SABROE HeatPAC™ HPX heat pumps

Single-stage high-pressure ammonia-based heat pumps, using a reciprocating compressor, with a 326–1300 kW capacity range

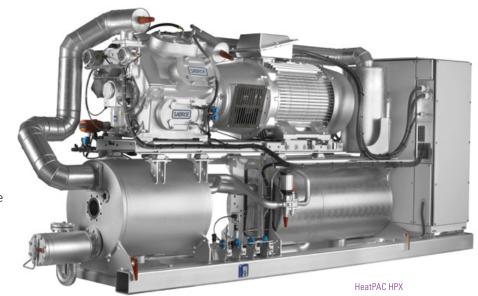
SABROE HeatPAC™ HPX heat pumps are compact units with an integrated singlestage configuration that features less than half the space and weight requirements of any other heat pump designs usually needed to achieve 90°C hot water outputs.

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

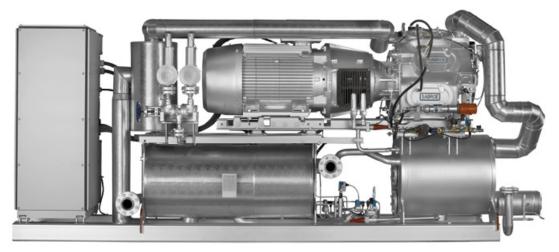
- Cascade evaporator
- Subcooler
- Control panel mounted separately
- Factory acceptance tests (FAT), customer-witnessed.



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, 16 K sub-cooling

Туре	Heating capacity	Cooling capacity	Power consumption	COP heat	R717 charge	Dry weight kg (approx.)	Unit dimensions in mm (approx.)		mm	Sound level dB(A)
	kW	kW	kW		kg		L	W	Н	(approx.)
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
HeatPAC 712-W	1010	786	252	4.0	55	6250	4700	1000	2100	87
HeatPAC 716-W	1324	1029	331	4.0	65	7000	6000	1000	2100	88
	HeatPAC 704-W HeatPAC 706-W HeatPAC 708-W HeatPAC 712-W HeatPAC 716-W	capacity kW HeatPAC 704-W 326 HeatPAC 706-W 489 HeatPAC 708-W 652 HeatPAC 712-W 1010	capacity kW capacity kW HeatPAC 704-W 326 249 HeatPAC 706-W 489 373 HeatPAC 708-W 652 498 HeatPAC 712-W 1010 786	capacity kW capacity kW consumption kW HeatPAC 704-W 326 249 82 HeatPAC 706-W 489 373 123 HeatPAC 708-W 652 498 164 HeatPAC 712-W 1010 786 252	capacity kW capacity kW consumption kW heat HeatPAC 704-W 326 249 82 4.0 HeatPAC 706-W 489 373 123 4.0 HeatPAC 708-W 652 498 164 4.0 HeatPAC 712-W 1010 786 252 4.0	capacity kW capacity kW consumption kW heat kg charge kg HeatPAC 704-W 326 249 82 4.0 25 HeatPAC 706-W 489 373 123 4.0 30 HeatPAC 708-W 652 498 164 4.0 35 HeatPAC 712-W 1010 786 252 4.0 55	capacity kW capacity kW consumption kW heat kg charge kg (approx.) HeatPAC 704-W 326 249 82 4.0 25 3500 HeatPAC 706-W 489 373 123 4.0 30 4200 HeatPAC 708-W 652 498 164 4.0 35 5000 HeatPAC 712-W 1010 786 252 4.0 55 6250	capacity kW capacity kW consumption kW heat charge kg (approx.) L HeatPAC 704-W 326 249 82 4.0 25 3500 3500 HeatPAC 706-W 489 373 123 4.0 30 4200 3700 HeatPAC 708-W 652 498 164 4.0 35 5000 4100 HeatPAC 712-W 1010 786 252 4.0 55 6250 4700	capacity kW capacity kW consumption kW heat charge kg (approx.) (approx.)	capacity kW capacity kW consumption kW heat kg charge kg (approx.) (approx.) L W H HeatPAC 704-W 326 249 82 4.0 25 3500 3500 1000 2100 HeatPAC 706-W 489 373 123 4.0 30 4200 3700 1000 2100 HeatPAC 708-W 652 498 164 4.0 35 5000 4100 1000 2100 HeatPAC 712-W 1010 786 252 4.0 55 6250 4700 1000 2100

Approximate values.

W = Heat pump unit water/water Capacities are nominal at 1800 rpm VSD drive is standard HeatPAC 712 and HeatPAC 716 are available on request.

Sound pressure levels in free field, over reflecting plane and one metre distance from the unit.

