



# Sabroe HeatPAC heat pumps

HeatPAC HPX with panel-mounted UniSAB systems controller

Single-stage high-pressure ammonia-based heat pumps, using a reciprocating compressor, with a 300–2,700 kW capacity range

HeatPAC units are extremely compact heat pumps based on ultra-reliable Sabroe HPO/HPC/HPX high-pressure reciprocating compressors achieving up to 40 bar differential pressures and up to 60 bar design pressures. Using ammonia as refrigerant, Sabroe HeatPACs provide a low-cost supply of hot water at up to 90°C, ideal for sterilisation, pasteurisation, and many other heating processes.

These highly customisable integrated units are based on a unique vibration-resistant design, featuring an uncomplicated flooded evaporating system. With the uniquely combined desuperheater, condenser, and subcooler design, Sabroe HeatPACs offer superior efficiency. The units provide exceptional heat pump capacity from the smallest possible footprint, and with only a very small refrigerant charge.

Sabroe HeatPAC heat pumps are the ideal solution for effectively exploiting low-temperature waste heat and turning it into hot water (up to 90°C) using only a minimum of electrical energy.

These units are designed to provide a cost-effective way to tackle the need for cooling and heating at the same time, providing an extremely high coefficient of performance (COP).

# Range

There are 13 standard models in this range of heat pump systems, with capacities ranging from 300 kW to 2,700 kW.

Features	Benefits
Factory-assembled, pre-tested packaged units based on Sabroe reciprocating compressors world- renowned for their reliability	Easy pre-commissioning makes installation and running-in both faster and cheaper
Compact single-stage configuration weighs less and takes up less space than bespoke and/or two-stage heat pump designs	Low installation cost. Easy to mount even in confined spaces or unconventional locations
Exceptional COP and outstanding part-load performance	High energy-efficiency, low operating costs
Service and maintenance based on load-based service schedules	Improved reliability, longer service intervals, minimal downtime, low cost of ownership
Variable-speed drive (VSD) and UniSAB compressor package controller as standard	Outstanding part-load performance and maximum operating flexibility





## Water condenser inlet 60 °C, outlet 70 °C and evaporator inlet 39 °C, outlet 34 °C

Туре	Heating capacity	Cooling capacity		Power consumption (shaft) kW	R717 charge	Dry weight kg	Unit dimensions in mm			Sound pressure level	COP shaft heating
	kW	kW					L	w	Н	dB(A)	_
HeatPAC 24-W	307	260	55	47	38	3100	3900	1000	2000	76	6.5
HeatPAC 26-W	461	391	79	71	48	3900	4100	1000	2000	78	6.5
HeatPAC 28-W	615	521	114	95	55	4200	4300	1000	2000	79	6.5
HeatPAC 104-W	725	611	136	112	73	5100	4500	1000	2000	82	6.5
HeatPAC 106-W	1087	916	207	168	87	5600	4900	1000	2000	83	6.5
HeatPAC 108-W	1432	1206	253	224	104	6200	5300	1000	2000	84	6.4
HeatPAC 112-W	2078	1742	399	338	121	8800	5700	1000	2100	85	6.2
HeatPAC 116-W	2663	2224	487	444	130	9800	6000	1000	2100	85	6.0

### Water condenser inlet 70 °C, outlet 90 °C and evaporator inlet 39 °C, outlet 34 °C

Туре	Heating capacity	Cooling capacity	E-motor	Power consumption (shaft)	R717 charge	Dry weight	Unit dimensions in mm			Sound pressure level	COP shaft heating
	kW	kW	kW	kW	kg	kg	L	w	н	dB(A)	
HeatPAC 704-W	341	269	97	77	35	3500	3800	1000	2100	83	4.4
HeatPAC 706-W	511	403	136	116	44	4200	4000	1000	2100	84	4.4
HeatPAC 708-W	682	537	172	154	54	5000	4400	1000	2100	85	4.4
HeatPAC 712-W	1023	805	271	232	73	6250	5200	1000	2100	86	4.4
HeatPAC 716-W	1346	1059	347	308	88	7000	6000	1000	2100	86	4.4

W = Heat pump unit water/water.

All data and nominal capacities kW at 1800 rpm. All HeatPACs: 60 Hz or VSD operation possible.

### Options

- Cascade evaporator
- Desuperheater
- Subcooler
- Variable-speed drive (VSD)
- Soft-starter or Y/D starter
- Control panel mounted separately
- Customer-witnessed factory acceptance test (FAT)
- Enclosure for outdoor installation

All information is subject to change without notice.

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Dimensions, weight and sound pressure levels are guidelines only. Sound pressure levels measured in free field, over reflecting plane and one metre distance from the unit.

The power behind your mission