

Skyline Energy – Ecological Solutions
Solar Electricity, Solar Hot Water, Heat-Pumps, and Hydronic Heating

Model SX-24ZA – Hydrocarbon Hydronic Heat Pump

Specifications: Model SX-24ZA

| | |
|---------------------------------------|---------------------------------------------------------------|
| Voltage / Phase | 240v 50Hz/ 1 or 2 Phase |
| Average heating power input range | 4.5kW to 5.8kW |
| C.O.P. range @10C ambient | 3 to 4.5 |
| Power output range @10C ambient | 16kW to 19kW |
| C.O.P. range @4C ambient | 2.9 to 4.2 |
| Power output range @4C ambient | 15kW to 17kW |
| Suitable floor area for slab heating | Up to 240sqm approx. ¹ |
| Suitable floor area for panel heating | Up to 200sqm approx. ¹ |
| Working air temp range | -19°C - +45°C |
| Compressor Type (Copeland Scroll) | 2x ZR34K3E-PFJ-522 |
| Refrigerant | Hydrocarbons |
| Zeihl Abegg “OWLET” Fans | FN050-6EK.4F.V7P1, 500mm, 300W, 6000m ³ /hr (each) |
| inlet/outlet connections diameter | 32mm |
| Recommended Primary Circ Pump | GPD32-9/12 |
| Maximum Outlet Water Temp | 55°C |
| Noise Level (dBa) @ 3 metres | <55 |
| Defrost | reverse cycle |
| Dimensions (mm) | 1450L x 800W x 1060H |
| Weight – empty | 200Kg |
| Warranty (from 2017 onward) | 3yrs ² |

SX-24ZA model uses Ziehl-Abegg “OWL” fans for improved airflow, higher efficiency and quieter operation



- Operates in cold climates
- Quiet yet powerful (ZA fans)
- Economical to operate
- Can be offset with Solar Electricity

Our staggered-start dual-compressor 220V single-phase SX-24ZA models can also be spanned across 2ph supply or across 2ph of a 3ph supply.

Heating water for panel radiators panels or water-filled pipes embedded in concrete slab or screed.

Unit specifications subject to change without notice

1. SIZING IS FOR NEW 5-STAR THERMAL EFFICIENCY BELOW 500m ALTITUDE - CALL FOR FURTHER SIZING INFORMATION
2. Subject to suppliers sizing and installation guidelines being followed (there may be a travel charge for on-site service if there is a significant distance)

HEATING THE NATURAL WAY

A Cold Climate Air Sourced Hydronic Heat Pump uniquely extracts solar heat energy found abundant in the in air and transfers it to water.

Our Air Sourced Hydronic Heat Pump technology has a vast potential for harnessing renewable energy, they extract heat from the air and concentrate it to provide hot water for heating homes and commercial buildings. The only energy required is that which is used to concentrate the thermal energy – so the system can provide a heat output up to four times larger than the energy input. Because they don't rely on direct sunlight radiation, they can operate in all seasons of the year, under all conditions; shade, overcast, sun, rain, frost, even at night.

The SX-24ZA models are fitted with state-of-the-art Zeihl Abegg FN045-6EK.4F.V79P1, 450mm, 190W, 4000m³/hr (each) “OWLET” fans, significantly reducing noise levels and providing greater overall efficiency.

Used in conjunction with good building practices such as good insulation, passive solar design, hydronic heating with our state of the art, correctly sized heat pumps can be an economical and ecological, wise investment.

... “let us exceed your expectations”

1300 552 976

website: www.skylineenergy.com.au

email: info@skylineenergy.com.au

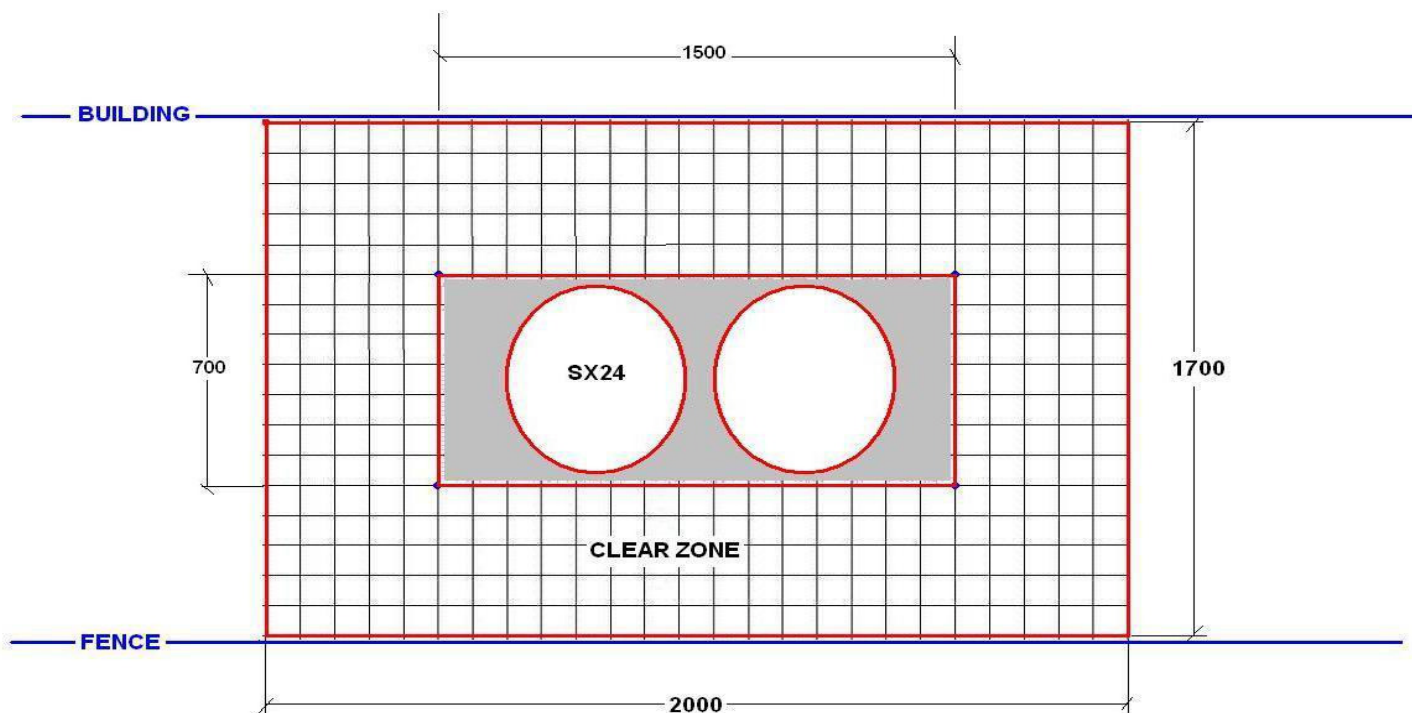
Skyline Energy – Ecological Solutions

Solar Electricity, Solar Hot Water, Heat-Pumps, and Hydronic Heating

Installation Notes:

One of the more common installation issues is the placement of the unit in confined spaces. Air-Sourced heatpumps take heat from the air thereby discharging colder air. The colder air being discharged should not find its way back into the air inlet as this would reduce the efficiency of the heatpump, so we need to give the unit lots of breathing space. Also, even though your heatpump should provide many years of reliable service it will at some stage need maintenance so the removable side-panels should be accessible.

Other than for flow & return water pipes, circulation pumps, expansion tank and close-coupled buffertank, this footprint diagram shows the recommended MINIMUM clearances for optimum performance and accessibility:



- * This plan is a guide only
- * It assumes that 2 sides are closed
- * This plan is not OK if more than 2 sides are closed
- * Waste cold air must not be allowed to back feed to the unit.
- * Access must be provided for service.
- * The top of this plan must be open without overhanging structures.
- * If there is only one side closed off then the 500mm clearance can be reduced to 300



Remote heatpump location is quite acceptable if installed properly



Installing a buffertank on a hydronic heat-pump allows for zoning without causing backpressure or flow-rate fluctuations which may trip the heat-pump. Hydronic Buffertanks may also reduce short-cycling which increases efficiency.

With a heat-pump hydronic system, heat energy is always readily available so a larger buffertank is not necessary and in fact can reduce efficiency. (one reason why we don't recommend multiple potable hot-water-tank heat-pumps for hydronics)

Skyline Energy offer specially designed 100Lt, 200Lt and 400Lt stainless steel buffertanks.
www.skylineenergy.com.au/250SSBT.php

1300 552 976

website: www.skylineenergy.com.au

email: info@skylineenergy.com.au

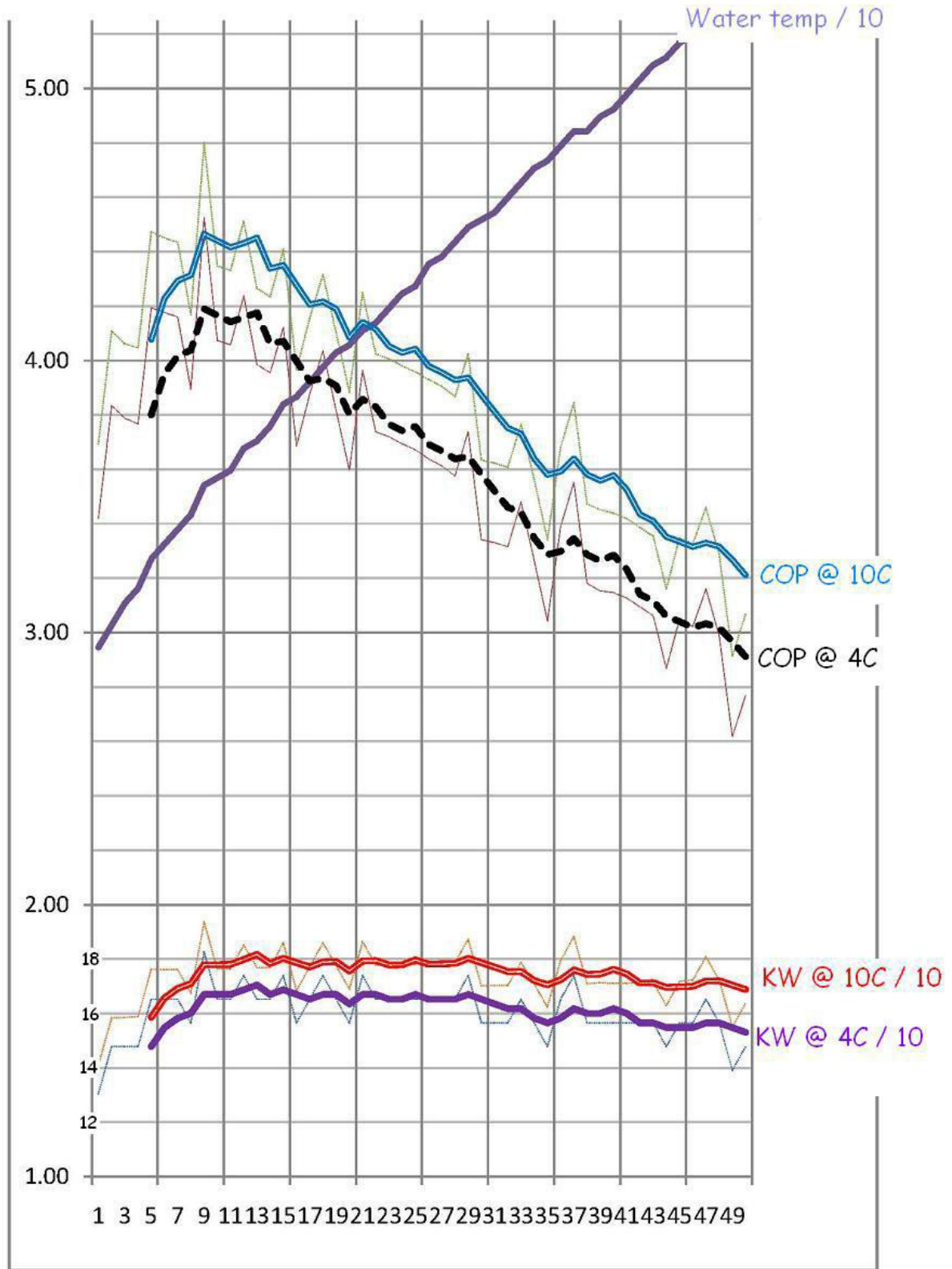
Skyline Energy – Ecological Solutions

Solar Electricity, Solar Hot Water, Heat-Pumps, and Hydronic Heating

SX24sp owl

8-10/16E

Flow 46lt/min



super 10
Angle 8

700g OZ50

Ambient 4C

1300 552 976

website: www.skylineenergy.com.au

email: info@skylineenergy.com.au