



"Budget" Air-cooled Water Chiller

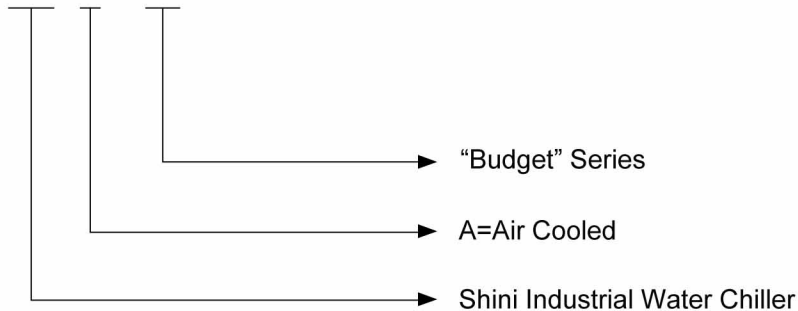
SIC-5A-EB



Refer carefully to this manual before operation.

■ Coding Principle

SIC - A - EB



■ Features

- Cooling range 7~25℃
- Environmentally insulated water tank, with prolonged service life and free of contamination.
- Adopt R410 A refrigerant with good refrigeration effect.
- Refrigerating system adopts multiple precise controls that accurately control the system stability.
- Compressor and pump overload protection.
- Fin-style condenser with quick heat conduction and good dissipation effect.
- Adopt tube and shell evaporator. The SUS304 pipe is directly mounted on water tank that is economical and practical.-
- Adopt renowned brand of original precision temperature-controlled meter with an accuracy of $\pm 0.1^{\circ}\text{C}$.



Control panel

■ Application

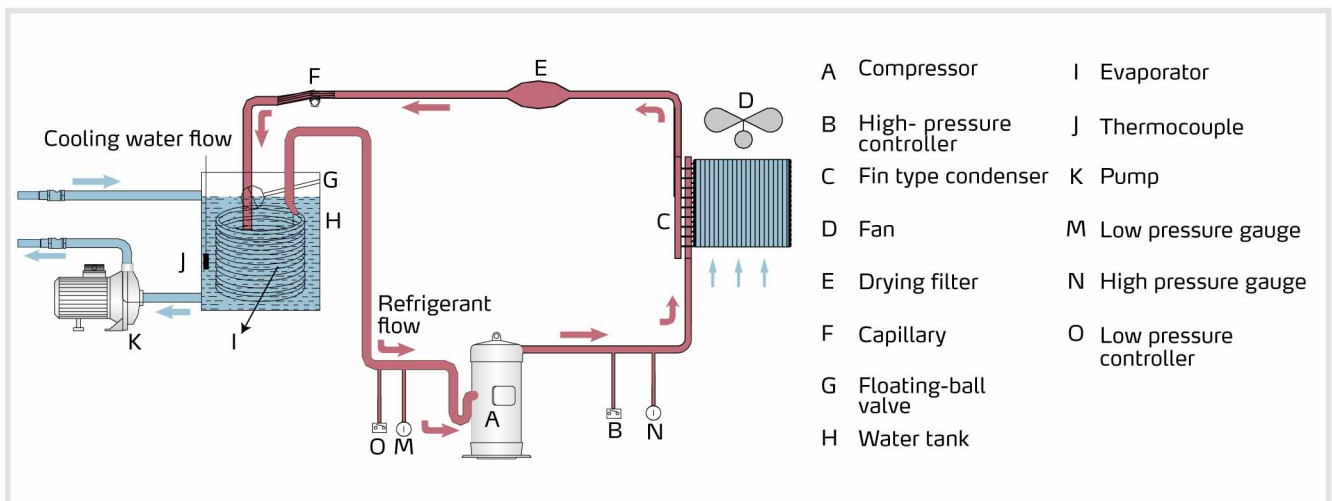
SIC-A-EB series are applicable for cooling moulds to reduce products molding cycle time; also they are available in the cooling of equipments in order to maintain a normal temperature. Besides, they are suitable for other industries with the need of cooling.

SIC-A-EB Series

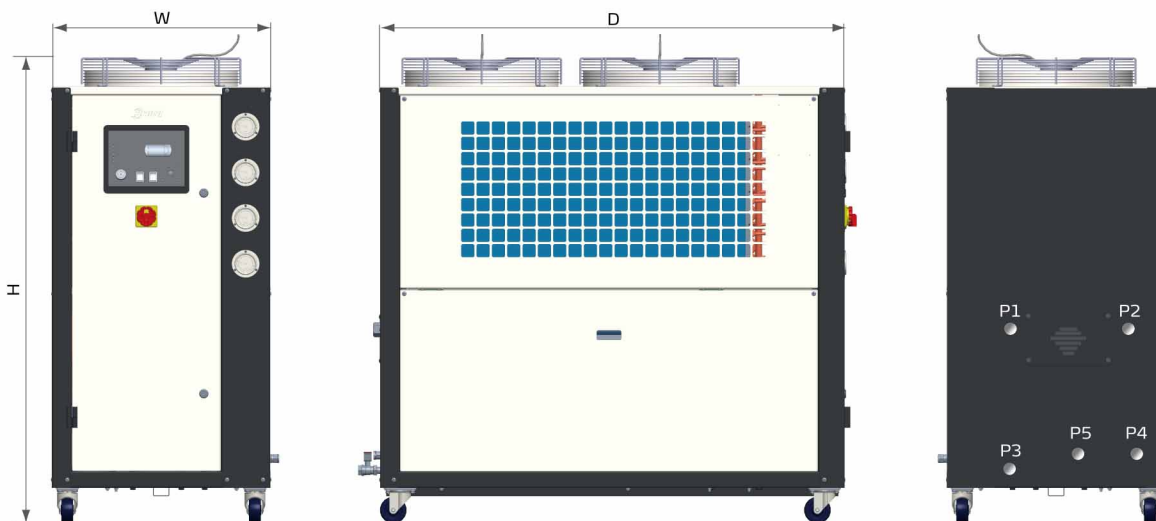
Working Principle

SIC-A-EB air cooled water chiller mainly consists of compressor, condenser, capillary and tube evaporator. Adopting single-stage vapor compression refrigerating system, gas-liquid adsorption and release, it achieves the cooling effect.

When SIC-A-EB air-cooled water chiller starting up, compressor (A) starts working. Refrigerant is compressed into high temperature high pressure gas, and then be cooled when passing through condenser (C) and changed into liquid. Heat is taken away by the cooling air. The liquid high pressure refrigerant passes through the capillary (F), and partial refrigerant is changed into gas under reduced pressure. At this time, the refrigerant is mixed with gas and liquid, which cools down the chilled water into required temperature after passing through the tube evaporator(I). By heat adsorption, the liquid refrigerant changes to gas and returns the compressor for this circulation.



Outline Drawings

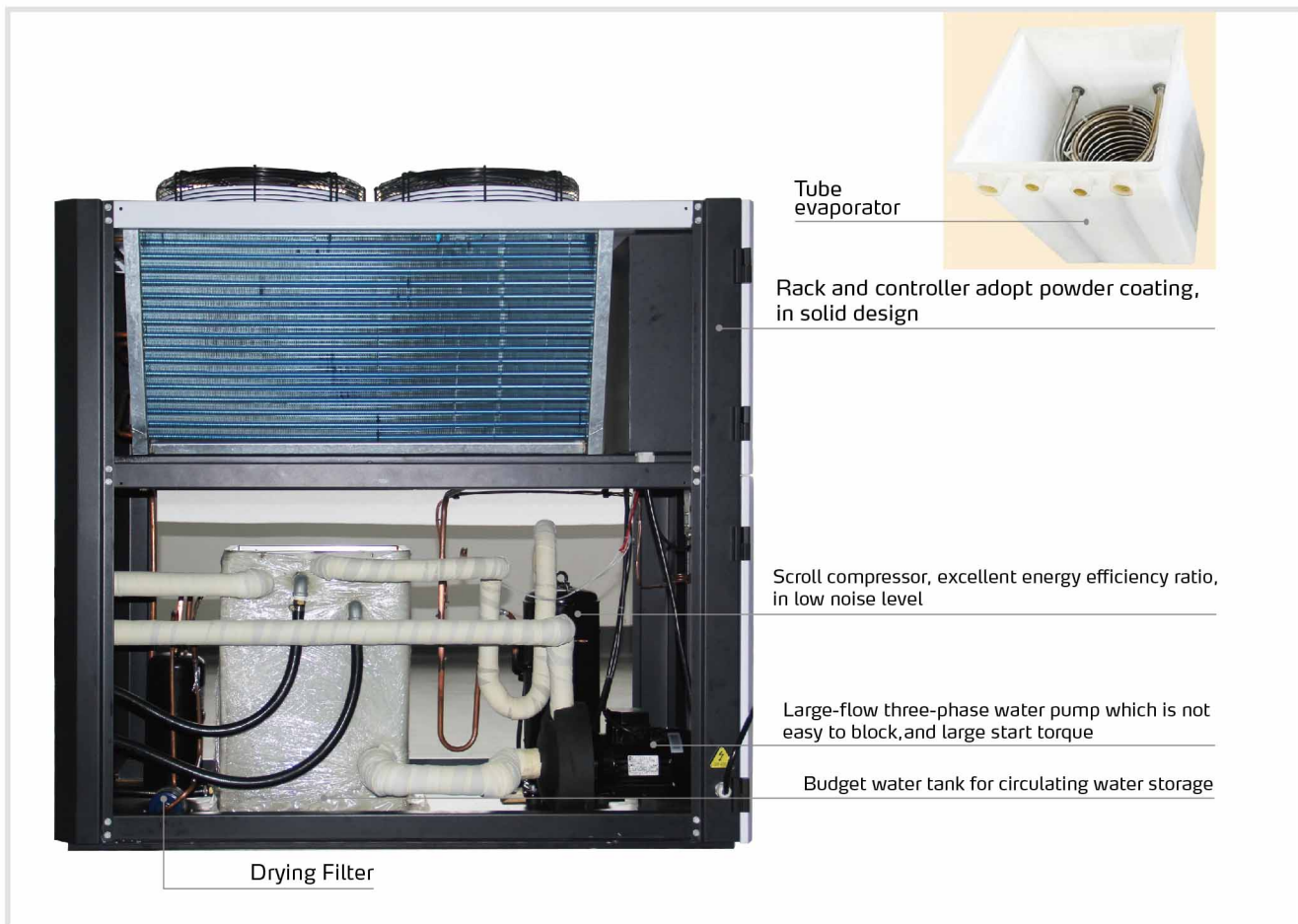


SIC-A-EB

Outline Drawings

Model	H (mm)	W (mm)	D (mm)	P1 (inch) Chilled Water inlet	P2 (inch) Chilled Water Outlet	P3 (inch) Water Tank Refill Work	P4 (inch) Water Tank Overflow Port	P5 (inch) Water Tank Outlet Port	Weight (kg)
SIC-5A-EB	1265	661	1344	1	1	1/2	1/2	1/2	240
SIC-10A-EB	1430	697	1490	1	1	1/2	1/2	1/2	310
SIC-15A-EB	1650	931	1853	1.5	1.5	1/2	1/2	1/2	420

Structure of Air-cooled Models



SIC-A-EB Series

■ Specification

Model		SIC-5A-EB	SIC-10A-EB	SIC-15A-EB
Refrigerant Capacity	kW	10	20	30
	kcal/hr	8,600	17,200	25,800
Compressor	Input power(kW)	Scroll		
	Filling Volume (kg)	3.3	6.6	13.3
Refrigerant	Filling Volume (kg)	7.5	7.5×2	11
	Control Mode	Capillary		Expansion valve
	Type	R410A		
Evaporator		Tube		
Condenser	Type	Fin style		
	Blower power (kW)	0.19×2	0.25×2	0.8×2
Water Tank Capacity (L)		55	145	161
Pump (50Hz)	Power (kW)	0.37	0.75	1.5
	Pump flow (L/min)	60		133
	Working Pressure(Bar)	2.0		3.0
Total Power (kW)		4.05	7.85	16.4
Pipe Coupling (inch)	Chilled Water Outlet	1		1½
	Chilled Water Inlet	1		1½
	Water Tank Drainage Port	1/2		
	Water Tank Overflow Port	1/2		
Protective Devices	Compressor	Built-in protective switch /Overload Relay		
	Pump	Overload Relay		
	Refrigeration Loop	High and Low pressure controller		
Power		3 φ, 400VAC, 50Hz		
Measures Exchange		1 kW = 860 kcal/hr	1 RT = 3,024 kcal/hr	10,000 Btu/hr = 2,520 kcal/hr

Note: 1) The refrigeration capacity is measured based on the outlet temperature (20°C) of chilled water under the environment temperature of 35°C.

2) Special orders of machine voltage can be acceptable according to customers's request.

We reserve the right to change specifications without prior notice.

Shini Group

Addr: No. 23, Minhe St., Shulin Dist.,
New Taipei, Taiwan

Tel: +886 2 2680 9119

Fax: +886 2 2680 9229

Email: shini@shini.com

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