Sabroe SMC reciprocating compressor units

Large single-stage compressors with swept volumes of 250-1350 m³/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 partload 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



Advantages	Benefits
High coefficient of performance (COP), with excellent performance under part-load conditions	Low power consumption, which greatly reduces operating costs
Variable-speed drive (optional) provides stepless capacity control over the entire operating range	Power consumption and operating costs kept to a minimum
Repairs can be undertaken <i>in situ</i> , without removing the compressor	Lower repair costs and less downtime
Easy to access for service, with limited spare parts requirements	Easy, inexpensive maintenance, which helps limit downtime and reduce operating costs
Special oil separator design based on coalescer technology	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 singlestage reciprocating compressor block with gauges

Model	Number of cylinders	Bore x stroke mm	volume at 1800 rpm	Nominal capacities kW				Dimensions in mm Direct coupled unit			Weight excluding motor	Sound pressure		
				R717 R404A			level							
				Single/high stage		Booster	Single/high stage							
				-10/+35°C	0/+35°C	-40/-10°C	0/+35°C	-10/+35°C	L	W	Н	kg	dB(A)	
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	
SMC 116 E	16	100 x 120	1357	824	1297	230	N/A	N/A	2475-3200	1301	1314	1760	84	

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.

