







High Temperature Heat Pumps



Ultra High Temperature Heat Pumps



Industrial Chillers





### 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.



























This series of heatpumps can generate hot water at 80°C at high COP. These heatpumps are ideal for industrial applications and processes requiring water at high temperature.







Environment friendly refrigerant



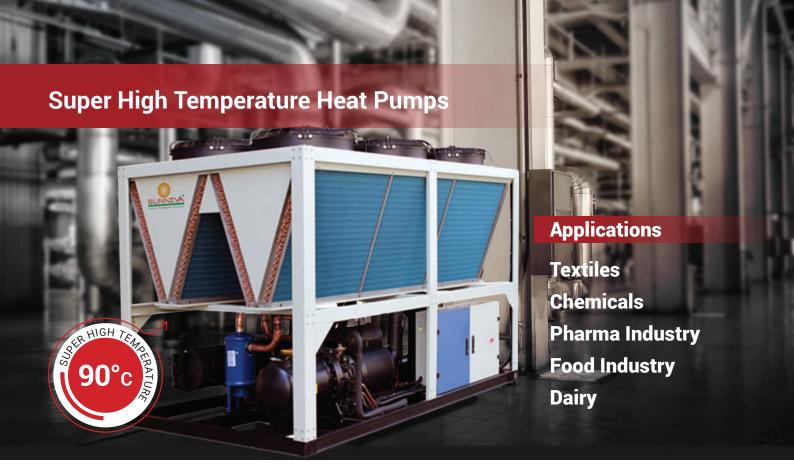
Available in water to water

## **Features**

- Water outlet temperature up to 75/80°C
- Capacity available up to 200 KW
- Wide ambient range 7-43°C
- Environment friendly green refrigerant
- Protective system with thermostat and pressure switch
- High efficiency heat exchanger
- ZW series compressor
- Overload protection
- Smart touch

		SE-HT- 15U	SE-HT- 19U	SE-HT- 29U	SE-HT- 35U	SE-HT- 38U	SE-HT- 58V	SE-HT- 70V	SE-HT- 115V
Heating Capacity	KW	14.5	18.4	28.6	34.9	36.8	57.2	69.8	114.4
COP		4.2	4	4.2	4.1	4.0	4.2	4.1	4.2
Power Supply					380~415V	/50Hz/3Ph			
Input Power	KW	3.5	4.6	6.8	8.5	9.2	13.6	17	27.2
Rated Current	Α	7.6	11.8	17.4	21.2	23.6	34.8	42.4	69.6
Rated Water Temperature	°C				7	5			
Max Water Temperature	°C				8	0			
Heat Exchanger (Condenser)				Brazed P	ate Heat Exc	hanger / Tuk	e in Shell		
Evaporator		Blue Finned Evaporator Coil							
Throttling Valve		Electronic Expansion Valve							
Refrigerant		R134a							
Compressor		Scroll (Copeland/Panasonic/Sunniva)							
Number of Compressor		1 1 2 1 2 2 4						4	
Fan Quantity	Piece	1	1	2	1	2	2	2	4
Rated Hot Water Output @ 60°C	LPH	360	530	820	1000	1060	1640	2000	3280
Rated Hot Water Output @ 70°C	LPH	280	370	580	700	750	1160	1400	2310
Rated Hot Water Output @ 80°C	LPH	215	280	435	530	560	870	1060	1740
Water Flow	m³/hr	2.5	3.3	5.5	6.1	6.6	10	12.2	20
Water Pressure Drop	KPa	≤45	≤50	≤55	≤56	≤58	≤65	≤70	≤75
Weight	kg	174	205	320	350	375	510	610	1040
Noise at 1 Meter	dB(A)	≤58	≤62	≤65	≤69	≤74	≤76	≤78	≤81
Pipe Size	inch	R1	R1	R1-1/4	R1-1/2	R1-1/2	R1-1/2	R2	R2-1/2
Dimension	mm	800 × 800 ×	800 × 800 ×	1450 × 890	975 × 975 ×	1600 × 990	1850 × 950	1850 × 950	2200 × 2100
		1110	1025	× 1110	1300	× 1150	× 1635	× 1635	× 1800

Testing Condition: Ambient Temp. (DB/WB)= $20^{\circ}$ C/ $15^{\circ}$ C, Inlet Water Temp. =  $55^{\circ}$ C, Outlet Water Temp. =  $60^{\circ}$ C (E.T.  $10^{\circ}$ C./ C.T.  $65^{\circ}$ C)



This series of heat pumps can generate hot water up to 90°C using a refrigerant R1234ze. The heat pumps are ideal to be used in industrial applications because of ultra low GWP and heating capacity up to 1000 KW.







Environment friendly refrigerant



Reliable screw compressor

## **Features**

- Water outlet temperature up to 90°C
- Capacity ranging from 280 to 1000 KW
- Smart display controller
- Ultra low GWP
- Hanbell screw compressor
- Water flow rate protection system
- High pressure protection system
- Over-current protection system
- PLC with RS485 connection

		SE-SHT-280V	SE-SHT-320V	SE-SHT-420V	SE-SHT-500V		
Heating Capacity	KW	280	320	420	504		
COP		2.1	2.0	2.2	2.2		
Rated Hot Water Output	LPH	4000	4600	6000	7200		
Rated Water Temp.	°C		8	5			
Max Water Temp.	°C	90					
Input Power	KW	136	157	194	233		
Current	Α	278	323	402	484		
Power Supply		380~415V/50Hz/3Ph					
Compressor		Screw (Hanbell)					
Number of Compressor		1					
Heat Exchanger (Evaporator)		Blue Finned Evaporator Coil					
Condenser		Shell and Tube Condenser					
Fan Quantity	Piece	6	6	8	8		
Water Flow	m3/hr	48	55	72	87		
Ambient Temperature	°C	20-43					
Refrigerant		R1234ze					
Noise at 1 Meter	dB(A)	≤75	≤76	≤77	≤78		
Pipe Size	inch	R3	R3	R4	R5		
Dimension (L X W X H)	mm	3400 × 2100 × 2400	3400 × 2100 × 2400	4500 × 2100 × 2400	4500 × 2100 × 2400		
Weight	kg	2900	3050	3200	3250		

Testing Condition: Inlet/Outlet Water Temp.(Condenser Side)= 30°C/90°C



Ultra high temperature heat pumps are capable of generating steam upto 120°C using R245fa refrigerant. This makes it an ideal choice for industrial applications that require steam for their processes.







Environment friendly refrigerant



**Energy saving** 

#### **Features**

- Water outlet temperature up to 120°C
- Reliable scroll compressor technology
- Smart display controller
- Independent of ambient temperature
- Heating capacity starts at as low as 35 KW
- High efficiency brazed plate heat exchanger
- Electronic expansion valve with smart controller
- Optional heat recovery system

		SE-UHT-35	SE-UHT-70	SE-UHT-140			
Heating Capacity	KW	35	70	140			
COP		3.1	3.1	3.1			
Rated Hot Water Output	LPH	350	680	1350			
Rated Water Temp.	°C		100				
Max Water Temp.	°C		120				
Input Power	KW	12	22.5	45			
Current	Α	20	39	76			
Power Supply		380~415V/50Hz/3Ph					
Compressor		Scroll (Sunniva)					
Number of Compressor		1 2 4					
Heat Exchanger (Evaporator)		Brazed Plate Heat Exchanger / Tube in Shell					
Condenser		Brazed Plate Heat Exchanger					
Throttling Device		Electronic Expansion Valve					
Water Flow	m3/hr	6.5	13	26			
Refrigerant		R245fa					
Noise at 1 Meter	dB(A)	≤60	≤65	≤68			
Pipe Size	inch	R1-1/2	R2	R2-1/2			
Dimension (L X W X H)	mm	1950 × 950 × 1290	2200 × 1100 × 1535	2200 × 2200 × 1535			
Weight	kg	450	780	1550			

Testing Condition: Cold Water Temperature =  $30^{\circ}$ C, Inlet/Outlet Water Temp. (Evaporator Side) =  $55^{\circ}$ C/ $50^{\circ}$ C Inlet/Outlet Water Temp. (Condenser Side) =  $95^{\circ}$ C/ $100^{\circ}$ C(E.T. =  $50^{\circ}$ C / C.T. =  $120^{\circ}$ C)



Experience the ultimate cooling solution with our highperformance chiller. Designed for efficiency & durability, this chiller ensures optimal temperature control for a variety of applications.

Our chiller delivers sub-zero temperatures with remarkable consistency. It's robust construction ensures longevity, while its energy efficient design reduces operational costs.



MODBUS communication



Less maintenance



Environment friendly refrigerant

#### **Features**

- Water/glycol temperature upto -35°C
- Capactiy available up to 1000 KW
- Optional heat recovery system
- Chilled water temp. range 5-20°C
- Water cooled chiller capacity available up to 5000 KW
- Specialized air cooled compressor
- Energy efficient
- Improved control over productivity
- Optimised process control and operating limits
- High return on investment
- Up to 30% energy savings compared to air conditionin



## Commercial Chiller (up to 5°C)

		SE-CH-12U	SE-CH-24U	SE-CH-29V	SE-CH-47V		
HP	HP	5	10	12	20		
Cooling Capacity	KW	11.8	23.5	29	47		
COP		2.5	2.58	2.5	2.6		
Rated Cold Water Output	LPH	410	820	1000	1620		
Rated Water Temp.	°C		7	7			
Min Water Temp.	°C	5					
Input Power	KW	4.6	9	12	18		
Current	Α	7.6	16.2	22	32.4		
Power Supply		380~415V/50Hz/3Ph					
Compressor		Scroll (Copeland/Panasonic)					
Number of Compressor	Nos	1 1 2		2			
Heat Exchanger (Evaporator)		Tube-in-Shell Heat Exchanger / Brazed Plate Heat Exchanger					
Condenser		Blue Finned Condenser Coil					
Throttling Device		Electronic Expansion Valve					
Water Flow	m3/hr	2.2	4.1	5	8		
Fan Quantity	Nos	1	1	2	2		
Refrigerant		R407C/R404A					
Noise At 1 Meter	dB(A)	≤60	≤65	≤67	≤70		
Pipe Size	inch	R1	R1	R1-1/4	R1-1/2		
Dimension (L X W X H)	mm	800 X 800 X 1110	975 X 975 X 1300	1650 X 950 X 1625	1850 X 950 X 1635		
Weight	Kg	160	320	415	550		

Testing condition: Ambient Temp.(DB/WB) =  $35^{\circ}$ C/ $30^{\circ}$ C, Inlet/Outlet Water Temp.=  $12^{\circ}$ C/ $7^{\circ}$ C (E.T. =  $2^{\circ}$ C / C.T. =  $55^{\circ}$ C)

## Low Temperature Chiller (up to -5°C)

		SE-LT-10U	SE-LT-20U	SE-LT-29V	SE-LT-40V		
HP	HP	5	10	16	20		
Cooling Capacity	KW	9.4	19.5	29.2	39		
COP		2	2.1	2.1	2.1		
Rated Cold Water Output	LPH	270	560	840	1120		
Rated Water Temp.	°C		(	0			
Min Water Temp.	°C		-	5			
Input Power	KW	4.7	9.2	14.2	18.4		
Current	Α	10	20	16.4	40		
Power Supply		380~415V/50Hz/3Ph					
Compressor		Scroll (Copeland/Panasonic)					
Number of Compressor	Nos	1	1	2	2		
Heat Exchanger (Evaporator)		Tube-in-Shell Heat Exchanger / Brazed Plate Heat Exchanger					
Condenser		Blue Finned Condenser Coil					
Throttling Device		Electronic Expansion Valve					
Liquid Flow	m3/hr	1.8	3.5	5	6.8		
Fan Quantity	Nos	1	1	2	2		
Refrigerant		R404A/R134a					
Noise at 1 Meter	dB(A)	≤60	≤65	≤67	≤70		
Pipe Size	inch	R1	R1	R1-1/4	R1-1/2		
Dimension (L X W X H)	mm	800 X 800 X 1110	975 X 975 X 1300	1650 X 950 X 1625	1850 X 950 X 1635		
Weight	Kg	180	330	420	570		

Testing Condition: Ambient Temp.(DB/WB) =  $35^{\circ}$ C/ $30^{\circ}$ C, Inlet/Outlet Glycol Temp.=  $5^{\circ}$ C/ $0^{\circ}$ C (E.T. =  $-5^{\circ}$ C / C.T. =  $50^{\circ}$ C)



# **Client List**



- Saint Gobain
- · Lubrizol Industries
- · Chandan Mukhwas
- · Adwal Palkar Associates
- Dahanu Rubber
- Reckitt Benckiser Group
- Theobroma
- · Majisa Chemical Industries

- Hindustan Chem Tex
- Arnaa Polymers
- Akshay Patra Foundation
- Nisarg Biotech
- Filpak
- Raman & Weil
- · Valley Agro Food Products
- 50+ Laundries

