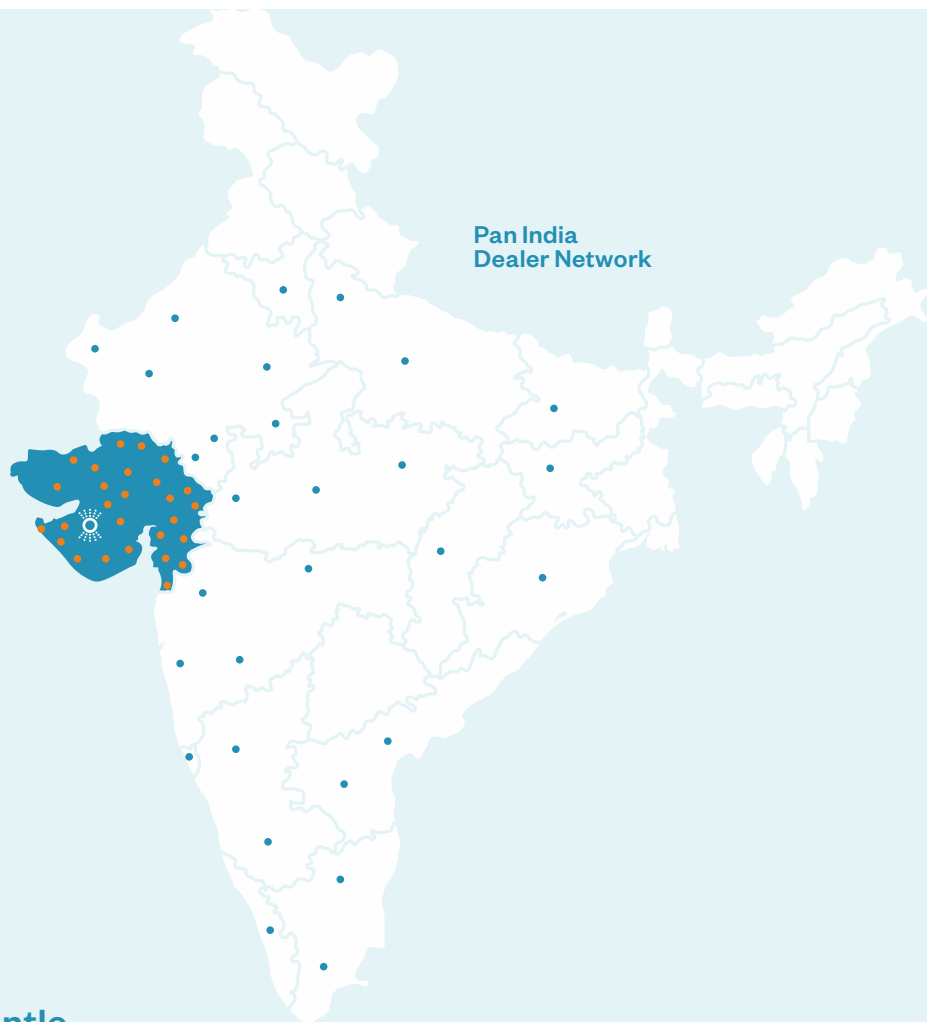




Pan India
Dealer Network



Scale Free Heat Pump

for Hot & Cold Water

24x7 | **UP TO 75%***
HOT WATER SYSTEM | ENERGY SAVINGS

Our Clientle

Hotels (Rajkot)

- Bhabha (4000 Ltr.)
- El-Classic (1250 Ltr.)
- Vivanta (1250 Ltr.)

Hotels (Morbi)

- Labh (1250 Ltr.)
- Surbhi (1250 Ltr.)

Hotels (Dwarka)

- The Grand Dwarka (4000 Ltr.)
- Nand Nanadan (1500 Ltr.)
- Shyam Sadan (1250 Ltr.)
- Shree Hari (2500 Ltr.)
- Shiv Laheri (1250 Ltr.)
- Vraj Inn (1250 Ltr.)

Hotels (Amreli)

- Darshan (2500 Ltr.)

Resort (Gir) (High Temp.)

- Mahavan (3600 Ltr.)
- Aattithya (1850 Ltr.)

Resort (Dwarka)

- Madhuvan (3000 Ltr.)

Hostel (Rajkot)

- Modi School (22000 Ltr.)
- Sharaddha (4500 Ltr.)
- Sanskruti (2000 Ltr.)
- Vrundavan (1250 Ltr.)

Industries (High Temp.)

- Alfa Proteins - Upleta
- Natraj Proteins - Hadamtala

High Rise Building (Rajkot)

- Karnavati Height (5000 Ltr.)
- Fortune Group (15000 Ltr. Tank)
- Florenza (6500 Ltr.)

High Rise Building (Morbi)

- Shlok (2000 Ltr.)
- Shreemad (6000 Ltr.)
- Tapovan (3000 Ltr.)
- Bhavyadeep (2000 Ltr.)
- Akshar Villa (3000 Ltr.)

High Rise Building (Jamnagar)

- Shlok 28 (2000 Ltr.)
- Antarix (2000 Ltr.)
- Divine (1500 Ltr.)

and many more... More than 5,00,000 Ltr. Capacity Heat Pump Installation

Manufacturer:

DELTA SOLAR SYSTEM PVT. LTD.

M : +91 98790 49493

Customer Care : +91 89800 49493

W : thermobridge.in

E : thermoheatpump@gmail.com

Office :

150 Feet Ring Road, Opp. Echo Glass,
Nr. Mavdi Chowkdi, Rajkot-360 004 Gujarat-India
Mo. : 99251 64715, 96621 00412

Factory :

Plot No. 2063/64-B, Gate No.-3, Kishan Gate Road,
B/h. Kadvani Forge, Lodhika GIDC, Metoda,
Rajkot-360 021 Gujarat-India
Mo. : 99799 07321, 98258 92327

Manufacturer
**DELTA SOLAR
SYSTEM PVT. LTD.**

thermobridge.in



Domestic (55 °C) • Commercial (55 °C)
Industrial (80 °C) • Swimming Pool



ABOUT US

Delta Solar was established in the year 1999. And from there on, our focus is on manufacturing and selling products which in turn satisfy customer needs and cater to custom requirements of our customers. Now we are one of the leading manufacturer and seller of delta solar water heater.

Thermobridge is a leading innovator in sustainable water heating technology, specializing in the manufacturing of scale-free heat pump water heating systems. We are dedicated to delivering high-efficiency, eco-friendly solutions that ensure clean and reliable hot water access for residential, commercial, and industrial applications.

MISSION

To be the global leader in the heat pump water heating industry by continuously advancing our technology to create cleaner, more efficient systems that contribute to a greener, more sustainable future.

VISION

At Thermobridge, our mission is to revolutionize water heating by providing advanced heat pump solutions that eliminate scaling issues, reduce energy consumption, and promote sustainability. We strive to enhance customer experiences by offering products that combine cutting-edge technology with durability and low maintenance.



*Registration in process

DELTA SOLAR SYSTEM PVT. LTD.

ASSEMBLY & STOCK



MAIN COMPONENTS



Scroll Compressor



Rotary Compressor



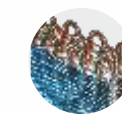
Screw Compressor



PVC Shell Titanium Condenser



Tube-in-shell Condenser



Blue Finned Coil



Electronic Expansion Valve



Thermostatic Expansion Valve



High-Pressure Low-Pressure Switch



H.D.G Tank

Panasonic

Schneider Electric

TOSHIBA

DELTA

DSPL

Danfoss

Copeland

HICOOL
Air Moving Products

SANHUA

OM GALVE



HOT DIP GALVANIZED TANK

Direct Heating Tank



Indirect Heating Scale Free Tank



Description:

Water storage tanks are adapted to the advanced technology of hot dip galvanized inner tank, which fuses to solid steel at about 450°C to 500°C. The result is a tough surface that effectively resists the corrosive attacks of hot water chemicals, thus ensuring a long life span of water tank, especially suitable for the areas of hard water.

Insulation protection:

PUF polyurethane foam insulation is injected and surrounds the inner tank, filling the space between the inner tank and outer tank thus providing an exceptionally good heat retention barrier. This helps to reduce the energy cost by minimizing standby heat loss.

Safety Protection:

Each tank is provided with a pressure relief valve (PRV valve). It protects the tank against excessive pressure by releasing its contents safely.

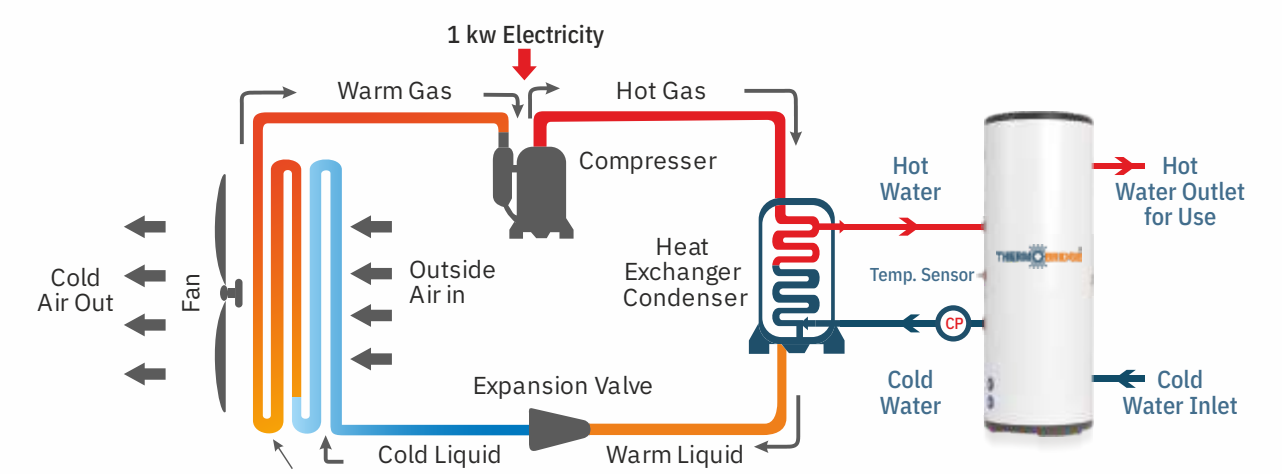
		Pressurised upto 2000 Ltr.	Non-Pressurised upto 2000 Ltr.
Inner Tan		Hot Dip Galvanized	G.I.
Thickness	mm	5 MM	3 MM
Outer Tank		Galvanized Steel	
Color		White/Cream/Offwhite	
Insulation	mm	Polyurethane 50 to 75 MM	
Inlet/Outlet Size		1" to 1.5" as per tank	
Rated Working Pressure		up to 4.5 kg/cm ²	up to 1.5 kg/cm ²
Electric Heater	KW	Optional	Optional
Thermowell		Included	
PRV		Yes	No

More Than 2000 Ltr. Capacity sand blast ceramic / glass / epoxy coated tank available
More Than 1500 Ltr. Capacity hot dip galvanized process depend on hot dip tank level

* T&C apply



HEAT PUMP WORKING PRINCIPLE



BENEFITS OF HEAT PUMP

- Reduced water heating costs upto 75%
- Reliable hot water round the year
- Quick payback & return on investment
- Silent operation
- Space saving
- Reduced carbon emissions
- Negligible maintenance costs
- Longest product life

ECONOMIC BENEFITS OF HEAT PUMP

	*Operating Cost Per 100 Liters of Hot Water			
	₹ 37 ELECTRIC	₹ 32 LPG	₹ 23 PNG	₹ 10 HEAT PUMP
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

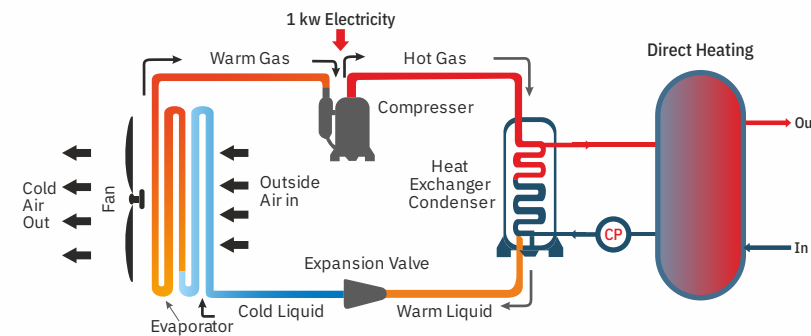
Above Calculations are based on following Data
Quantity of Hot water Estimated (liters.) 5000; Cold water Inlet Temperature (20 C); Hot water Temperature(50C)

ALL IN ONE HEAT PUMP

APPLICATIONS

Bungalows • Villas • Farm House

Direct Heating

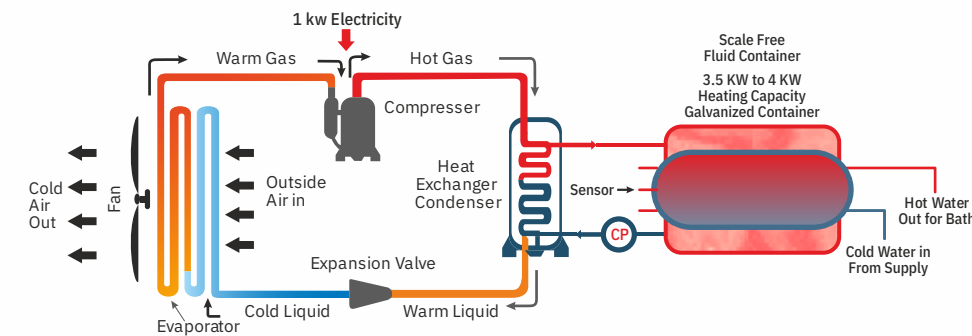


MONOBLOCK HEAT PUMP (Domestic)

APPLICATIONS

Bungalow • Hotels • Motels
Boarding Houses

Indirect (Scale Free) / Direct Heating



Features :

- Panasonic/equivalent (highly efficient rotary compressor)
- Automatic defrosting
- Low noise & vibration
- Inbuilt circulation pump
- Closed loop system possible
- Long working life
- Safe, reliable and stable running
- Easy to install
- Intelligent control

		SE-AH-1-80	SE-AH-2-150	SE-AH-2-200
Rated Volume	L	80	150	200
Inner Tank Material		Enameled steel (1.8mm)	Enameled steel (2.5mm)	Enameled steel (2.5mm)
Outer Casing			Painted galvanized steel	
Insulation	°C		polyurethane foam, 45mm	
Ambient Temperature		5~45	0~45	0~45
Colour			White	
COP		3.4	3.85	3.85
Power Supply			~220-240V/50Hz/1Ph	
Heating Capacity (W)	W	750	1600	1600
Rated Hot Water Output	L/H	16	36	36
Max. Water temp	°C	55	75	75
Max. Input Power	W	2450	3200	3200
Max. Input Current	A	12	16	16
Rated Input Power	W	220	415	415
Electric Heater Power	W	2000	2500	2500
Noise	dB(A)	<40	48	48
Net Weight	kg	70	102	114
Refrigerant			R134a	
Compressor Brand			Panasonic	
Condenser			Micro-channel heat exchanger	
Control Method			Remote display	
Product Size	mm	470 x 1075	525 x 1735	525 x 1955

Note : Colour Subject to Change.

All-in-one Heat Pump Models are Available from 80 Liters to 500 Liters.

Model No.	Heat Pump Heating Capacity upto	Input Power Approx	Water Heating LTR/HR Upto	Pressurised Scale free (Indirect Heating) 5mm Hot Deep Galvanized + 3mm G.I	Pressurised Scale free (Direct Heating) 5mm Hot Deep Galvanized	Non Press. Scale free (Indirect Heating) 3mm G.I	Non Press. Scale free (Direct Heating) 3mm G.I
4M (1ph)	3.8 K.W	1 K.W	90	250 LTR	200 LTR	250 LTR	200 LTR
				350LTR	300 LTR	300 LTR	300 LTR
				500LTR	500 LTR	500 LTR	500 LTR
6M (1ph)	6 K.W	1.5 K.W	135	600 LTR	750 LTR	600 LTR	750 LTR
7M (1ph)	7.5 K.W	1.9 K.W	180	850 LTR		850 LTR	1000 LTR
10M (R) (1ph)	10 K.W	2.4 K.W	225	1250 LTR 1500 LTR	1000 LTR	1250 LTR 1500 LTR	1250 LTR
10M (P) (1ph)	11.5 K.W	2.8 K.W	250	1250 LTR 1500 LTR	1250 LTR	1750 LTR 2000 LTR	1500 LTR

Cop up to 4.1

Voltage Range : 220-240V. / 50HZ

Compressor Rotary : Panasonic / Toshiba / Equivelent

Electronic Expansion Valve

Circulation Pump Inbuilt Heat exchanger-Tubein Shell

Noise : 54 to 60 db.

Pipe Size : 3/4" to 1"

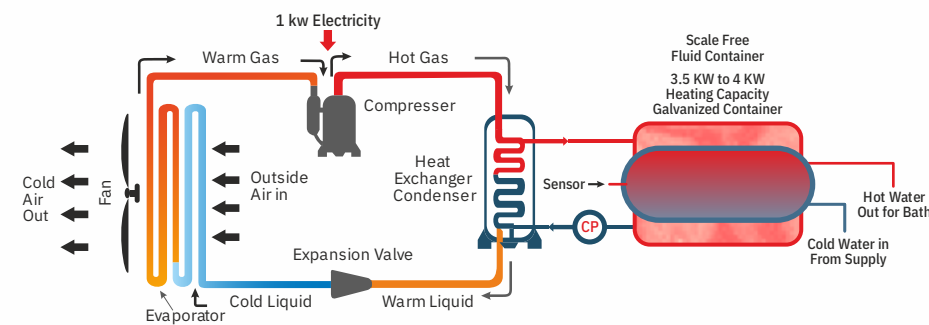
COMMERCIAL HEAT PUMP



APPLICATIONS

Hotels • Resorts • Boarding Schools
Apartment Complexes • Hospitals

Indirect (Scale Free) / Direct Heating



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 feature
- Circulation pump outside

Model No.	Heat Pump Heating upto	Input Power Approx	Water Heating LTR/HR upto	Pressurised Scale free (Indirect Heating) 5mm Hot Deep + 3mm G.I	Pressurised Scale free (Direct Heating) 5mm Hot Deep Galvanized	Non Press. Scale free (Indirect Heating) 3mm G.I + 3mm G.I	Non Press. Scale free (Direct Heating)
100M (3ph)	11.5 KW	2.8 K.W	260	1250 LTR	1250 LTR	1500 LTR	1250 LTR
				1500 LTR		1750 LTR	
						2000 LTR	
14U (3ph)	14 K.W & 15 K.W	3.8 K.W	380	2500 LTR	1500 LTR	2500 LTR	1500 LTR
					2000 LTR		2000 LTR
19U (3ph)	19.5 K.W	4.5 K.W	500	2500 LTR	2000 LTR	2500 LTR	2000 LTR
				3000 LTR	2500 LTR	3000 LTR	2500 LTR
25U (3ph)	25 K.W	6 K.W	680	3500 LTR	2500 LTR	3500 LTR	2500 LTR
				4000 LTR	3000 LTR	4000 LTR	3000 LTR
37U (3ph)	37 K.W	8.8 K.W	1060	5000 LTR	4000 LTR	5000 LTR	4000 LTR
				6000 LTR	5000 LTR	6000 LTR	5000 LTR
45U (3ph)	45 K.W	11.2 K.W	1260	6000 LTR	5000 LTR	6000 LTR	5000 LTR
				7000 LTR	6000 LTR	7000 LTR	6000 LTR
50U (3ph)	50 K.W	11.2 K.W	1480	8000 LTR	7000 LTR	8000 LTR	7000 LTR

NOTE :

Only Hot Deep Galvanized process in Single Tank Max. Cap. - 1500 to 2000 LTR

After that multiple tank for total capacity is must in Hot Deep Galvanized process

In Single Tank more than 2000 Ltr Sand Blast Glass / Ceramic / Epoxy Enamel Coat Regd.

Ele. Expansion Valve Cap. : up to 4.2

Heat Exchange : Tube in Shell Voltage : 380 - 415 3ph. / 50hz

Noise : 65 to 75 db Compressor :(Copeland / Panasonic) Scroll

Pipe size : 1" to 1.5"

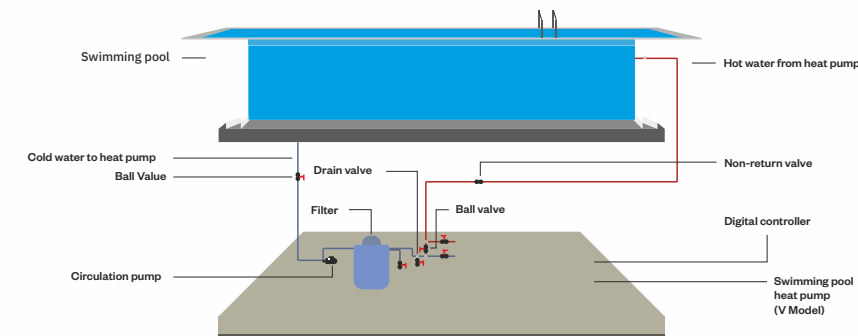
SWIMMING POOL HEAT PUMPS



APPLICATIONS

Swimming Pools • Spas • Jacuzzis
Physiotherapy Clinics

Direct Heating



Features :

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

		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	8.5	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		R41A/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	11.2	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	1250x660x725	1250x660x725	800x800x1110	975x975x1300	1450x890x1110
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

HIGH TEMPERATURE HEAT PUMPS

(Available)

APPLICATIONS

Laundries • Commercial Kitchens • Resort
Pharma Industry • Industrial Processes
Textiles • Chemicals • Dairy
Pharma Industry • Food Industry



Features :

- Water outlet temperature up to 90°C • Capacity ranging from 280 to 1000 KW • Ultra low GWP
- Smart display controller • Hanbell screw compressor • Water flow rate and high pressure protection system

		SE-HT-15U	SE-HT-19U	SE-HT-29U	SE-HT-35U
Heating Capacity	KW	14.5	18.4	28.6	34.9
COP		4.2	4	4.2	4.1
Power Supply		380-415V/50Hz/3Ph			
Input Power	KW	3.5	4.6	6.8	8.5
Rated Current	A	7.6	11.8	17.4	21.2
Rated Water Temperature	°C	75			
Max Water Temperature	°C	80			
Heat Exchanger (Condenser)		Braze Plate Heat Exchanger / Tube 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
Fan Quantity	Piece	1	1	2	1
Rated Hot Water Output @ 60°C	LPH	360	530	820	1000
Rated Hot Water Output @ 70°C	LPH	280	370	580	700
Rated Hot Water Output @ 80°C	LPH	215	280	435	530
Water Flow	m³/hr	2.5	3.3	5.5	6.1
Water Pressure Drop	KPa	≤45	≤50	≤55	≤56
Weight	kg	174	205	320	350
Noise at 1 Meter	dB(A)	≤58	≤62	≤65	≤69
Pipe Size	inch	R1	R1	R1-1/4	R1-1/2
Dimension	mm	800 × 800 × 1110	800 × 800 × 1025	1450 × 890 × 1110	975 × 975 × 1300

Testing Condition: Ambient Temp. (DB/WB)=20°C/15°C, Inlet Water Temp. = 55°C, Outlet Water Temp. = 60°C

SUPER HIGH TEMPERATURE HEAT PUMPS

(Under Experiment)

Features :

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



		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	85			
Max Water Temp.	°C	90			
Input Power	KW	136	157	194	233
Current	A	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	LPH	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

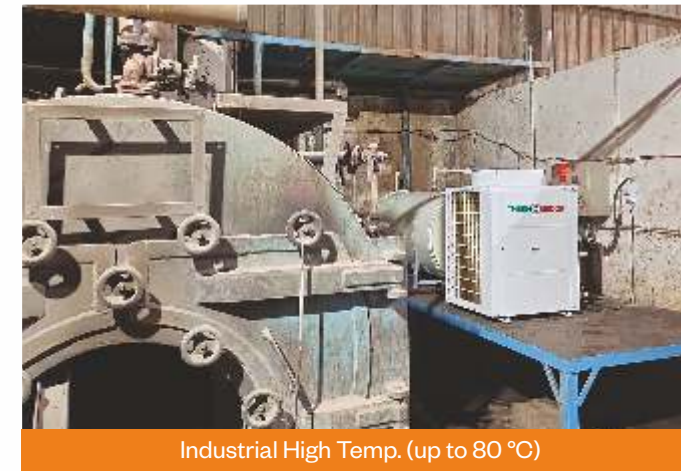
Testing Condition: Inlet/Outlet Water Temp.(Condenser Side)= 30°C/90°C



Domestic Scale Free - 500 Ltr.



Commercial Scale Free - 5000 Ltr.



Industrial High Temp. (up to 80 °C)



Swimming Pool



Commercial Direct Heating - 3000 Ltr.



Commercial (Hotel) Scale Free - 2500 Ltr.



Domestic Direct Heating - 300 Ltr.