THE ADVANTAGES OF CHOOSING SIRAC

“Intelligent controller programmed to provide maximum component protection and accurate temperature control.”

- Well engineered to provide years of reliable efficient operation.
- Proven local and international track record.
- Spacious and well-engineered compressor compartment provides easy service access.
- Heavy gauge galvanized steel panels, epoxy painted after manufacture. 304 Stainless steel casings available as an option for coastal conditions.
- Recognised international componenet brands.
- Electronic Expansion valve.
- Intelligent controller programmed to provide maximum component protection and accurate temperature control.
- Environmentally friendly R417a refrigerant.
- Purpose made SIRAC tube in tube heat exchanger designer to provide excellent efficiency, reliability and reduce tube fouling.
- The product is specifically designed to meet South African conditions.
- Emerson Copeland Scroll Compressors.

“Specifically designed to meet South African conditions.”

- GIVE US A CALL TODAY -

0861 082 913

COMMERCIAL HOT WATER HEAT PUMPS

www.sirac.co.za

SPECIAL FEATURES

COMPRESSOR

The heart of the Heat Pump is the Emerson Copeland Scroll Compressor. These compressors have been developed specifically for heat pump applications. Copeland™ compressors are engineered for higher efficiency, lower sound levels, superior durability and unsurpassed reliability. They allow the integration of new and environmentally friendly refrigerants, while seamlessly improving efficiency and performance levels.

ELECTRONIC EXPANSION VALVE [EEV]

The use of the EEV shifts the SIRAC products to a whole new level. The EEV increases the efficiency, reliabilty and performance. In the world of heat pumps, the EEV is the greatest advancement since the Scroll Compressor.

TUBE IN TUBE HEAT EXCHANGER

The proprietary SIRAC Coaxial Tube in Tube heat exchanger is made by SIRAC. The special coaxial design provides exceptional heat transfer and reduces tube fouling.

MICROPROCESSOR CONTROLS

The SIRAC programmable controller offers accurate temperature control with advance features that protect and manage the efficient operation of the unit. The controller has a fault diagnostic feature that prevents and reduces service call outs. The unit is provided with a backlit wired remote display for easy access.

EVAPORATOR COIL

Hydrophilic-coated evaporator fins reduce corrosion and provides excellent heat transfer. Tubes are mechanically bonded to the fins.

REFRIGERANT

Environmentally friendly R417a refrigerant. Refrigerant R417a has been specifically selected for its low operating temperatures and pressures. This has a huge impact in the operating conditions and reliability of the compressors.

ELECTRICAL PANELS

Large and spacious electrical panels with easy access to all componenets. Reliable well-represented Schneider Electric Switchgear fitted as standard.

GAS PRESSURE ACTUATED WATER FLOW CONTROL VALVES

Provides hot water at a constant adjustable leaving temperature.

SOUTH AFRICAN BUILDING REGULATIONS: SANS 10400
The national building regulations, require all new builds to make use of heat pumps or solar water heaters for more than 50% of their hot water generation requirements.

SIRAC

TECHNICAL SPECIFICATIONS: *COMMERCIAL HOT WATER HEAT PUMPS*

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Heating capacities are rated at: Air temperature 20°C, water heated from 20°C to 55°C

SIRAC

MODEL	LSQ015RC*	LSQ02RC	LSQ03R	LSQ05R	LSQ06R	LSQ08R	LSQ10R	LSQ15R	LSQ20R	LSQ25R
Outlet Water Rated Temp	55									
Outlet Water Max. Temp	60									
Heating Capacity	4,7kW	6,5kW	10,6kW	17,1kW	21kW	28,5kW	35kW	44kW	70kW	87kW
Rated Power Input	1,3kW	1,85kW	2,8kW	4,5kW	5,5kW	7,5kW	9,2kW	11,4kW	18,7kW	23kW
Power Supply	230V / 1Ph / 50Hz			400V / 3Ph / 50Hz						
Compressor Type	Rotary		Copeland Scroll							
Compressor Qty	1	1	1	1	1	2	2	2	4	2
Refrigerant Charge	750g	1100g	2800g	3800g	5000g	3500g x2	3800g x2	5000g x2	3800g x4	7000g x2
Starting Current	22 Amp	28 Amp	40 Amp	35 Amp	50 Amp	38 Amp	44 Amp	50 Amp	78 Amp	105 Amp
Running Current	6 Amp	8,2 Amp	12 Amp	9 Amp	12 Amp	7 Amp x2	9 Amp x2	12 Amp x2	18 Amp x2	22 Amp x2
Cabinet Material	Powder Coated Galvanized Steel Cabinet									
Air Discharge	Horizontal		Vertical							
Fan Motor Watts	25	40	90	250	350	250 x2	250 x2	350 x2	250 x4	750 x2
Air Flow (m^3/h)	1650	2200	3600	5600	6500	5600 x2	5600 x2	6500 x2	5600 x4	12000 x2
Expansion Device	Capillary		Saginomya Electronic Expansion Valve							
Defrosting Device	4-way Reversing Valve									
Refrigerant Type	R417a									
Water Output (litres/h)	110	150	245	420	520	700	810	1100	1700	2200
Noise Level dB	47	49	51	53	54	57	58	58	63	63
Pipe Size (inches)	3/4”		1”			1,25”			2,5”	
Heat Exchanger Type	Copper Tube in Tube									
Dimensions (mm) (LxWxH)	960x370 x740	990x450 x560	750x690 x845	750x690 x1060	800x750 x1080	1484x730x 1060	1484x730x 1060	1420x 725x1365	1383x 1378x1706	2010x 980x1850
G.W.	46kg	79kg	141kg	160kg	175kg	255kg	278kg	361kg	750kg	780kg
N.W.	43kg	65kg	125kg	140kg	150kg	230kg	240kg	310kg	720kg	750kg

**LSQ015RC is supplied with a brass water pump and intergrated flow control valve. All other units are not supplied with water pumps*