SUNNIVA™
Create • Conserve • Sustain

Heat Pumps by Sunniva

Designed and Manufactured in India

Commercial Heat Pumps

EVI Heat Pumps

Swimming Pool Heat Pumps

www.sunnivaencon.com

About us

Sunniva Encon is a Heat Pump and Chiller manufacturing company based out of Mumbai, India. We have a complete range of HVAC products catering to various industries since 2013 across India with production capacity of 100 machines per month and a focus on service and customer satisfaction. Our machines are well built for Indian conditions.

Vision

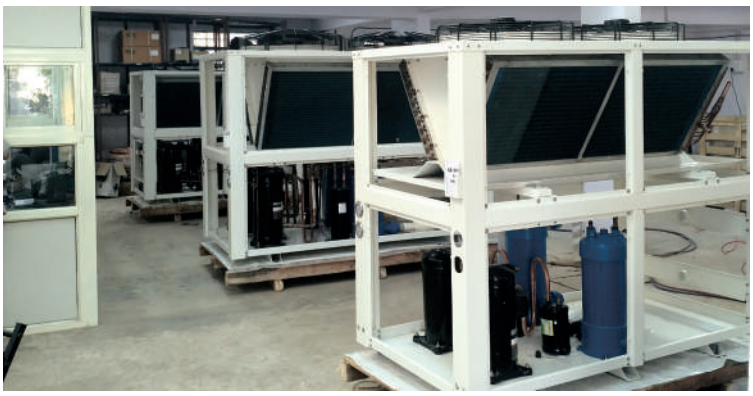
To be a world-class heat-pump and chiller manufacturer with all its allied products and services under one roof.

Mission

To be a leading provider of clean technologies in energy conservation, enabling our clients to reduce their carbon footprint with attractive ROI.

Design & Manufacturing

A state-of-the-art unit based in Asangaon, Maharashtra and a team with over 30 years of experience, Sunniva is an expert in designing and manufacturing of heat pumps and chillers. Exposure of Good Manufacturing Practice (GMP) from HVAC industry has helped us get EN14511 certification. Our products have a superior world-class quality which are much sought after in domestic, commercial and industrial sectors.



Economic Benefits of Heat Pump

Operating cost per 100 liters of hot water

	Electric	LPG	PNG	Heat Pump
	₹37	₹32	₹23	₹10
Efficiency	95%	90%	90%	350%
Heat Required in Kcals	150000	150000	150000	150000
Calorific Value	-	11200	8400	-
Power Required Kilowatt	174.42	-	-	174.42
Power Consumption In KWh	183.60	-	-	49.83
Heat Delivered In per kg	-	10080	7560	-
Total Fuel Required kg/Ltrs	-	16.5	22.05	-
Cost/Unit ₹	10	95	51	10
Total Cost/Day ₹	1,836	1,571	1,124	498
Total Cost/Month ₹	55,080	47,123	33,730	14,950
Total Cost/Year ₹	660,955	565,476	404,762	179,402

Above Calculations are based on following Data
Quantity of Hot water Estimated (Liters.) 5000; Cold Water Inlet Temperature (20°C); Hot water Temperature (50°C)

Heat Pump Working Principle

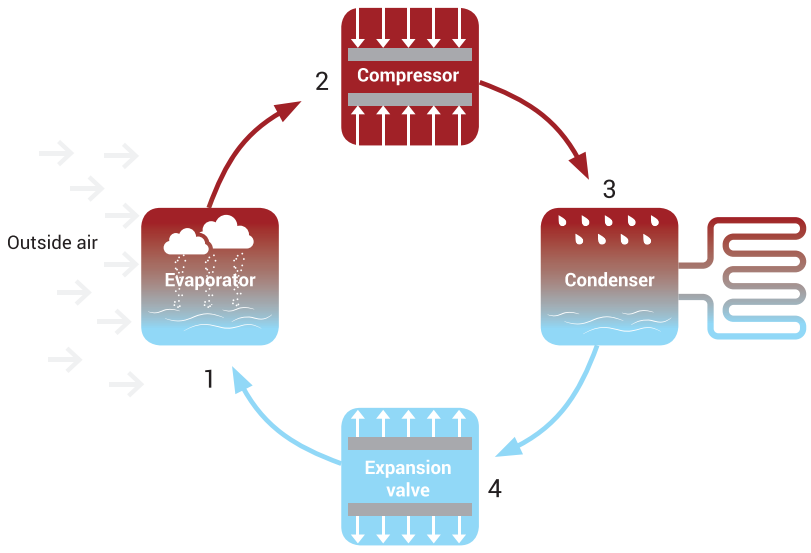
A compressor pumps the refrigerant between two heat exchanger coils.

1-2 In evaporator coil, the refrigerant is evaporated at low pressure and absorbs heat from its surroundings.

2-3 The refrigerant is then compressed en route to the other coil.

3-4 Here it condenses at high pressure and it releases the heat it absorbed, earlier in the cycle.

4-1 The high pressure low temperature refrigerant will be converted into low pressure low temperature refrigerant when it passes through the expansion valve and the cycle will recommence.



Commercial Heat Pumps

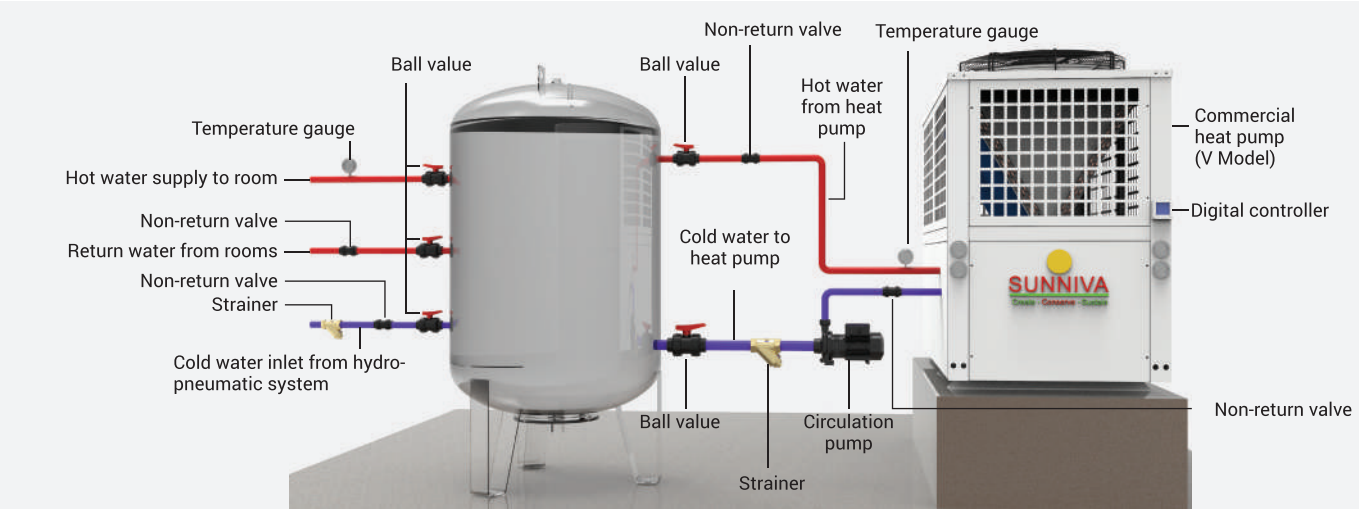
Applications

- Hotels
- Resorts
- Hospitals
- Boarding Schools
- Apartment Complexes

		SE-AH-14U	SE-AH-19U	SE-AH-25U	SE-AH-37U	SE-AH-45U	SE-AH-50U
Heating Capacity	KW	14	19	25	37	45	50
COP		4.2	4.2	4.15	4.2	4.16	4.2
Rated Hot Water Output	L/H	400	540	710	1070	1270	1480
Rated Water Temp.	°C	55					
Max Water Temp.	°C	60					
Input Power	KW	3.8	4.4	6	8.8	11.1	12.1
Current	A	6.4	8.4	11.4	16.7	20.1	23.1
Power Supply		380~415V/50Hz/3Ph					
Compressor		Scroll (Copeland/Panasonic)					
Number of Compressor		1	1	1	2	1	2
Heat Exchanger (Condenser)		Tube-in-Shell Heat Exchanger / Brazed Plate Heat Exchanger					
Evaporator		Blue Finned Evaporator Coil					
Throttling Device		Thermostatic Expansion Valve/Electronic Expansion Valve					
Water Flow	m^3/hr	2.5	3.2	4.3	6.5	7.5	8.7
Fan Quantity	Piece	1	1	1	2	1	2
Refrigerant		R410A/R407C					
Noise at 1 Meter	dB(A)	≤65	≤65	≤65	≤65	≤66	≤67
Pipe Size	inch	R1	R1	R1	R1-1/2	R1-1/2	R1-1/2
Dimension (L X W X H)	mm	800 × 800 × 1110	800 × 800 × 1110	800 × 800 × 1110	1450 × 890 × 1110	975 × 975 × 1300	1600 × 990 × 1150
Weight	kg	140	180	200	310	325	365

Testing Condition: Ambient Temp.(DB/WB) = 30°C/25°C, Inlet Water Temp.= 25°C, Outlet Water Temp. = 55°C (E.T. = 10°C / C.T. = 60°C)

Schematic Diagram



Description

This series is splendid for centralized hot water system and is capable of generating hot water upto 55°C It is the ideal hot-water solution for Hotels, Hospitals, Resorts, Boarding Schools and Apartment Complexes.

Silent operation

Less maintenance

Available in EVI

Features

- American Copeland/Panasonic scroll compressor
- Optional automatic defrosting
- Super intelligence
- Low noise and vibration
- Stable running, safe and reliable
- Smart-touch control
- Anti-corrosive coating
- High pressure/Low pressure protection feature

		SE-AH-70V	SE-AH-90V	SE-AH-100V	SE-AH-140V	SE-AH-180V
Heating Capacity	KW	70	90	100	140	180
COP		4.1	4.15	4.2	4.1	4.15
Rated Hot Water Output	L/H	2030	2600	2970	4060	5220
Rated Water Temp.	°C	55				
Max Water Temp.	°C	60				
Input Power	KW	17.1	21.7	23.8	34.1	43.4
Current	A	32.4	41.2	45.6	64.9	82.4
Power Supply		380~415V/50Hz/3Ph				
Compressor		Scroll (Copeland/Panasonic)				
Number of Compressor		2	2	2	4	4
Heat Exchanger (Condenser)		Tube-in-Shell Heat Exchanger / Brazed Plate Heat Exchanger				
Evaporator		Blue Finned Evaporator Coil				
Throttling Device		Thermostatic Expansion Valve/Electronic Expansion Valve				
Water Flow	m^3/hr	12	15.5	17.3	24	30.9
Fan Quantity	Piece	2	2	2	4	4
Refrigerant		R410A/R407C				
Noise at 1 Meter	dB(A)	≤70	≤72	≤72	≤75	≤78
Pipe Size	inch	R2	R2	R2	R2-1/2	R3
Dimension (L X W X H)	mm	1850 × 950 × 1635	2250 × 1090 × 1785	2250 × 1090 × 1785	1900 ×1850 × 1635	2250 × 2180 × 1785
Weight	kg	610	740	820	1150	1300

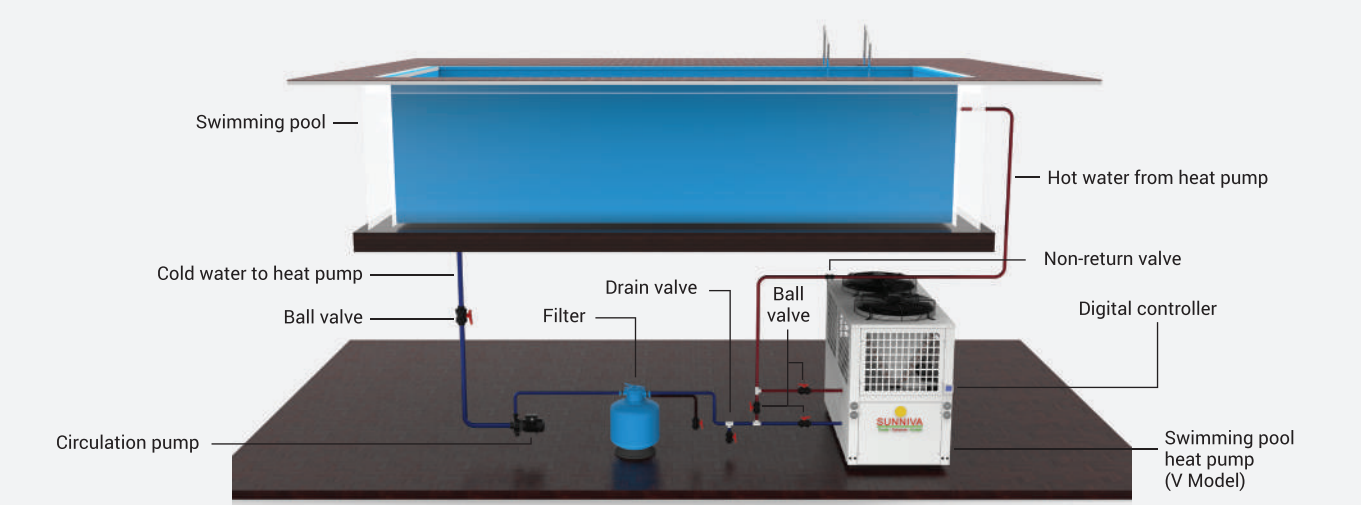
Testing Condition: Ambient Temp.(DB/WB) = 30°C/25°C, Inlet Water Temp.= 25°C, Outlet Water Temp. = 55°C (E.T. = 10°C / C.T. = 60°C)

Swimming Pool Heat Pumps

		SE-SP-11U	SE-SP-17U	SE-SP-25U	SE-SP-35U	SE-SP-50U
Heating Capacity	KW	11	17	25	35	50
COP		6.7	6.7	6.7	6.8	6.7
Max Output Water Temp.	°C	45				
Power Supply		380~415V/50Hz/3Ph				
Input Power	KW	1.8	2.5	3.7	5.1	7.4
Current	A	3.7	5.3	8	10.6	16
Max Input Power	KW	2.9	4.1	5	8.6	11
Max Current	A	5.2	7.2	9.5	15.2	23
Evaporator Coil		Blue Finned Evaporator Coil				
Throttling Valve		Thermostatic Expansion Valve / Electronic Expansion Valve				
Heat Exchanger (Condenser)		PVC Shell Titanium Condenser				
Refrigerant		R410A/R407C				
Compressor		Reciprocating (Copeland)		Scroll (Copeland/Panasonic)		
Number of Compressor		1	1	1	1	2
Fan Quantity	Piece	1	1	1	1	2
Fan Discharging		Horizontal	Horizontal	Vertical	Vertical	Vertical
Water Flow	m^3/hr	5	7.6	11.2	15	23
Pipe Size	inch	Rc1-1/2	Rc1-1/2	Rc1-1/2	Rc2	Rc2
Noise	db(A)	≤53	≤55	≤56	≤61	≤66
Dimension	mm	1250 x 660 x 725	1250 x 660 x 725	800 × 800 × 1110	800 × 800 × 1110	1450 × 890 × 1110
Weight	kg	120	145	170	240	320

Testing Condition: Ambient Temp. (DB/WB)=24°C./19°C, Inlet Water Temp. = 26°C, Outlet Water Temp. = 28°C (E.T. 10°C./ C.T. 40°C)

Schematic Diagram



Description

This series applies titanium heat exchanger and heat pump technology which can move heat from surroundings to the pool water. It is especially suitable for commercial swimming pools.

Energy saving

WiFi Control

Available in EVI

Features

- American Copeland/Panasonic scroll compressor
- Titanium tube in PVC shell heat exchanger
- Optional intelligent defrosting
- Easy installation and operation
- Stable running, economic and durable
- Heating in winter & optional cooling in summer
- Available in EVI category
- Smart touch
- Optional WiFi Controlling

		SE-SP-65U	SE-SP-80V	SE-SP-90V	SE-SP-110V	SE-SP-140V	SE-SP-220V
Heating Capacity	KW	65	80	90	110	140	220
COP		6.7	6.9	6.9	6.9	6.6	6.9
Max Output Water Temp.	°C	45					
Power Supply		380~415V/50Hz/3Ph					
Input Power	KW	9.7	11.8	13	16.8	20.2	33.6
Current	A	21	24	25.8	33.1	44.8	66.2
Max Input Power	KW	15.8	17.2	20.5	26	31	52
Max Current	A	29	30.4	35.5	45.2	57.6	90.4
Evaporator Coil		Blue Finned Evaporator Coil					
Throttling Valve		Thermostatic Expansion Valve / Electronic Expansion Valve					
Heat Exchanger (Condenser)		PVC Shell Titanium Condenser					
Refrigerant		R410a/R407C					
Compressor		Scroll (Copeland/Panasonic)					
Number of Compressor		2	2	2	2	2	4
Fan Quantity	Piece	2	2	2	2	2	4
Fan Discharging		Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Water Flow	m^3/hr	30	35	40	47	60	95
Pipe Size	inch	Rc2	Rc2	Rc2-1/2	Rc2-1/2	Rc3	Rc4
Noise	db(A)	≤66	≤66	≤66	≤68	≤70	≤76
Dimension	mm	1600 × 990 × 1150	1850 × 950 × 1635	1850 × 950 × 1635	2250 × 1090 × 1785	2250 × 1090 × 1785	2250 × 2180 × 1785
Weight	kg	410	540	570	750	820	1180

Testing Condition: Ambient Temp. (DB/WB)=24°C./19°C, Inlet Water Temp. = 26°C, Outlet Water Temp. = 28°C (E.T. 10°C./ C.T. 40°C)

Client List

Hotels

- Ferns Group
- Hyatt Hotels
- Taj Falaknuma Palace
- Hilton Shillim Estate
- Orchid Group
- Bloom Group of Hotels
- Anchaviyo Resort
- Mango Group of Hotels
- Otters Club
- Yogi Group of Hotels
- Godwin Group of Hotels
- Kesar Bagh
- Raajsa Resort
- The Marutinandan Grand
- Sai Palace Group of Hotel
- Citizen Hotel
- Bawa Group of Hotels

Builders

- Lodha Group
- Embassy Group
- Arihant Developers
- Ranjekar Developers
- Suntek Realty
- Avighna Towers
- Kotibhaskar
- Kanai Infra
- Priparth Developers
- Laxmi Devi Developers
- Anutham
- Gundecha Builders
- Priparth Developers
- Airoli Sports Association
- Rosa Group
- Kumkum Building
- Nivara Builders

Swimming Pools & Aqua Therapy

- Bamboo Saa Resort & Spa
- Godwin
- Isprava Realty
- Polycab Villa
- Ishwar Exports
- Gravitas India
- Amar Tea
- RM Spaces
- Bombay Paints
- Dr. Prachi Shah Arora
- Children's Hospital
- Dr. Tejas Patel
- Rotary Sewa Kendra
- Over 500 Individual Swimming Pools

Hospitals

- Suasth Hospital
- Lifeline Hospital
- AIMS Hospital
- Sadhguru Seva Sangh
- Eye Care Hospital
- Thunga Hospital

Boarding Houses

- Aagam Mandir
- Bangalore Bhavan
- Manas Mandir
- Bhanbai Nenshi Hostel
- Chitrakoot Mandir
- Navratna Dham

Pan-India Network

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