

# Sabroe SMC reciprocating compressor units

Large single-stage compressors with swept volumes of 250–1350 m<sup>3</sup>/h

SMC compressor units are ideal for use in medium-sized refrigeration installations where reliable service is a major priority. They are particularly effective under part-load conditions.

Sabroe SMC compressors are world-renowned for their exceptional reliability, making them an economical, low-maintenance solution for heavy-duty refrigeration, using all common refrigerants.

## Range

Fifteen different models are available to provide swept volumes of between 250 and 1357 m<sup>3</sup>/h at 1800 rpm.



SMC 108 single-stage reciprocating compressor unit with Unisab III systems controller

### Advantages

High coefficient of performance (COP), with excellent performance under part-load conditions

Variable-speed drive (optional) provides stepless capacity control over the entire operating range

Repairs can be undertaken *in situ*, without removing the compressor

Easy to access for service, with limited spare parts requirements

Special oil separator design based on coalescer technology

### Benefits

Low power consumption, which greatly reduces operating costs

Power consumption and operating costs kept to a minimum

Lower repair costs and less downtime

Easy, inexpensive maintenance, which helps limit downtime and reduce operating costs

Low oil carry-over, which cuts back on oil costs



## Optional equipment

- Unisab III systems controller
- Variable-speed drive line
- Gauges, thermometers and temperature/pressure control switches
- Extended cylinder capacity control
- Oil level regulator (for use in parallel systems)
- ATEX-compliant configuration
- Special vibration dampening



SMC 108 single-stage reciprocating compressor block with gauges

Model	Number of cylinders	Bore x stroke mm	Swept volume at 1800 rpm m <sup>3</sup> /h	Nominal capacities kW					Dimensions in mm Direct coupled unit			Weight excluding motor kg	Sound pressure level dB(A)
				R717		Booster -40/-10°C	R404A		L	W	H		
				Single/high stage -10/+35°C	0/+35°C		Single/high stage 0/+35°C	-10/+35°C					
SMC 104 S	4	100 x 80	271	129	209	35	205	132	2400-2800	1228	1103	830	80
SMC 104 L	4	100 x 100	339	167	266	46	208	235	2400-2800	1228	1103	830	81
SMC 104 E	4	100 x 120	339	206	324	57	N/A	N/A	2400-2800	1228	1103	830	81
SMC 106 S	6	100 x 80	407	194	313	52	308	197	2400-2800	1190	1108	925	81
SMC 106 L	6	100 x 100	509	251	398	70	312	202	2400-2800	1190	1108	925	82
SMC 106 E	6	100 x 120	509	309	486	86	N/A	N/A	2400-2800	1190	1108	925	82
SMC 108 S	8	100 x 80	543	259	417	70	410	263	2400-2800	1201	1103	990	82
SMC 108 L	8	100 x 100	679	335	531	93	416	270	2400-2800	1201	1103	990	83
SMC 108 E	8	100 x 120	679	412	648	115	N/A	N/A	2400-2800	1201	1103	990	83
SMC 112 S	12	100 x 80	814	388	626	106	616	395	2425-3000	1290	1314	1660	83
SMC 112 L	12	100 x 100	1018	502	796	140	624	405	2425-3000	1290	1314	1660	83
SMC 112 E	12	100 x 120	1018	618	972	172	N/A	N/A	2425-3000	1290	1314	1660	83
SMC 116 S	16	100 x 80	1086	517	834	141	821	526	2475-3200	1301	1314	1760	84
SMC 116 L	16	100 x 100	1357	669	1062	187	831	539	2475-3200	1301	1314	1760	84
<b>SMC 116 E</b>	<b>16</b>	<b>100 x 120</b>	<b>1357</b>	<b>824</b>	<b>1297</b>	<b>230</b>	<b>N/A</b>	<b>N/A</b>	<b>2475-3200</b>	<b>1301</b>	<b>1314</b>	<b>1760</b>	<b>84</b>

Nominal capacities are based on 5°C subcooling and 1500 rpm.

SMC-E series: max. rpm 1500 for R717

SMC-S series: max. rpm 1500 for R404A

SMC-L series: max. rpm 1200 for R404A

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

All information is subject to change without notice.

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