

Sabroe CMO reciprocating compressor units

Small single-stage compressors with swept volumes of 100–270 m³/h

CMO compressor units are small units specially designed for use in smaller-scale refrigeration installations where reliability is a particular concern, and uninterrupted service a big priority.

They are an economical, low-maintenance solution for smaller-scale, heavy-duty refrigeration installations, and are most commonly used as stand-alone units operating at full load, or as small back-up compressors.

Range

Six different models are available to provide swept volumes of between 100 and 270 m³/h.



CMO 28 reciprocating compressor unit with UniSAB systems controller

Advantages	Benefits
High coefficient of performance (COP), with excellent performance, even under part-load conditions	Low power consumption, which greatly reduces operating costs
Special design ensures low noise and vibration	Wider range of possible mounting locations, and minimal expenditure on noise attenuation systems
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 in situ, 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



Options

- UniSAB systems controller
- Variable-speed drive line (UniSAB always included)
- Gauges, thermometers and temperature/pressure control switches
- Extended cylinder capacity control
- Oil level regulator (for use in parallel systems)
- ATEX-compliant configuration
- Oil separators with coalescing element
- Special vibration dampening.

Model	Number of cylinders	Swept volume at 1500 rpm m ³ /h	Swept volume at 1800 rpm m ³ /h	R717 *				Unit dimensions in mm			Weight excluding motor kg	Sound pressure level at 1500 rpm db(A)	Sound pressure level at 1800 rpm db(A)
				Nominal capacities in kW at 1500 rpm		Nominal capacities in kW at 1800 rpm		L	W	H			
				Single/high-stage		Single/high-stage							
				-10/+35°C	0/+40°C	-10/+35°C	0/+40°C						
CMO 24	4	97	116	52	80	62	96	2150-2400	1050	1100	680	69	72
CMO 26	6	146	175	78	120	93	144	2200-2400	1150	1100	780	71	73
CMO 28	8	194	233	104	160	125	192	2250-2400	1200	1100	960	72	74
CMO 34	4	114	136	61	94	73	113	2150-2400	1050	1100	680	70	73
CMO 36	6	170	204	91	141	109	169	2200-2400	1150	1100	780	72	74
CMO 38	8	227	273	122	187	146	225	2250-2400	1200	1100	960	73	75

* Other refrigerants available on request

Nominal capacities are based on:
1500 rpm at 50 Hz.
1800 rpm at 60 Hz or VSD.

For R717

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

Design pressure, HP side: 28 bar

Design pressure, LP side: 21 bar

Differential pressure: 21 bar.

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

Min./max. speed	R717
CMO 20	700-1800 rpm
CMO 30	700-1800 rpm

All information is subject to change without notice.

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