

# SolPak<sup>™</sup> closed loop solar water heating system features the Solaraide<sup>™</sup> heat exchanger tank, collectors and pump station

#### System

- Closed loop system glycol design
- Single and double collector systems
- System includes Solaraide HE tank, collectors and pump station.

### Heat Exchanger Tank

- 65, 80 and 120-Gallon capacities
- 4500 Watts
- Provides at least 40 gallons of stored hot water
- Double wall, high efficiency solar heat exchanger
- Collector feed and return fittings located on front of tank for easy installation
- Cold water inlet brings cold water to tank bottom to prevent mixing with heated water
- Rheemglas® tank lining resists corrosion and prolongs tank life
- T&P Valve included
- Automatic temperature control and over heat protection

#### Collectors

- OG-100 certified by SRCC
- Durable low iron tempered glass
- Integral mounting channel for easy installation
- Stainless steel fasteners
- Suitable for open and closed loop systems
- Copper absorber plate
- Black paint absorber coating
- Can be mounted horizontally or vertically

#### **Pump Station**

- Pre-engineered assembly of quality components in a neat, compact insulated enclosure
- Simple, labor saving, attractive solution for closed loop glycol solar systems
- Includes cast iron three speed pump, advanced differential controller and balancing valve and flow meter

#### Warranty

- 6-Year limited tank,
- 10-year limited collector
- 6-year limited pump station



# SolPak

65, 80 & 120 Gallon Capacities 4.5 Kw Backup element Closed Circuit Forced Circulation



SYSTEM INFORMATION			COLLECTOR INFORMATION								WATER HEATER INFO.						
STORAGE CAPACITY (US GAL)	SYSTEM MODEL NUMBER	SOLAR ENERGY FACTOR*	NUMBER OF COLLECTOR PANELS	ABSORBER COATING	WIDTH (INCHES)	LENGTH (INCHES)	DEPTH (INCHES)	AREA SQ. FT. (GROSS)	DRY WEIGHT (LBS)	FLUID CAPACITY (US GAL)	DESIGN FLOW RATE (GPM)	MAX FLOW RATE (GPM)	MAX. OPERATING PRESSURE	HEIGHT (INCHES)	DIAMETER (INCHES)	APPROX. WEIGHT (LBS)	ELEMENT WATTAGE
65	RS65-24BP	1.4	1	Black Paint	36-1/8	98-1/4	3/1/2004	24.61	80	0.78	0.62	12	160	59	21	170	4500 W
65	RS65-32BP	1.7	1	Black Paint	48-1/8	98-1/4	3/1/2004	32.19	106	1	0.83	12	160	59	21	170	4500 W
65	RS65-40BP	1.9	1	Black Paint	48-1/8	122-1/4	3/1/2004	40.81	191	1.2	1.04	12	160	59	21	170	4500 W
80	RS80-40BP	2.4	1	Black Paint	48-1/8	122-1/4	3/1/2004	40.81	141	1.2	1.04	12	160	58-3/4	24-1/2	222	4500 W
80	RS80-48BP	2.6	2	Black Paint	36-1/8	98-1/4	3/1/2004	24.61	80	0.78	0.62	12	160	58-3/4	24-1/2	222	4500 W
120	RS120-64BP	3.2	2	Black Paint	48-1/8	98-1/4	3/1/2004	32.79	106	1	0.83	12	160	62	28-1/4	380	4500 W

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

Rheem Manufacturing MEA FZE Dubai Airport Free Zone - Dubai, UAE www.rheem-mea.com



# With the new Rheem SolPak Pump Master, you get easy, time saving installation in closed loop glycol solar water heating systems

#### **Rheem SolPak Pump Master**

- Pre-engineered assembly of quality components in a neat compact enclosure with an advanced differential controller
- Simple, labor saving, attractive solution for closed loop glycol solar systems

# Cast Iron Three Speed Pump (115V-60Hz)

- Adjustable three speed pump provides flow rates across the range of SRCC OG-300 certified closed loop glycol systems
- Includes line cord for connection to differential controller

#### **Differential Controller**

- Easy to read backlit LCD displays system operating temperatures at up to three locations
- Includes line cord from controller to 120V outlet, providing plug and play installation and operation

#### Compact Insulated Enclosure

- Made of expanded polypropylene foam, designed for professional finished appearance and superior durability
- Custom molded enclosure allows easy access to all piping connections
- Removable cover is form fitted around temperature gauges for convenient system performance monitoring

#### Combination Brass Ball Valves and Check Valves

- Integrated thermometers, (32° F 248° F scale)
- Valves are color coded blue handle for supply to collectors, red handle for return from collectors
- Spring check valve in supply and return ball valves

 Check valves can be bypassed by turning the valve handle to the 45° position

#### Balancing Valve and Flow Meter (0.5 - 4 gpm)

 Visual reading of system flow with balancing valve for quick and easy optimization of system flow rate

#### Air Separator With Air Vent

- Air separator tube removes air from flow during pump operation
- Air is separated from main flow during system activation and maintenance, and can be expelled by opening air vent
- Removal of air from flow reduces potential for air locks in system

#### Pressure Relief Valve With Pressure Gauge and Expansion Tank Connection

- Pressure relief valve set to discharge at 145 psi
- Pressure gauge scale is 0 145 psi (0 – 10 bar)
- Expansion tank connection is 3/4" male BSP with adapter to NPT 1/2"

#### **Fill and Drain Valves**

• ¾" Hose thread located upstream and downstream of the pump for filling, purging and draining the glycol loop

#### Compression Fittings for 3/4" Type L Copper

 Top two compression fittings to connect to collectors, bottom two to connect to heat exchanger in tank

#### Warranty

6-Year limited warranty\*

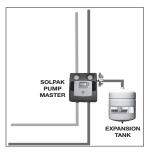
\*See Residential Warranty Certificate for complete information



# Solpak Pump Master

The Complete Package for Closed Loop Glycol Systems RSPS-01

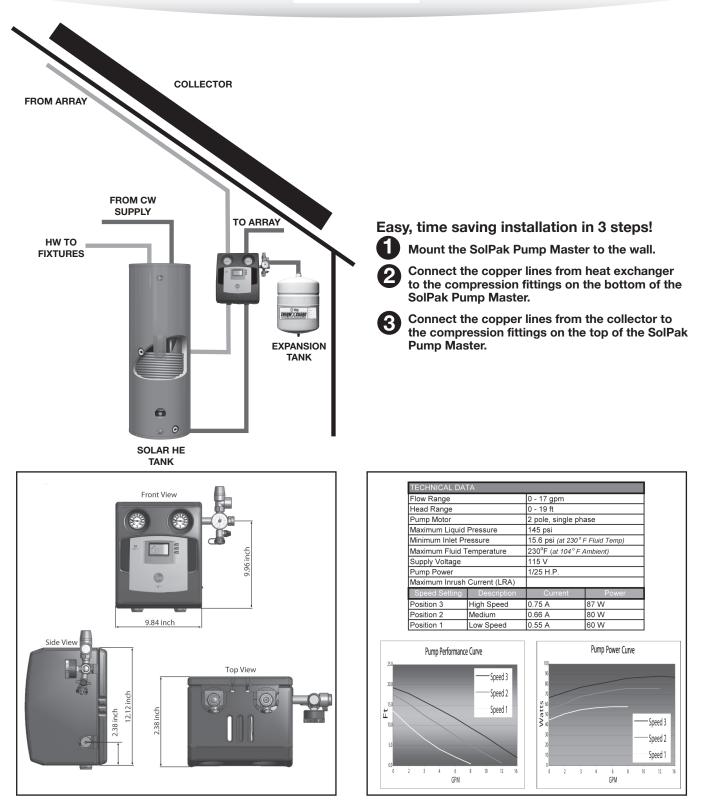




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Units meet or exceed ANSI requirements and have been tested according to D.O.E. procedures. Units meet or exceed the energy efficiency requirements of NAECA, ASHRAE standard 90, ICC Code and all state energy efficiency performance criteria.



# Solaraide<sup>™</sup> HE tanks are available as electric backup water heaters and as storage tanks, designed for use with closed loop solar water heating systems

#### **Features & Benefits**

- Double wall heat exchanger includes copper tubing wrapped around the tank and secured within the jacket for positive leak protection
- Two well insulated models to choose from...a storage tank or a high efficiency 4500 Watt backup electric water heater
- Electric backup model provides at least 40-gallons of stored hot water

#### **Easy Installation and Maintenance**

- Collector feed and return fittings conveniently located on front of tank for easy installation
- A special 1/2" NPT opening is provided for installation of a "probe type" thermostat
- Durable brass drain valve for easy maintenance

#### **Tank Design & Construction**

- Cold water inlet brings cold water to tank bottom to prevent mixing with heated water
- Rheemglas® tank lining resists corrosion and prolongs tank life
- Anode rod equalizes aggressive action for prolonged tank life
- Temperature and pressure relief valve included
- Electric backup model has automatic temperature control and over heat protection

#### Warranty

 6-Year limited tank and parts warranty\*

Units meet or exceed ANSI requirements and have been tested according to D.O.E. procedures. Units meet or exceed the energy efficiency requirements of NAECA, ASHRAE standard 90, ICC Code and all state energy efficiency performance criteria.



# Solaraide HE Tanks

80 and 120-Gallon Capacities Heat Exchanger Electric WHs and Storage Tanks



#### **Copper Heat Exchanger Coil** Type L Copper 5/8" I.D

Type L Copper 5/6 1.D.									
Solaraide HE Tank Capacity	Coil Capacity Gallons	Length of Tubing Around Tank (Ft) 120 143							
80 Gallons	2.2								
120 Gallons	2.6								
PRESSUE	PRESSURE DROP THROUGH COIL (Feet of H <sub>2</sub> 0)								
	Head Loss (Feet)								
Flow Rate	80-Gallon	120-Gallon							
1 GPM	1.3	1.6							
2 GPM	4.8	5.7							
3 GPM	10.0	12.0							

<b>€</b> 8"→ <b> </b>	<u> </u>		WATER CONNECT ALL 3/4" N.P.T.	ION NIPPLES
	SENSOR PROBE PORT		COLLECTOR RETURN SOL OLL OLL OLL OLL OLL OLL OLL OLL OLL	Artonne Reference Bellevicteren Nosouution
	<u>.</u>	(REQL	R CIRCULATOR IIRED FOR NON- VITY SYSTEMS)	

		DESCRIPTION	l .	ROUGHING I	ENERGY INFORMATION			
түре	GAL. CAP.	MODEL NUMBER	ELEMENT WATTAGE UPPER	HEIGHT A	DIAMETER B	APPROX. SHIP WT. (LBS.)	APPROX. R- FACTOR	
т.	80	81V80HE-1	4500 W*	58-3/4	24-1/2	222	R-17.3	
Å	80	81V80HE-T	Storage only	58-3/4	24-1/2	222	R-17.3	
Ļ	120	82V120HE-1	4500 W*	62	28-1/4	380	R-17.3	
	120	82V120HE-T	Storage only	62	28-1/4	380	R-17.3	

\*Heaters furnished with standard 240 volt AC, single phase non-simultaneous wiring and 4500 watt heating element

If heating elements of different wattages than those shown are demanded by zone requirements, they must be specifically requested.

To prevent corrosion, proper pH levels in transfer fluid must be maintained. Solaraide models meet all current state requirements for solar storage tanks.

The tanks are Rheemglas lined and are designed to operate up to 150 PSI.

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