Sabroe HeatPAC[™] HPX heat pumps

Single-stage high-pressure ammonia-based heat pumps, using a reciprocating compressor, with a 100–600 kW capacity range

Sabroe HeatPAC™ HPX heat pumps are compact units with an integrated singlestage configuration that features less than half the space and weight requirements of any other heat pump designs usually needed to achieve 90°C hot water outputs.

These energy-efficient units feature a breakthrough HPX hybrid compressor design that allows differential pressures as high as 40 bar and discharge pressures as high as 60 bar, combined with space-saving evaporator technology from the ChillPAC $^{\text{TM}}$

packaged ammonia chiller.

HeatPAC HPX heat pumps make it easy to produce hot water at temperatures up to 90°C, using any suitable source of low-temperature heat, with only tiny energy inputs needed.

They provide a low-cost supply of hot water at temperatures ideal for sterilisation and pasteurisation – as well as many other hygiene-sensitive functions and processes.



Advantages	Benefits
Factory-assembled, pre-commissioned units based on ultra-reliable Sabroe reciprocating compressors	Easy, rapid commissioning saves time money and manpower, and minimises disruption
Compact single-stage configuration weighs less and takes up less space than bespoke and/or two-stage heat pump designs	Easy to mount or retrofit, even in confined spaces or unconventional locations
Exceptional Coefficient of Performance (COP) in high-temperature single-stage configuration	High energy-efficiency, low operating costs
Variable-speed drive (VSD) and Unisab III compressor package controller as standard	Outstanding part-load performance and maximum operating flexibility
Service and maintenance based on Load Based Service (LBS) schedules	Improved reliability, longer service intervals, minimal downtime, low cost of ownership

Options

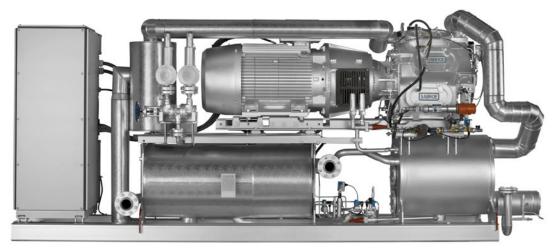
- Cascade evaporator
- Subcooler
- Control panel mounted separately
- Factory acceptance tests (FAT).



Compliance

HeatPAC HPX heat pumps are fully compliant with appropriate major international design codes and the specifications laid down by the most common classification societies.

Approval in accordance with other technical requirements, specific national legislation or other classification societies' requirements is available on request.



HeatPAC HPX

Condenser water inlet +70°C, outlet +90°C Evaporator water inlet +39°C, outlet +34°C Evaporation 30°C, 16K sub-cooling

Туре	Heating	Cooling	Power	СОР	R717	Dry weight		Dimensions in mm		Sound
	capacity kW	capacity kW	consumption kW	heat	charge kg	kg	L	w	н	level dB(A)
HeatPAC 704-W	326	249	82	4.0	25	~3500	~3500	1000	2100	~83
HeatPAC 706-W	489	373	123	4.0	30	~4200	~3700	1000	2100	~85
HeatPAC 708-W	652	498	164	4.0	35	~5000	~4100	1000	2100	~86

Approximate values.

W = Heat pump unit water/water Capacities are nominal at 1800 rpm VSD drive is standard Sound pressure levels in free field, over reflecting plane and one metre distance from the unit.

