

## Sabroe SAB screw compressor units

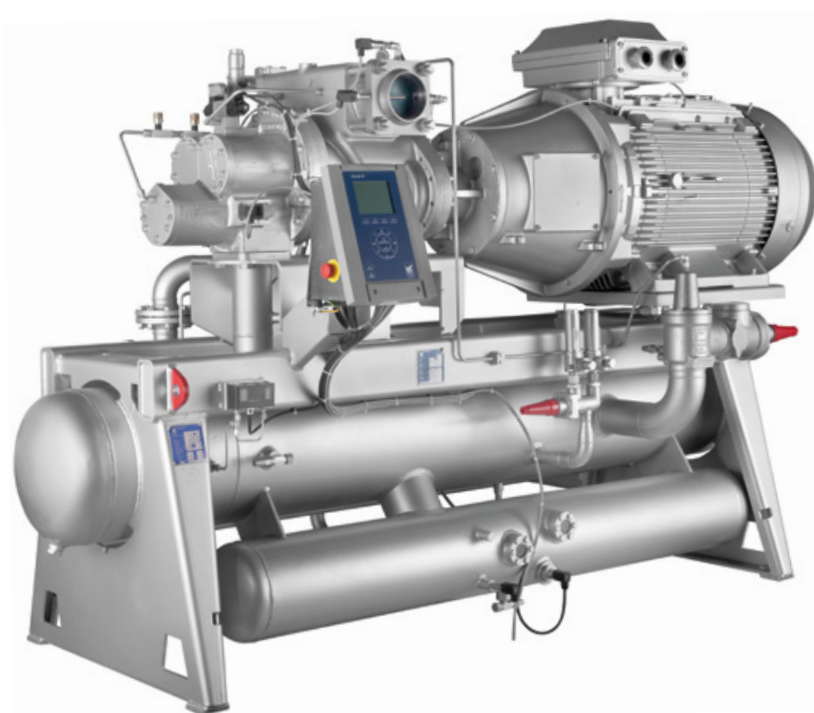
Small single-stage compressors with swept volumes of 200–1000 m<sup>3</sup>/h

Sabroe SAB screw compressors are designed and configured to tackle smaller-scale industrial refrigeration requirements where a combination of exceptional reliability, high performance and low operating costs is essential.

These small units can be used with all the most common refrigerants and process gases, and all the components are selected for good accessibility and ease of service, ensuring cost-effective maintenance.

### Range

Eight different models are available to provide swept volumes of 200–1000 m<sup>3</sup>/h.



SAB 151 screw compressor unit with UniSAB systems controller

Advantages	Benefits
Variable-speed drive and stepless capacity control ensure that capacity is always adjusted to suit requirements	Maximum part-load efficiency and lowest possible operating costs
SAB screw compressor units are all equipped with a UniSAB systems controller	More efficient operating profile, less downtime and longer service life
Cold Start valve lubricates the compressor, with no oil pump needed	Lower operating costs and less maintenance
SuperFilter II oil filter captures 99% of all particles larger than 5 microns	Longer bearing life, providing maximum reliability and savings on both maintenance and replacement
Space-saving design with small footprint	Significant reductions in space requirements



## Options

- Variable-speed drive
- Thermosyphon and water-cooled oil coolers, with 3-way oil temperature control valve
- Liquid injection oil cooling (EZ Cool)
- Dual SuperFilter II oil filters (on SAB 151 models only)
- Complete economiser systems
- Demand oil pump – controlled by UniSAB systems controller
- Sensors and transmitters for control by external PLC systems.

Model	Swept volume at 3000 rpm* m <sup>3</sup> /h	Swept volume at 3600 rpm* m <sup>3</sup> /h	Nominal capacities in kW at 3600 rpm			Unit dimensions in mm L x W x H	Weight excluding motor/oil kg	Sound pressure level at 3000 rpm dB(A)	Sound pressure level at 3600 rpm dB(A)
			R717		With economiser R717 -40/+35°C				
			High-stage -10/+35°C	Booster -40/-10°C					
SAB 120 S*	204	245	145	44	44	2200 x 1300 x 1500	1200	85	87
SAB 120 M	255	306	191	58	58	2200 x 1300 x 1500	1200	86	88
SAB 120 L	316	379	243	73	73	2200 x 1300 x 1500	1300	88	90
SAB 120 E	413	496	325	98	99	2200 x 1300 x 1500	1300	89	91
SAB 151 S	484	581	373	116	106	3000 x 1450 x 1800	2050	90	92
SAB 151 M	571	685	448	139	127	3000 x 1450 x 1800	2050	91	93
SAB 151 L	708	850	565	175	160	3000 x 1450 x 1800	2050	91	93
SAB 151 E	847	1016	680	211	193	3000 x 1450 x 1800	2050	92	94

### 2-pole motor:

3000 rpm at 50 Hz.

3600 rpm at 60 Hz or VSD.

### \* 4-pole motor (for SAB 120 S):

1500 rpm at 50 Hz.

1800 rpm at 60 Hz or VSD.

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

### For R717:

2 K liquid subcooling and 0.5 K non-usable suction superheat.

### 28 bar design pressure:

SAB 120 and SAB 151

Min./max. speed	R717
SAB 120 S	1000-1800 rpm
SAB 120 M-L-E	1000-3600 rpm
SAB 151 S-M-L-E	1000-3600 rpm