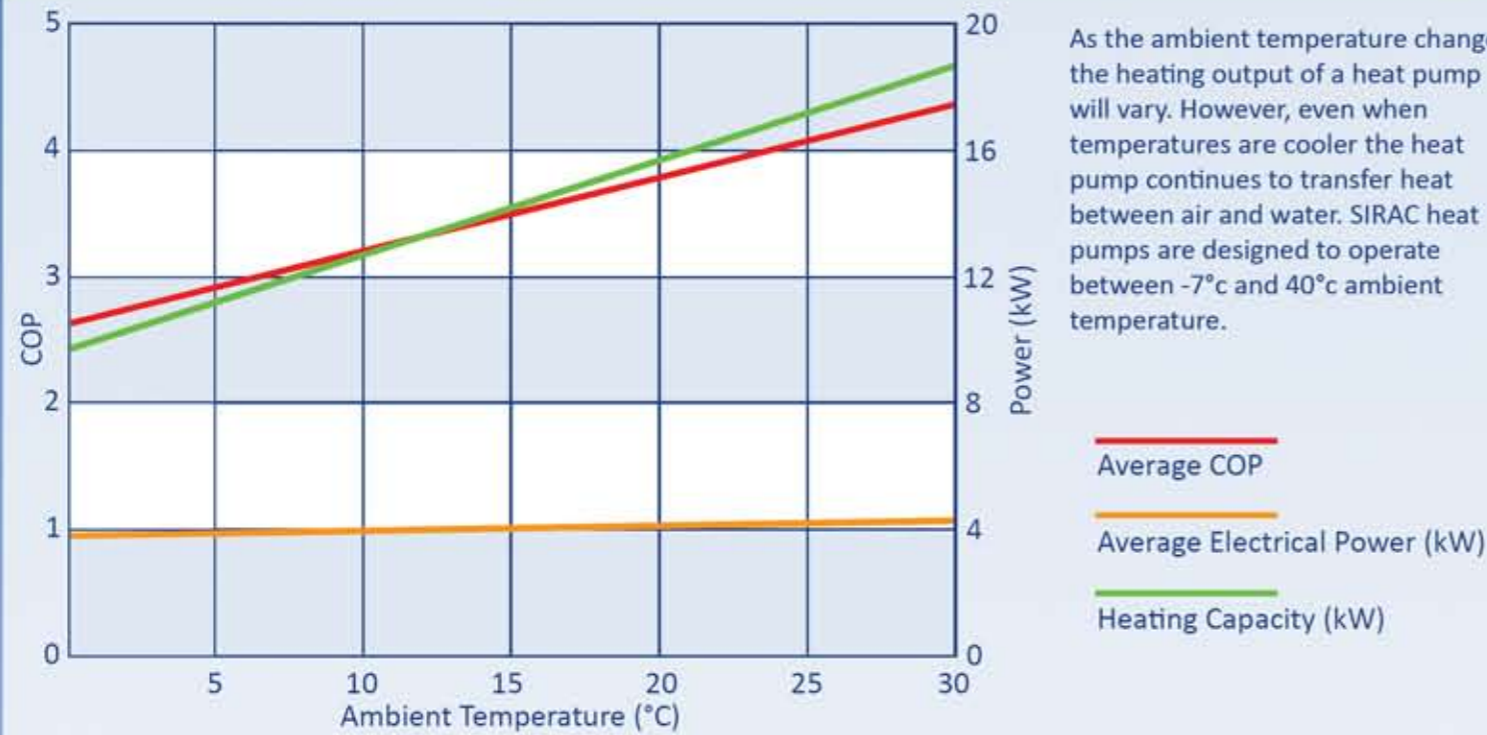


INPUT, OUTPUT AND COP VS. AMBIENT TEMPERATURE



TECHNICAL SPECIFICATIONS

Model	LSQ010RC	LSQ015RC	LSQ02RC	LSQ03R	LSQ05R	LSQ10R	LSQ15R	LSQ20R	LSQ25R
Outlet Rated Temp (°C)	55								
Outlet Max Temp (°C)	60								
Heating Capacity (kW)	3	4.7	6.5	10.6	17.1	35	44	70	87
Power Input (kW)	0.75	1.2	1.7	2.8	4.5	9.2	11.4	18.7	23
COP	4	3.92	3.82	3.79	3.8	3.76	3.86	3.74	3.78
Power Supply (V/PH/Hz)	230/1/50				400/3/50				
Compressor Type	Rotary				Copeland Scroll				
Refrigerant Charge (g)	650	750	1200	2800	3800	3800 x 2	5000 x 2	6000 x 2	6500 x 2
Starting Current (A)	16	22	28	40	35	44	50	78	105
Running Current (A)	3.5	6	8.2	12	9	9 x 2	12 x 2	18 x 2	22 x 2
Cabinet Material	Powder Coated Galvanised Steel Cabinet								
Air Discharge	Horizontal				Vertical				
Fan Motor (W)	20	25	40	130	250	250 x 2	250 x 2	750 x 2	750 x 2
Air Flow (m³/hr)	1400	1650	2200	4200	5600	5600 x 2	5600 x 2	12000 x 2	12000 x 2
Expansion Device	Capillary				Alco Thermal Expansion Valve				
Defrosting Device	4-Way Reversal Valve								
3-Speed Fan Motor	No				Yes				
Refrigerant Type	R 417 a								
Heating Capacity (L/hr)	85	110	150	245	420	810	1100	1700	2200
Noise Level (dB)	46	47	49	51	53	58	58	63	63
Pipe Size (inch)	3/4"			1"		1.25"		2.5"	
Heat Exchanger Type	Copper Tube in Tube								
Unit Length	920	930	1140	717	750	1484	1420	2010	2010
Dimen. Width	335	350	440	657	690	730	725	980	980
(mm) Height	600	550	560	845	1060	1060	1365	1850	1850
G.W (kg)	41	46	79	141	160	278	361	750	750
N.W (kg)	38	43	65	125	140	240	310	720	720

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High Efficiency Commercial Hot Water Heat Pumps

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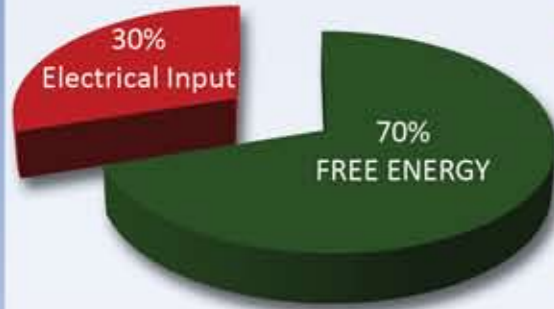
SIRAC

INTRODUCTION

SIRAC is a refrigeration company that understands refrigeration and heat pumps. We are geared to provide the necessary expertise and backup to ensure that our clients receive unparalleled service and efficiency. The key to SIRAC's continued growth is a total commitment to the highest standards of product quality and customer satisfaction. These standards are achieved through strict adherence to rigorous quality controls at every step; from engineering, machining, manufacturing and assembly to delivery and after sale support. SIRAC's participation in ISO and SABS Certification programs further demonstrates its commitment to quality.



HEAT PUMPS PAY OFF



SIRAC heat pumps have an average COP (coefficient of performance) of 3.8. This means for 1 kW of electrical energy consumed 3.8 kW of heat energy is generated.

This energy produced is a combination of the electrical energy supplied to the compressor and the energy absorbed through the evaporator coil.

As the ambient temperatures increase so does the efficiency of the machine.

With a highly efficient SIRAC Heat Pump you can enjoy plentiful hot water throughout the year at a much reduced cost. They are affordable, reliable and their high efficiency keeps your electricity bill to a minimum. By installing a SIRAC Heat Pump you can reap a return on your investment with a payback through energy savings in record time.

KEY BENEFITS

"The SIRAC range of Heat pumps have been carefully engineered to provide maximum reliability, efficiency and ease of service"



- > Attractive, well engineered product.
- > Strong local support and service back-up.
- > ISO 9000 Manufacturing facility.
- > Simple uncomplicated design.
- > Three year compressor warranty



At the Heart of the unit is the Copeland Scroll Compressor. This compressor is recognized for its energy efficiency and reliability. Copeland Scroll has helped shape the HVACR industry for over 20 years. To date approximately 60 million Copeland scroll compressors have been sold worldwide. These compressors have been developed specifically to cope with Heat Pump Application.

All other components are recognized brands such as Sporlan and Alco with local back up and support.



> The Evaporator/Fan section is completely enclosed and independent from the Compressor/Heat Exchanger compartment. The unit can be run with all the access panels removed. This makes it possible to service and maintain the machine whilst it is operational.

> Large Spacious easy service access.

> Sturdy steel base that provides rigidity to the frame structure.

> Heavy gauge galvanised steel panels and frame, epoxy coated after manufacture.



> V-Design evaporator coil guard. This configuration reduces the chance of hail damage to the coil face.

> Designed to meet with European energy standards. The evaporator coils are designed to operate down to -20°C ambient temperatures. This makes the unit extremely efficient in the mild South African climate.

> Automatic hot gas defrost controlled by intelligent control system - not timer based.

> A flow confirmation switch is provided for field operation.

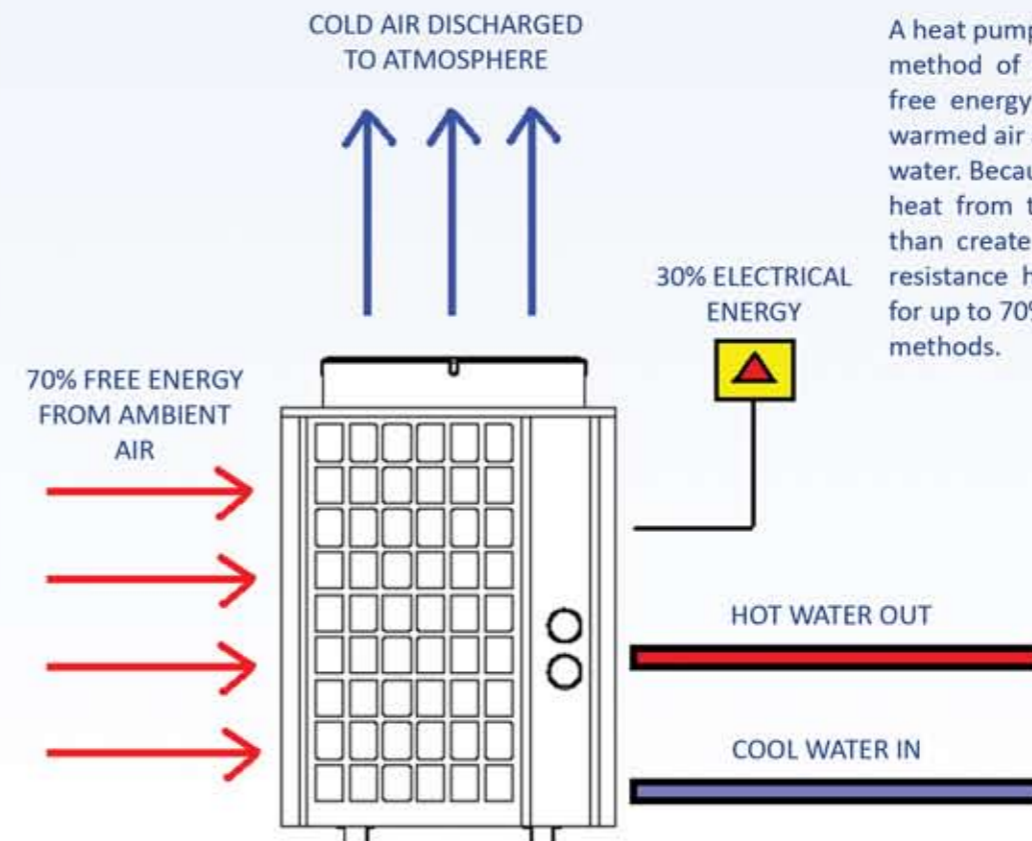
The heat exchangers manifold together with connections provided on both sides of the unit. All internal water piping is pre-insulated.

Tidy refrigeration compartment with good access to all components. Glycerine filled refrigeration gauges externally mounted on casing.

Two completely independent refrigeration circuits are staged to part load control and 50% stand by.

Ozone friendly Refrigerant - R417a

THE SIMPLE SCIENCE BEHIND HEAT PUMPS



A heat pump is a highly efficient, cost effective method of heating water. It utilizes the sun's free energy by extracting heat from the sun-warmed air and transferring it efficiently to the water. Because the heat pump moves the free heat from the outside air to the water, rather than create heat, as a fossil fuel or electric resistance heater does, it can heat the water for up to 70% less cost than other less efficient methods.

SIRAC