

# R410A SERIES COMMERCIAL



- ✓ -7°C-43°C Ambient Temp
- ✓ 26KW-145KW Models
- ✓ 40m³-500m³ Pools size

## R410A Commercial Series

Ideal sustainable pool heating & cooling solutions for 40~500m<sup>3</sup> commercial pools in hotels, competitions, schools, sports centers, gyms, etc.

### Features



#### Electronic Expansion Valves (Sanhua EEV)

Adopt PID closed-loop automatic control technology



#### High-Efficiency Condensor

Spiral titanium tube in PVC



#### Heat exchanger

Hydrophilic coated aluminum foil inner corrugated finned heat exchanger



#### High-Performance Fan Motor

High airflow, low noise, minimal vibration, excellent anti-aging properties.



#### Separate Isolated Electrical Compartment

Effectively prevents internal corrosion and extends the service life of your heat pump.



#### Multiple Noise Reduction Design

Noise optimized via absorption, insulation, & buffering; 56 dB(A) at 1m.



R410A  
Refrigerant



Heating & Cooling

75%  
Max energy saving



Intelligent Defrost



Easy installation

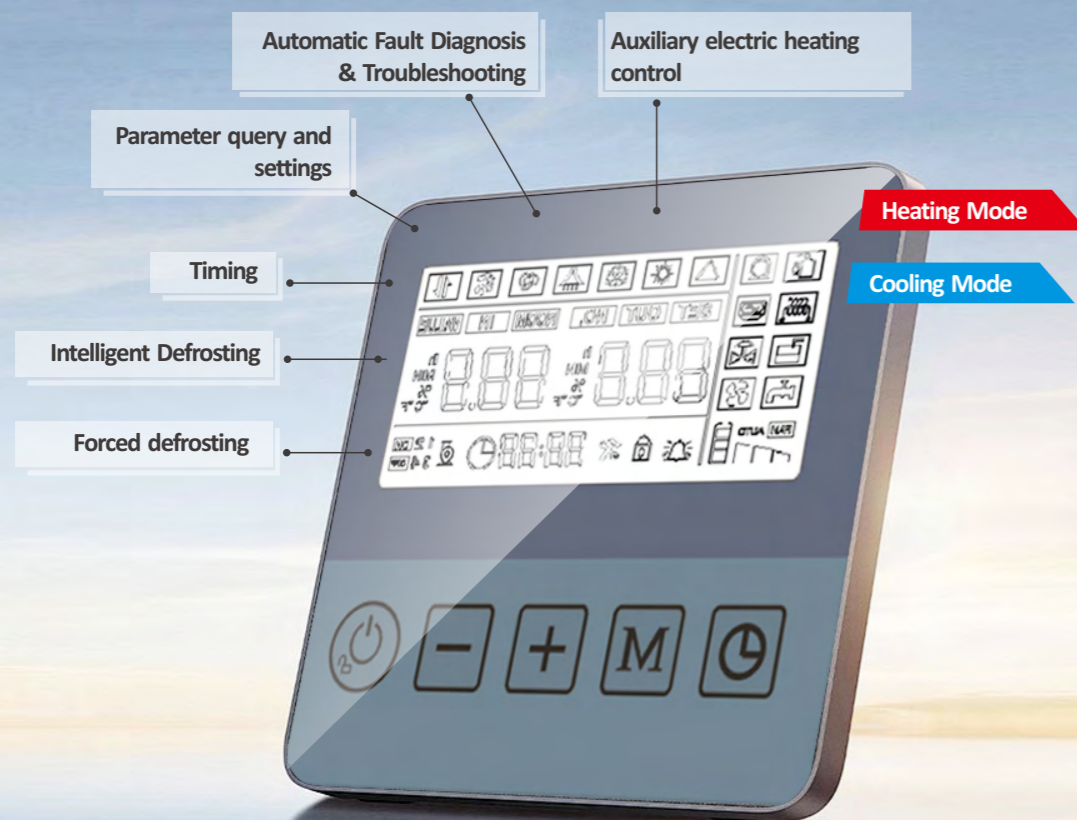


Ambient Temp  
-7°C-43°C

## Intelligent Digital Controller

Humanized UI design with blue LED backlight for simpler, clearer controller operation.

	<b>Multi-Point Precise Control</b> Equipped with multiple strategically placed sensors, our unit ensures accurate, pinpoint control during the defrost process, optimizing performance and efficiency.
	<b>Comprehensive Intelligent Protection</b> Antifreeze, water flow, exhaust, water inlet, power outage, overheating, current, voltage, overload, locked rotor, power off memory and other intelligent protections ensure all-around security for your system.
	<b>5-Minute Quick Intelligent Defrost</b> Four-way valve intelligent reversing defrost. With multi-point precise control, frost can be effectively eliminated in as little as 5 minutes.
<b>PID</b>	<b>PID Closed-Loop Automatic Control Technology</b> Employing the advanced PID closed-loop control mechanism, our system ensures precise, self-regulating performance.



## R410A Commercial Series

Model	SM50-410A	SM100-410A	SM150-410A	SM200-410A	SM250-410A	SM300-410A
Advised pool volume (m3) <sup>①</sup>	40~85	80~170	120~250	150~300	210~400	260~500
Operating air temperature (°C)	-7~43°C					
Performance Condition: Air 27°C, Water 26°C, Humidity 80%						
Heating capacity (kW)	26	51.5	75	100	121	145
Heating capacity (Btu)	88400	175100	255000	340000	411400	493000
Consumed power (kW)	4.2	8.4	12.1	16.8	20.2	23.8
COP	6.2	6.1	6.2	6	6	6.1
Performance Condition: Air 15°C, Water 26°C, Humidity 70%						
Heating capacity (kW)	18.3	39.8	53.5	77.5	90.3	105.8
Heating capacity (Btu)	62220	135320	181900	263500	307020	359720
Consumed power (kW)	3.9	8.4	11.3	16.7	19.2	22.8
COP	4.7	4.7	4.7	4.6	4.7	4.6
Performance Condition: Air 35°C, Water 28°C, Humidity 80%						
Cooling capacity (kW)	15.3	31.0	43.0	62.5	73.0	85.5
Sound pressure at 1m dB(A)	56	58	60	62	64	66
Sound pressure at 10m dB(A)	44	46	48	50	52	54
Heat exchanger	Spiral titanium tube in PVC shell					
Casing	Metal Casing					
Refrigerant	R410A					
Power supply	380V~400V/3PH/50Hz					
Compressor	Gree			Copeland		
Water connection (mm)	G1-1/2" (PVC female thread)	G2" (PVC female thread)	G2" (PVC female thread)	Dn90 (PVC flange)	Dn90 (PVC flange)	Dn90 (PVC flange)
Rated input current at air 15°C (A)	6.05	13.02	17.52	25.89	29.77	35.35
Advised water flux (m³/h)	11.2	22.1	32.3	43.0	52.0	62.4
Water pressure drop (max) KPa	50	50	50	45	45	50
Net weight / Gross weight (kg)	135/145	200/220	248/268	352/372	450/480	465/500
Product size (mm)	750X805X1165	1500X750X1075	1530X790X1100	1705X1065X1200	2005X1065X1400	
Loading quantity (20GP/40GP/40HQ)	14/28/56	6/14/28	6/14/28	6/12/12	5/10/10	
Operating water temperature(°C) Heating	9~40°C					
Operating water temperature(°C) Cooling	9~35°C					

① The advised pool volumes are valid under ideal conditions: Air 27°C, Water 26°C, Humidity 80%, Pool covered with an isothermal cover.

Note: The data above is for reference only, please refer to the nameplate on the unit if for more specific data.