

# SABROE SAB screw compressor units

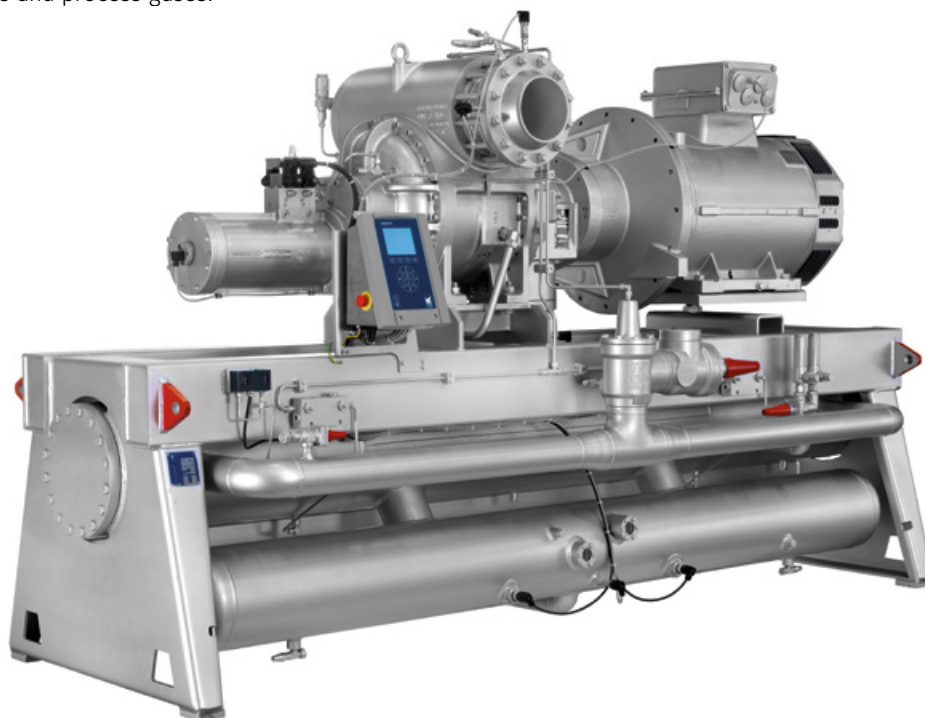
Large single-stage compressors with swept volumes of 850–11000 m<sup>3</sup>/h

The bigger models of SABROE SAB screw compressors are specifically engineered to deal with larger-scale industrial refrigeration installations in which requirements prioritise exceptional reliability, high performance and low operating costs. All the components are designed and configured to ensure low maintenance costs as a result of good accessibility and ease of service.

Like their smaller counterparts, these large-capacity compressor units can be used with all common refrigerants and process gases.

## Range

Thirteen different models are available to provide swept volumes of 848–11016 m<sup>3</sup>/h.



SAB 233 screw compressor unit with Unisab III systems controller

### Advantages

Variable-speed drive and stepless capacity control ensures that capacity is always adjusted to suit requirements

SAB screw compressor units are all equipped with a Unisab III systems controller

Cold Start valve lubricates the compressor, with no oil pump needed

SuperFilter II oil filter captures 99% of all particles larger than 5 microns

Space-saving design with small footprint

Compact oil separator

### Benefits

Maximum part-load efficiency and lowest possible operating costs

More efficient operating profile, less downtime and longer service life

Lower operating costs and less maintenance

Longer bearing life, providing maximum reliability and savings on both maintenance and replacement

Significant reductions in space requirements

Highly efficient oil carry-over as a result of two-stage separation



## Options

- Variable-speed drive
- Thermosyphon and water-cooled oil coolers, with 3-way oil temperature control valve
- Liquid injection oil cooling (EZ Cool)
- Dual external oil filters (SuperFilter II type)
- Complete economiser systems
- Demand oil pump – controlled by Unisab III 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 193 S	848	1018	653	194	193	3150 x 1500 x 1800	2700	84	86
SAB 193 L	1131	1358	872	260	258	3250 x 1500 x 1900	2800	84	86
SAB 233 S	1494	1792	1172	344	334	3700 x 1700 x 2100	4600	86	88
SAB 233 L	1880	2257	1477	484	421	3700 x 1800 x 2200	4750	86	88
SAB 233 E	2323	2788	1826	537	520	3700 x 1800 x 2200	4800	86	88
SAB 283 S	2676	3211	2096	616	597	3700 x 1800 x 2250	5500	88	90
SAB 283 L	3370	4044	2638	776	752	4150 x 1900 x 2650	5850	88	90
SAB 283 E	4055	4865	3159	929	901	4450 x 2100 x 2850	7650	88	90
SAB 355 S	4192	5031	3236	963	917	4550 x 2350 x 3500	10000	89	91
SAB 283 X	4580	5496	3592	1056	1025	4600 x 2100 x 2850	8950	88	90
SAB 355 L	5716	6860	4369	1299	1240	4700 x 2350 x 3500	10000	89	91
SAB 355 E	7275	8730	5550	1630	1576	4850 x 2350 x 3500	10200	89	91
SAB 355 X	9180	11016	NA	2053	1966	5000 x 2350 x 3500	10400	89	91

### 2-pole motor:

3000 rpm at 50 Hz.  
3600 rpm at 60 Hz or VSD.  
4200 rpm at 70 Hz or VSD.

Sound pressure levels 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.

Min./max. speed	R717
SAB 193	1000-4200
SAB 233	1000-3800
SAB 283	1000-3600
SAB 355	1000-3600

All information is subject to change without notice.

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