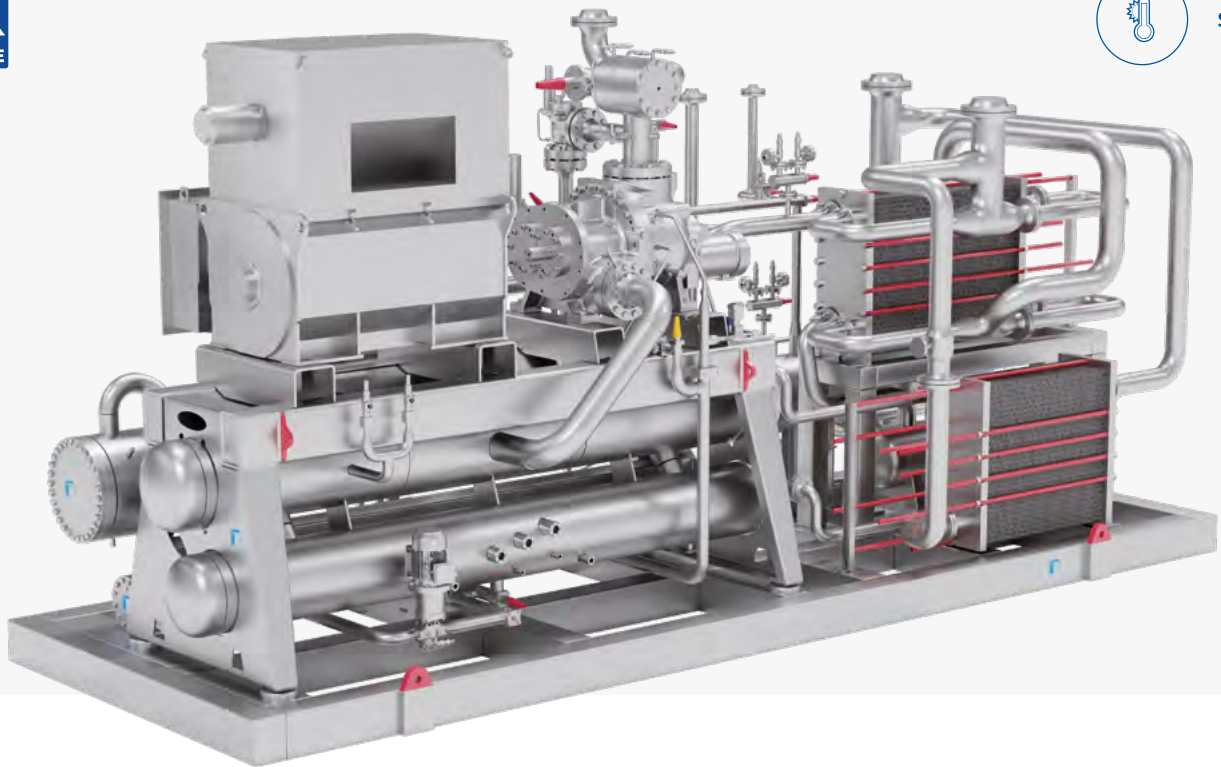




SabroeHeat



Sabroe HicaHP Heat pumps

Sabroe HicaHP 273 S

Ammonia-based heat pumps using screw compressors with capacities ranging from 2 MW to 25 MW, delivering up to 95°C

Sabroe HicaHP (high capacity heat pumps) are compact heat pumps optimised to enable large-scale heat pump installations to support your path to net zero.

By using the environmentally-friendly natural refrigerant ammonia, HicaHP can deliver high water temperatures of up to 95°C at a high capacity yet with minimum energy needed to operate the compressor.

HicaHP heat pumps are optimised at 40 bar or 63 bar design pressure, enabling a supply temperature up to 72°C or 95°C respectively, offering an optimal solution for various temperature needs.

To achieve 95°C supply, HicaHP uses a unique high-pressure compressor developed and designed specifically for high-pressure heat pump applications. These compressors have optimised rotor profiles in a design that ensures exceptional reliability, low deflection, high efficiency and long service life.

Range

There are five different models in the range of HicaHP heat pumps, with capacities ranging from 2 MW to 25 MW.

Features	Benefits
Factory-assembled, pre-tested packaged units, including capacity test (407: compressor test only)	Easy pre-commissioning makes installation and running-in both faster and cheaper
Newly developed, short and robust rotor profile, specifically for heat pump operation	Increased lifetime and service intervals, minimising total lifecycle cost
Based on solutions to reduce vibrations and supply a compact and flexible design	Increased reliability and uptime resulting in low lifecycle cost
Small, space-saving footprint, with fewer moving parts and very low vibration level	Exceptional reliability, low maintenance costs and very easy access for service
Condition-based service schedules, which help improve safety and ensure maximum reliability	Optimised service/maintenance intervals, minimal unscheduled downtime



Single-stage HicaHP

Model	Cold side In/out	Hot side In/out	Heating capacity	Cooling capacity	Power consumption	Sound pressure level	COP heating
	°C	°C	kW	kW	kW	db(A)	
HicaHP 193 S	20/12	50/72	1690	1266	424	84	3.9
HicaHP 233 S	20/12	50/72	3021	2281	740	86	4.0
HicaHP 273 S	40/30	65/95	4325	3150	1175	84.3	3.6
HicaHP 407 S	40/30	65/95	14385	10258	4127	-	3.5
HicaHP 407 L	40/30	65/95	19274	13807	5467	-	3.5
HicaHP 273 S	50/40	65/95	5375	4166	1209	84.3	4.3
HicaHP 407 S	50/40	65/95	17937	13660	4278	-	4.2
HicaHP 407 L	50/40	65/95	23986	18271	5715	-	4.2

Two-stage HicaHP

Model	Cold side In/out	Hot side In/out	Heating capacity	Cooling capacity	Power consumption	Sound pressure level	COP heating
	°C	°C	kW	kW	kW	db(A)	
HicaHP 273 S/283 S	25/15	60/95	6750	4765	1985	86.6	3.4
HicaHP 273 S/283 L	20/10	60/95	7260	4885	2375	86.4	3.1
HicaHP 273 S/283 L	15/5	60/95	6450	4241	2209	86.2	2.9

Sound pressure levels are guidelines only.

Options

- Different oil cooler layouts based on customer needs
- Economiser operation for increased efficiency
- High-voltage motors
- Complete economiser system
- Customer-witnessed factory acceptance test (FAT)

All information is subject to change without notice.

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