Sabroe SAB screw compressor units

Large single-stage compressors with swept volumes of 850-9000 m³/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 838–9053 m³/h at 3000 rpm.



SAB 193 screw compressor unit with Unisab III systems controller

Advantages	Benefits
Variable-speed drive and stepless capacity control ensures 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 III 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 foot- print	Significant reductions in space requirements
Compact oil separator	Highly efficient oil carry-over as a result of two-stage separation



Optional equipment

- 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	Capacities in kW						Dimensions	Weight	Sound	
	volume at	R7	R717 R404A		With economiser		in mm	excluding	pressure		
	3000 rpm	High stage	Booster	High	stage	R717	R404A		motor/oil	level	
	m³/h	-10/+35°C	-40/-10°C	-10/35°C	0/+40°C	-40/-	+35°C	LxWxH	kg	dB(A)	
SAB 193 S	838	541	164	524	779	155	213	3145 x 1470 x 1562	2370	84	
SAB 193 L	1118	723	220	709	1041	207	289	3232 x 1470 x 1562	2470	84	
SAB 233 S	1475	974	292	922	1404	271	379	3388 x 1497 x 2317	3350	86	
SAB 233 L	1856	1220	366	1199	1760	340	492	3388 x 1497 x 2342	3450	86	
SAB 233 E	2258	1520	456	1472	2191	424	606	4118 x 1775 x 2534	4550	86	
SAB 283 S	2640	1767	530	1694	2544	500	707	4121 x 1858 x 2590	5700	88	
SAB 283 L	3326	2215	664	2079	3190	627	874	4121 x 1858 x 2647	5850	88	
SAB 283 E	3998	2667	800	2524	N/A	755	1064	4406 x 2075 x 2813	7650	88	
SAB 355 S	4134	2785	836	2649	4033	786	1116	4350 x 2400 x 3400	8000	89	
SAB 283 X	4516	3033	910	2832	N/A	844	1185	4582 x 2075 x 2815	8950	88	
SAB 355 L	5638	3771	1131	3418	5459	1065	1457	4350 x 2400 x 3400	8250	89	
SAB 355 E	7175	4793	1438	4300	6940	1354	1838	5600 x 2450 x 3700	11100	89	
SAB 355 X	9053	N/A	1796	l N/A	N/A	1681	2139	5600 x 2450 x 3700	11300	89	

Nominal capacities are based on 3000 rpm.

New oil separator frame design available for SAB 193.

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





