



# RENEWABLE

## Energy Solutions



Commercial & Industrial series





### Based on experience, backed by commitment

#### Over three decades of application knowhow

Over three decades various process industries sector have been reaping benefit of SUNTEC's cost effective, performance orientated process heat solution by ensuring conservation of energy & preserving environment.

Besides providing solutions for combustion systems for Oil, Gas & Biomass to various industrial segments, SUNTEC now offering renewable energy solutions for Residential, Commercial & Industrial use for Heating, Cooling & Drying, by means of Heat pumps hot water generators, Heat pump dryers, Solar hot water generators, Solar PV power generation system on turn-key project basis.

## Air Source Heat Pump for Sanitary Hot Water



**Higher  
COP  $\geq 4.5$**



Air source heat pump is meant for sanitary hot water for commercial use, such as Hotels, Hospitals, Restaurants, Schools, Hostels, Resorts, etc. It is helpful to get better performance in low temperature. Heat pump can be easily connected with existing solar water system. Commercial air source heat pumps are very easy to install & maintain. Standard capacity range available up to 200 kW; higher capacity available on specific request.

### Features

- Hot water temperature 60°C
- Energy saving up to 75%
- Environment friendly refrigerant
- Automatic controls
- Touch screen multi-functional controller
- Efficient scroll compressor
- High efficient shell & tube heat exchanger
- U, V & X shape design

Model		SC-H-200	SC-H-350	SC-H-500	SC-H-800V	SC-H-1000V	SC-H-1250V	SC-H-1650V
Power supply	V/Ph/Hz	415/3/50						
Ambient temperature	°C	-10 to 46°C						
Rated heating output	kW	19.6	35	50	76	95	125	165
Rated hot water output	L/h	421	752	1075	1634	2042	2687	3547
Input power	kW	4.45	7.92	11.36	17.27	23.8	28.9	38.10
Rated water outlet temperature	°C	55						
Max. water outlet temperature	°C	60						
Compressor		Copeland scroll						
Heat exchanger		Shell & tube						
Rated water flow rate	m <sup>3</sup> /h	3.37	6.00	8.60	13.00	16.34	21.5	28.4
Noise	dB(A)	≤58	≤65	≤66	≤68	≤72	≤74	≤78
Dimension (LWH)	mm	740	1450	1580	1850	2000	2050	2050
	mm	740	740	850	1000	1100	1000	2000
	mm	1070	1150	1200	1950	2080	1980	1980
Net weight	kg	145	270	315	482	582	840	1230
Testing conditions		Inlet water 15°C/Outlet water 55°C (max.60°C) Dry bulb/Wet bulb temperature 20°C/15°C						

## Air Source Swimming Pool Heat Pump



**Higher  
COP  $\geq 5.5$**



Air source heat pump is meant for swimming pool heating & cooling. It applies titanium heat exchanger & heat pump technology which can move heat from atmosphere to pool water. It is helpful to get better performance in low temperature. Heat pumps are easy install & maintain. Standard capacity range available up to 200 kW; higher capacity available on specific request.

### Features

- Swimming Pool heating & cooling
- Hot water temperature range 10-40°C
- Energy saving up to 80%
- Environment friendly refrigerant
- Titanium heat exchanger
- Automatic controls
- Touch screen multi-functional controller
- Efficient scroll compressor
- High efficient shell & tube heat exchanger

Model		SC-W-210	SC-W-350	SC-W-500	SC-W-700	SC-W-1000	SC-W-2000
Power supply	V/Ph/Hz	415/3/50					
Ambient temperature	°C	-10 to 43°C					
Rated heating output	kW	21	35	50	70	100	200
Input power	kW	3.7	7.9	11.1	16.32	17	34
Heating range	°C	10-40					
Rated cooling output	kW	15.2	25	36	50.8	63.8	128.2
Rated input power	kW	4.62	7.8	11.25	15.87	16.2	34.2
Cooling range	°C	8-28					
Compressor		Copeland scroll					
Noise	dB(A)	≤ 56	≤ 61	≤ 63	≤ 65	≤ 68	≤ 78
Net weight	kg	116	215	235	395	482	964
Dimension (LWH)	mm	1050	1450	1450	2165	1850	1850
	mm	455	710	710	1130	1000	2000
	mm	1250	1060	1060	1520	1950	1950
Testing conditions	Heating	Inlet water 15°C/Outlet water 55°C (max.60°C)					
	Cooling	Dry bulb / Wet bulb temperature 20°C/15°C					

## Water Source Heat Pump



**Higher  
COP  $\geq 7$**

Water source heat pump use water as heat source for water heating at use side & you get chilled water at other side simultaneously. Huge energy saving involved when we use water source heat pump. Heat pumps are easy install & maintain. Standard capacity range available up to 200 kW; higher capacity available on specific request.

### Features

- Hot water temperature 60°C for sanitary use
- Chilled water temperature 7°C for cooling
- Environment friendly refrigerant
- Compact size as no air fans
- Automatic controls
- Touch screen multi-functional controller
- Efficient scroll compressor
- High efficient shell & tube heat exchanger



Model		SC-HW-550	SC-HW-800	SC-HW-950	SC-HW-1200	SC-HW-1900
Power supply	V/Ph/Hz	415/3/50				
Rated heating output	kW	55	80	95	120	190
Rated hot water output	L/h	1182	1720	2043	1280	4085
Input power	kW	11.6	16.0	19.4	24.9	38.8
Rated water outlet temperature	°C	55				
Max. water outlet temperature	°C	60				
Compressor		Copeland scroll				
Heat exchanger (use side)		Shell & tube				
Rated water flow rate	m <sup>3</sup> /h	9.4	13.8	16.3	20.6	32.7
Heat exchanger (source side)		Shell & tube				
Rated water flow rate	m <sup>3</sup> /h	7.3	10.7	12.7	16.1	25.5
Protections		High/Low pressure, Anti-freeze, High temperature, Overload, Lack of phase, Reverse phase				
Noise	dB(A)	≤62	≤64	≤65	≤68	≤72
Dimension (LWH)	mm	1100	1800	1800	1800	2000
	mm	840	1150	1150	1150	1200
	mm	800	1050	1050	1050	1000
Net weight	kg	320	700	730	780	880
Testing conditions		Source side water 15°C Use side inlet water 15°C/Outlet water 55°C (max.60°C)				

## EVI Heat Pump for Cold Climate (Ambient range -25° to 45°C)



### Advantages

**EVI Technology** : Adopting the most advanced low temperature enhanced vapors injection compressor technology which can help heat pump work steadily even at temperature of -25°C.

**Wide range of temperature** : EVI heat pump can work from -25°C to 45°C. Widely used in different environment.

**Higher heating capacity** : Using enlarging evaporator extracting more heat energy from air will increase COP

**Automatic start-up anti-freezing protection** : When the ambient is below 0°C, the unit is in standby mode more than 30 minutes, automatic anti-freezing device will be started up so that the unit will be protecting in lower temperature.

### Features

- Hot water temperature 60°C
- For Hotels, Hospitals, Hostels, Resorts etc..
- Energy saving up to 75%
- Environment friendly refrigerant
- Automatic controls
- Touch screen multi-functional controller
- Efficient scroll compressor
- High efficient shell & tube heat exchanger
- High efficient V shape design

Model		SCE-H-200	SCE-H-400	SCE-H-500	SCE-H-750	SCE-H-1000	SCE-H-1100
Power supply	V/Ph/Hz	415/3/50					
Ambient temperature	°C	-25 to 45°C					
Rated heating output	kW	19	38	52	76	95	110
Rated hot water output	L/h	400	817	1118	1634	2042	2364
Input power	kW	4.1	9.6	13.2	19.2	23.8	27.8
Rated water outlet temperature	°C	55					
Max. water outlet temperature	°C	60					
Compressor		Copeland EVI scroll					
Heat exchanger		Shell & tube					
Rated water flow rate	m <sup>3</sup> /h	2.6	6.54	8.94	13.07	16.34	18.92
Noise	dB(A)	60	≤66	≤68	≤68	≤72	≤75
Dimension (LWH)	mm	980	1580	1580	1850	2000	2300
	mm	390	800	800	1000	1100	1100
	mm	1280	1600	1600	1950	2080	2300
Net weight	kg	143	310	382	500	600	630
Testing conditions		Inlet water 15°C/Outlet water 55°C (max.60°C) Dry bulb/Wet bulb temperature 20°C/15°C					

## High Temperature Heat Pump for Commercial & Industrial Use



### Air source & Water source type

- Water outlet temperature up to 80°C
- Capacity available up to 200 kW
- Higher capacity models available on request
- Wide ambient range -7 to 45°C
- Environment friendly green refrigerant
- Top brand scroll/screw compressor
- Modbus connectivity
- Protective system with Thermostat, Pressure switch & overload protector
- Flow monitoring

### Wide application fields like

- Hot water for hotels, hospitals
- Agriculture drying
- Plastic industries
- Chemical & fertilizer industries
- Pharmaceutical industries
- Hotels & Hospitalities
- Food & packaging
- Waste water treatment
- Dehumidification HVAC

## Chillers for Cooling & Heating



**Air Cooled 1 to 40 TR**

### Air Cooled & Water Cooled

- Chilled water inlet 12°C, outlet 7°C
- Top Brand scroll/screw compressor
- World Top quality refrigeration components
- High intelligence PLC & micro processor controller system
- Condenser with best fouling factor
- Evaporator with high efficiency
- Modbus RS485 connectivity
- Protective system with Thermostat, Pressure switch, Overload protector
- Flow monitoring

### Features

- Centralized Chilling plants for air conditioning (Cooling & Heating)
- Plastic industries
- Chemical & Fertilizer industries
- Textile Industries
- Hotels & Hospitalities
- Ultrasonic cleaning
- Induction heating



**Water Cooled 4 to 200 TR**

## Solar Hot Water Generation system with Heat Pump



- Eco-friendly
- Save energy, save environment
- Round a clock Hot water
- High quality BIS approved collectors
- Safe to use – no fear of accident
- Zero expenditure on heating water
- Quick return of investment
- Easy to install
- Long life span
- Negligible maintenance
- Pressurized / Non-pressurized system
- Capacity range starts from 250 LPD

## Solar PV Power Generation system with Heat Pump

- Eco-friendly and clean source of power
- No pollution & no recurring fuel costs
- Ideal substitute for power from fossil fuels
- Long life span for Solar PV modules over 25 years
- Highly reliable, regulated and consistent power supply
- Can be installed at point of use to avoid transmission losses
- Permanent installation, could be installed on field/ground
- Very good quality power output with steady voltage & frequency
- No moving parts-negligible maintenance of cleaning of module surface
- Seasonal tilt feature available to get maximum output from solar panels



### Features

- Multi crystalline PV Solar module
- String Inverter for DC/AC conversion
- Smart online monitoring
- Integration with Computer or Mobile

## Accessories

Key accessories like Mixing / Calorifier / Make-up tanks, Circulating pumps, Control panels, Plate heat exchangers, Piping & items required to put system in operation.



## Turn-key Project Solutions

We are complete solution provider for entire system on turn-key basis

- Understand user's requirement
- Recommend them best system with optimum use & maximum benefits
- Core team for design & engineering of efficient system
- Design & supply of accessories like Tanks, Pumps, Control panels, Electricals, Instruments, Piping etc.
- Special team for site work movement & placement of equipment & erection.
- Monitoring of site progress with aim to complete project in time
- Project team for system installation & put system in operation



## High Efficiency Hot Water Generators



### **RIELLO** High efficiency Hot water generators

- High efficiency up to 92%
- Suitable for fuels NG, LPG, Light Oil & Biogas
- Reverse flame, Floor standing type
- Wetback design with horizontal furnace
- 5 bar working pressure (high pressure on request)
- Capacity range from 25K kcal/h to 25 Lac kcal/h
- Control Panel for automatic temperature controls
- Supplied with Riello Pressure jet burners
- Complete package with Tanks, Pumps, Control panel, Piping, Heat exchangers, Chimney etc.
- Turn-key project solution from design, supply, installation, testing, commissioning, hand over & maintenance

## High Efficiency Steam Boilers



### High efficiency Steam Generators for commercial use

- Next generation Steam Boilers with high efficiency up to 92%
- Most efficient, compact & safest
- Fired with Natural Gas, LPG, HSD, LDO & Heavy Oil
- Highest fuel economy
- Unmatched dry steam with quality
- Minimum blow down losses
- Compact in dimensions
- Fully automatic unit
- Shipped in a manner, unit is ready to plug & play
- Equipped with most advanced Riello Burners

### **Typical use**

- Hot water for sanitary use
- Hot water for kitchen
- Laundry application
- Process heating

## Clientele

### Hotels, Clubs, Hostels

- ITC Hotels
- Raddisson Hotel
- Hyatt
- Ramada
- Courtyard Marriott
- Club O7
- Avadh Group
- Raheja
- Golden Tulip
- Taj Group
- 1000 Island
- Udaipur Palace
- Novatel
- Four Season
- Braora Gold
- Ashoka University
- Koral Resort

### Swimming Pool

- Transstadia
- Club O7
- Roots International school
- Silver height
- Loodha Group
- Jupiter Club
- Netherland embassy
- Adani
- S V Builder
- Aura Gym

### Hospitals

- Shalby Hospitals
- Manipal Hospitals
- DMC Hospitals
- Harihar Hospitals

### Others

- Huber Group
- Iskcon Temple

## Installation



## SUNTEC Network

Our nationwide network is fully geared to provide prompt and efficient pre and post sales/service at your doorstep. This includes spares & service requirement in time.



In lieu of continuous product development process, we reserve the right to change details mentioned in catalogue without prior notice



### Suntec Energy Systems

Plot No.56, Phase-1, GIDC Estate,  
Naroda, Ahmedabad-382330 (India)  
Tel. : +91 - 79 - 2280 5529 / 30 / 31  
Fax : +91 - 79 - 2280 5532  
Web site : [www.suntecenergy.in](http://www.suntecenergy.in)  
Email : [marketing@suntecenergy.in](mailto:marketing@suntecenergy.in)