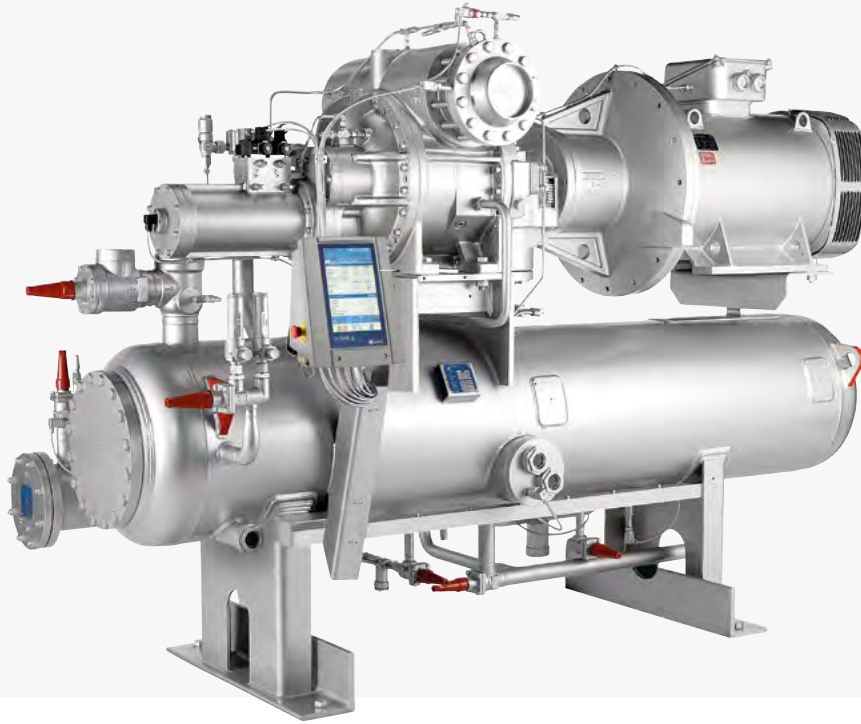




SabroeScrew



# Sabroe SAB high-pressure screw compressor units

SAB 193 high-pressure screw compressor unit with UniSAB systems controller

Variable-speed high-pressure screw compressor units with swept volumes of 1,000–7,350 m<sup>3</sup>/hour

These unique high-pressure compressor units are ideal for large, site-built ammonia heat pump installations that require condensing temperatures up to 93°C.

Sabroe SAB high-pressure screw compressors are specially designed for variable-speed operation and maximum flexibility, doing away with the traditional capacity limitations of slide-valve technology. The capacity range of all SAB models extends from 1,000 rpm to 3,600 rpm.

The high-pressure configurations, all ductile iron-cased versions of the large Sabroe compressor units, provide substantial base load capacities along with providing exceptional flexibility in frequency converter operation. This ensures the robustness and reliability derived from the thousands of compressors in long-term service in refrigeration plants worldwide.

The high-pressure screw compressor units are configured as standard with Sabroe Vibration Monitoring system, which monitors the conditions of the bearings to secure optimum uptime on the compressors. Monitoring of motor bearings can also be included on request.

## Range

Four models are available to provide swept volumes of between 1,000 and 7,350 m<sup>3</sup>/h.

Features	Benefits
High-pressure units designed specifically for applications that use CO <sub>2</sub> or ammonia as refrigerant	Makes it possible to undertake freezing and defrosting in a single stage, or to utilise waste heat
Stepless, skip-free capacity control ensures that output always matches requirements	Lowest possible operating costs and rapid return on investment
Consistently high performance at both full and part load	Maximum part-load efficiency and low life cycle costs
Space-saving small footprint, with fewer moving parts and very low vibration	Exceptional reliability and low maintenance costs
Load-based service schedules	Optimised service/maintenance intervals, with a minimum of unscheduled downtime

The power behind **your mission**





### Technical data, 40 bar

Model	Max. rpm	Swept volume at max. rpm m <sup>3</sup> /hr	Capacities +10°C/72°C		Unit dimensions in mm L x W x H	Sound pressure level db(A)
			Cooling	Heating		
			kW	kW		
SAB 193 S HP	3600	1018	1266	1690	3150 x 1500 x 1800	90
SAB 233 S HP	3600	1791	2281	3021	3700 x 1700 x 2100	90

### Technical data, 63 bar

Model	Max. rpm	Swept volume at max. rpm m <sup>3</sup> /hr	Capacities +20°C/93°C		Unit dimensions in mm L x W x H	Sound pressure level db(A)
			Cooling	Heating		
			kW	kW		
SAB 407 S HP	3600	5510	7875	11877	8900 x 2000 x 4000	-
SAB 407 L HP	3600	7350	10503	15843	9200 x 2000 x 4000	-

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

Min./max. speed	R717
SAB 193 S HP	1000-3600
SAB 233 S HP	1000-3600
SAB 407 S HP	1000-3600
SAB 407 L HP	1000-3600

All Sabroe high-pressure screw compressors are available on request.

### Options

- Variable-speed drive
- Thermosyphon and water-cooled oil coolers, with 3-way oil temperature control valve
- Dual external oil filters (SuperFilter II type)
- Complete economiser systems
- Demand oil pump – controlled by UniSAB systems controller
- Sensors and transmitters for control by external PLC systems
- Sabroe Vibration Monitoring system (SVM) for electrical motor

All information is subject to change without notice.

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