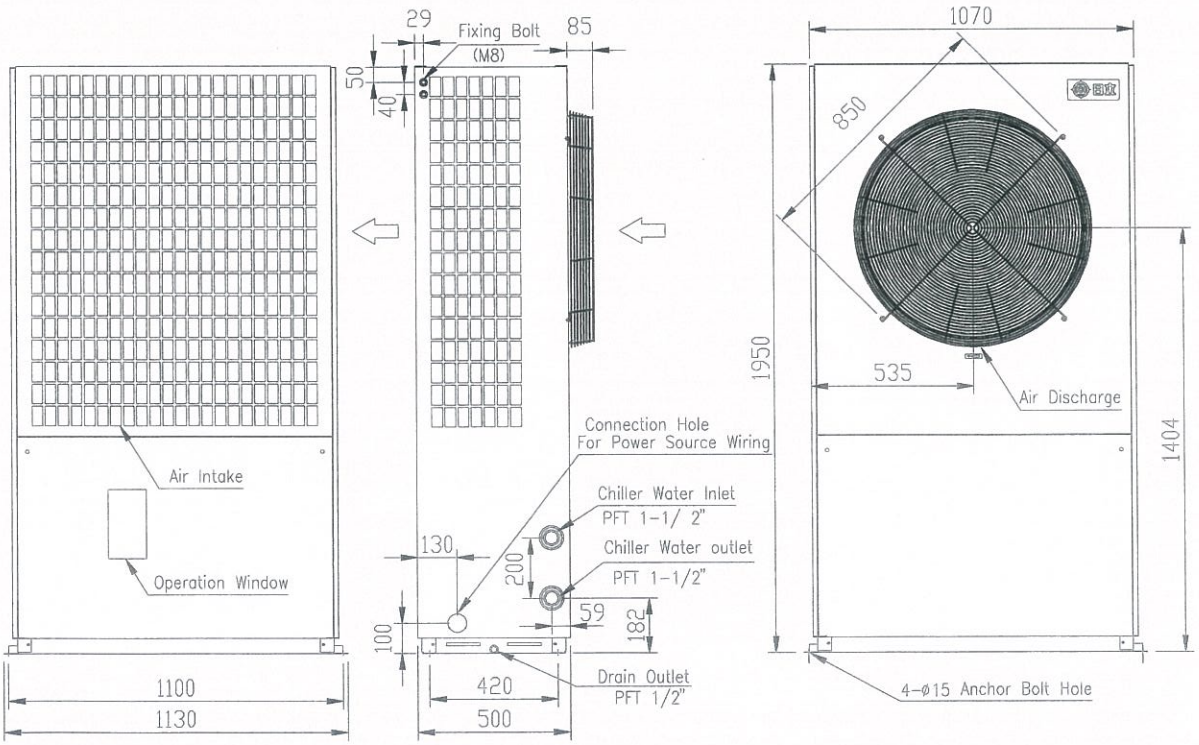


UNIT DIMENSIONS

RCU-56A

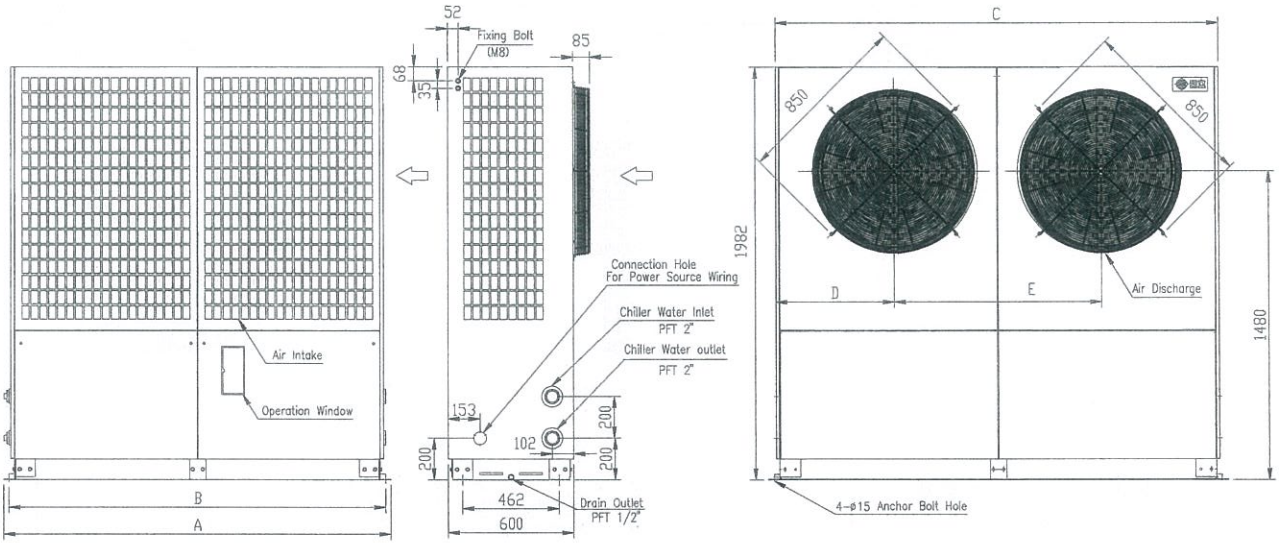


RCU-86A & 106A



UNIT DIMENSIONS

RCU-166A & 206A



Model	A	B	C	D	E
RCU-166A	1867	1817	1797	467	863
RCU-206A	2220	2160	2140	569	1002