

Hitachi Air Conditioning

Engineered for tomorrow.



Samurai RCU2E-AG2 Air Cooled Cooling Only, Samurai RHU2E-AG2 Air Cooled Heat Pump

The Samurai range of chillers offer world-renowned reliability – thanks to our own twin screw compressors – and incorporate the latest developments in screw compressor technology for excellent partial load performance and high seasonal efficiencies.

Our Chillers are ideally suited for Industrial and process applications: data centres, shopping centres, airports, hotels, hospitals and offices.

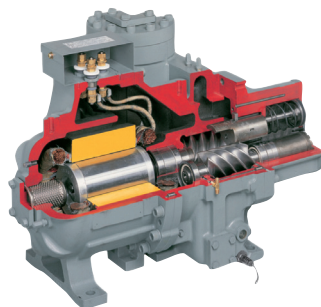


Features and Benefits

- ✓ RCU2E-AG2 Air Cooled Cooling only - capacities from 40HP to 400HP (112kW to 1030kW)
 - ✓ RHU2E-AG2 Air Cooled Heat Pump - capacities from 40HP to 240HP (106kW to 585kW)
 - ✓ ESEER of up to 3.52
 - ✓ Control outlet water temperature to +/- 0.5°C independent of cooling load
 - ✓ Continuous capacity control provides 15% to 20% energy saving compared to step control
 - ✓ STAR DELTA starting system reduces the maximum starting current
 - ✓ Excellent partial load performance
 - ✓ Low noise and vibration
 - ✓ Very small installation space
- Thanks to meticulous design of each component, it is possible to achieve exceptionally high cooling capacity values per square metre
- ✓ Optional recovery system
- Recover 30% of the output power in cooling mode by heating the water in a dedicated circuit with outlet temperatures up to 70°C at maximum working conditions.

Hydraulic Module Option - Single and Dual Pump Models

Hitachi Hydraulic modules are a compact design integrated inside the Chiller unit. They are assembled with all interconnecting piping and wiring during manufacture ready for installation. Available with or without buffer tank.



World Renowned Reliability with Hitachi's Twin Screw Compressor

With few moving parts, it is highly reliable with very low noise level and low vibration

Optional Control Systems



- ✓ **CSC 5S**
Central controller
(up to 8 Samurai Chillers)



- ✓ **CS Net Web**
Web based controller

BMS Interfaces



- ✓ **Modbus CHL-MBS-01**
Can control up to 8 RCU2E-AG2 chillers (Chiller modules >3 cycles are counted as 2 Chillers)



- ✓ **Lonworks® HARC-70CE1 (OP)**
Control and monitor
up to 4 Samurai chillers



RCU2E-AG2



RHU2E-AG2



Air Cooled Cooling Only

		RCU2E 40AG2	RCU2E 50AG2	RCU2E 60AG2	RCU2E 70AG2	RCU2E 80AG2	RCU2E 100AG2	RCU2E 120AG2	RCU2E 140AG2	RCU2E 160AG2	RCU2E 180AG2	RCU2E 210AG2	RCU2E 240AG2	RCU2E 280AG2	RCU2E 320AG2	RCU2E 350AG2	RCU2E 400AG2				
Cooling Capacity ¹	Kw	112	130	156	178	206	260	312	356	412	468	534	618	712	824	890	1030				
Power Input	Kw	38.6	44.7	53	61	70	89.4	106	122	140	159	183	210	244	280	305	350				
EER		2.9	2.91	2.94	2.92	2.94	2.91	2.94	2.92	2.94	2.94	2.92	2.94	2.92	2.94	2.92	2.94				
ESEER		3.48	3.49	3.52	3.5	3.52	3.49	3.52	3.5	3.52	3.52	3.5	3.52	3.5	3.52	3.5	3.52				
Sound Power Level (Std/LN/SLN)	dB(A)	82/80/78	83/81/79	84/82/80	85/83/81	85/83/81	86/84/82	87/85/83	88/86/84	88/86/84	89/87/85	91/89/87	91/89/87	92/90/88	92/90/88	94/92/90	94/92/90				
Sound Pressure Level (Std/LN/SLN) ³	dB(A)	52/50/48	53/51/49	54/52/50	55/53/51	55/53/51	55/53/51	56/54/52	57/55/53	57/55/53	57/55/53	58/56/54	58/56/54	59/57/55	59/57/55	60/58/56	60/58/56				
Height	mm	2430																			
Width	mm	1900																			
Depth	mm	2190			2790			4090			5290			5990		7790		10290		12790	
Net Weight	Kg	1430	1470	1560	1760	1820	2830	3000	3420	3550	4450	5070	5250	6750	7000	8450	8750				
Capacity Control	-	Continuous Capacity Control																			
	%	15 ~ 100																			
Number of Circuits	-	1	1	1	1	1	2	2	2	2	3	3	3	4	4	5	5				
Water Pipe Connection	in	3" Victaulic (1 x Inlet / 1 x Outlet) per Circuit																			
	in	Common Water Pipe Connection Option available																			
Leaving Water Outlet Temperature	°C	5 ~ 15 (-10 option)																			
Ambient Temperature	°C	-15 ~ 46																			

Air Cooled Heat Pump

		RHU2E 40AG2	RHU2E 50AG2	RHU2E 60AG2	RHU2E 70AG2	RHU2E 80AG2	RHU2E 100AG2	RHU2E 120AG2	RHU2E 140AG2	RHU2E 160AG2	RHU2E 180AG2	RHU2E 210AG2	RHU2E 240AG2				
Cooling Capacity ¹	Kw	106	123	148	169	195	246	296	338	390	444	507	585				
Heating Capacity ²	Kw	110	127	152	185	185	254	304	370	370	456	555	555				
Power Input (Cooling)	Kw	37.9	42.7	52	60	70	85.4	104	120	140	156	180	210				
Power Input (Heating)	Kw	40.7	44.5	54	68	68	89	108	136	136	162	204	204				
EER		2.80	2.88	2.85	2.82	2.79	2.88	2.85	2.82	2.79	2.85	2.82	2.79				
COP		2.70	2.85	2.81	2.72	2.72	2.85	2.81	2.72	2.72	2.81	2.72	2.72				
ESEER		3.36	3.45	3.42	3.38	3.34	3.45	3.42	3.38	3.34	3.42	3.38	3.34				
Sound Power Level	dB(A)	82/80/78	83/81/79	84/82/80	85/83/81	85/83/81	86/84/82	87/85/83	88/86/84	88/86/84	89/87/85	91/89/87	91/89/87				
Sound Pressure Level (Std/LN/SLN) ³	dB(A)	52/50/48	53/51/49	54/52/50	55/53/51	55/53/51	55/53/51	56/54/52	57/55/53	57/55/53	57/55/53	58/56/54	58/56/54				
Height	mm	2430															
Width	mm	1900															
Depth	mm	2190			2790			4090			5290			5990		7790	
Net Weight	Kg	1550	1600	1670	1880	1950	3050	3250	3670	3780	4780	5440	5650				
Capacity Control	-	Continuous Capacity Control															
	%	15 ~ 100															
Number of Circuits	-	1	1	1	1	1	2	2	2	2	3	3	3				
Water Pipe Connection	in	3" Victaulic (1 x Inlet / 1 x Outlet) per Circuit															
	in	Common Water Pipe Connection Option available															
Leaving Water Outlet Temperature (Cool)	°C	5 ~ 15 (-10 option)															
Leaving Water Outlet Temperature (Heat)	°C	35 ~ 55															
Ambient Temperature	°C	-15 ~ 46 Cooling / -10 ~ 15.5wb Heating															

NOTES:

- The nominal cooling capacities are based on the European Standard EN14511.
Chilled Water Inlet / Outlet Temperature: 12 / 7°C
Condenser Inlet Air Temperature: 35°C

- The nominal heating capacities are based on the European Standard EN14511.
Heated Water Inlet / Outlet Temperature: 40 / 45°C
Evaporator Air Inlet Temperature: 6°C wb
- Sound Pressure level measured at 10m