

Commercial Air Source Heat Pumps

S-ASX Range
Selector Guide



Which Air Source Heat Pump to Choose?

It can be confusing when trying to select the correct machine with so many different models on offer. The simple fact is that many Air Source Heat Pumps will do a similar job. However, fundamentally it's important to ask yourself a few basic questions at the outset. The answers to these questions will often lead towards a model selection.



What maximum flow temperature do I need?

This will often depend on whether the installation is a retrofit project, sometimes replacing or complementing existing boiler plant, or a new build. Retrofits will frequently require the Air Source Heat Pumps to operate with relatively high flow temperatures, whereas new installations will be designed from the ground up with lower temperatures. It's also essential to consider system heat losses and whether there is a Domestic Hot Water requirement.



What kW power output do I need?

The power output of Air Source Heat Pumps varies with changes in air temperature. Stöbel machines, like many others, are sized to a nominal power output which is measured at 7°C ambient air temperature. This is reasonable considering the average temperature for the UK was 10°C according to the Met Office in 2025. However, always make sure the selected unit has the required kW output at the design air temperature. At the same time also consider the number of units for resilience and load sharing.



How do I minimise running costs?

Achieving the best efficiency of the heat pump is critical as this will reduce annual electricity costs. Selecting the model with the highest SCOP at the required output and flow temperature is a good starting point.

And what about the Refrigerant?

Also remember that different refrigerants have different compositions and different thermal conductivity characteristics. Be sure to check the GWP of your refrigerant as this will impact on the embodied carbon (TM65) value of the selected machine. Note that the machines with the lowest GWP don't necessarily have the highest SCOP efficiencies. Accordingly, product selection will often require a balanced judgement between various characteristics and performance criteria.



	Product Name	Max Flow Temp (°C)		Number & Output (kW) Models	Max Number of Units in Cascade, and kW Output	SCOP				Refrigerant Type	GWP Rating	Compressor Type	Built-in Pump	Sound Pressure at 10m dB(A)
		A7	A-4			at 35°C	at 45°C	at 55°C	at 65°C					
	S-ASX-LPi Low GWP Vapour Injection	65	65	55, 75 & 100	16 units up to 1600kW	4.33	3.76	3.52	3.17	R454B	467	Inverter Scroll	Yes	45
	S-ASX-OPVi Natural Refrigerant Vapour Injection	65	65	45, 90 & 135	16 units up to 2.16MW	3.63	3.15	2.95	2.65	R454C	148	Inverter Scroll	Yes	45
	S-ASX-NTi Natural Refrigerant Vapour Injection	78	78	25, 35 & 45	16 units up to 720kW	4.23	3.67	3.43	3.08	R290	3	Inverter Scroll	Yes	45
	S-ASX-NTVi Natural Refrigerant Vapour Injection	78	78	80 & 120	16 units up to 1.92MW	4.23	3.67	3.43	3.08	R290	3	Inverter Scroll	Yes	45

All SCOP data and Sound Pressure Data is best model data for the appropriate range. Please check model for specific model data.



A consultation in person is highly recommended to ascertain or verify the best product and number of machines for each project as well as to check potential site layouts, buffer vessel sizing as well as delivery pinches and other site details.

What Else Do I Need?

With S-ASX Air Source Heat Pump installations we highly recommend a range of associated plant including matched Thermal Stores as well as our S-LC-I large coiled Domestic Hot Water Calorifiers, S-EBX Electric Boilers and, as and when necessary, our S-ACE 15 range of Acoustic Enclosures.

All these products are available direct from Strebel making it easy to source a complete system.



Thermal Storage Vessels

TSE & TS Buffer Tanks

Ensuring adequate hydraulic volume for seamless compressor run time, as well as defrost cycle heat delivery is a fundamental to the good design of any commercial heat pump system.

- Range of Vessels from 600 to 6000 litres
- Fully insulated to minimise heat loss
- Multiple sensor and immersion pockets
- Connections sized to suit ASHP flow rates



Acoustic Enclosures

S-ACE15 Units

It is an inescapable reality that commercial air source heat pumps make noise. This is minimised with all Strebel units by including anti-vibration feet as standard, and noise dampening insulation in the unit casing, but compressor and fan noise remain.

- Noise reduction of up to 15dB(A)
- No loss of ASHP output or performance
- Modular format supplied fully fitted
- Vertical air discharge arrangement





Domestic Hot Water

S-LC-I Calorifiers

Provision of domestic hot water, using Air Source Heat Pumps as the prime heat source for the transfer of heat, is made possible using the S-LC-I stainless steel calorifier range.

- DHW Storage from 500 to 2500 litres
- Fast recovery times due to large coil surface area
- Supplied immersions for back-up heating
- High grade 316L stainless steel unit



Electric Boilers

S-EBX Electric Boiler

Where heating load or resilience is required Air Source Heat Pump systems can be supported with additional capacity with our three phase wall mounted S-EBX electric boiler.

- Available in 40, 60, 80 and 100kW outputs
- Heat delivery up to 80°C Flow Temperature
- Alternative to additional ASHP for back-up resilience
- Small footprint and low CAPEX option



After Sales Support

Stebel Service plans are available, including full F-Gas regulatory checks, which are carried out by trained and experienced heat pump specialists. In addition, either passive or active remote monitoring plans are available depending on the level of support and assistance required. All Stebel S-ASX units are supplied as standard with webserver and two-year data connection to allow controlled snagging, bedding in and background level observation during this standard warranty period.

All S-ASX Stebel Air Source Heat Pumps are supplied with a two year parts and service warranty provided they are installed in accordance with our O&M manual instructions. An extended warranty is available for up to an additional five years on request.



Why Choose Strebel?

We recognise that Building Services engineers have a choice which heating system to use. There are many options and considerations to ponder when making these choices. So why choose Strebel over other manufacturers?

- We are 100% orientated on commercial and non-domestic installations.
- We design with energy efficiency and carbon reduction in mind. We don't simply just offer the cheapest solution. We recognise this isn't for everyone. It is what we do though.
- We've been doing this for over fifty years now, working with contractors, consultants and end-users in the UK.
- All our products and services are designed to offer quality and performance.
- We're honest and straightforward. If we can't help we will just say so. If we can, then we'll offer what we think is the best option. Simple as that.

Technical Support

We appreciate that system design and product selection is just the start. We work with our clients through delivery, installation, commissioning and after sales. Our internal and externally based engineers offer their know-how and experience in close support during project handover. We recognise that soft project landings benefit everyone and this is what we aim to achieve.



CPD Programme

We offer a focussed Continuous Professional Development programme that encourages discussion on heating designs and product selections in relation to minimising carbon dioxide and nitrous oxide emissions. It's CIBSE accredited and covers a range of Gas Boiler and Heat Pump related subjects.



Interested? Why not then...

Contact Us

For more information about the above or other services, visit our website at www.strebel.co.uk contact any of our external Area Sales Managers www.strebel.co.uk/how-to-buy or give the office a call directly on **01276 685 422**