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 97 and 273 m³/h.



CMO 24 reciprocating compressor unit with Unisab III 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 <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				



Options

- Unisab III 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.



CMO 28 reciprocating compressor block with gauges

Model	Number of cylinders	Swept volume at 1500 rpm	Swept volume at 1800 rpm	Nominal capacities in kV R717 Single/high stage Booster						Dimensions in mm Direct coupled unit		Weight excluding motor	Sound pressure level at 1500 rpm	
		m³/h	m³/h	-10/+35°C	0/+35°C	-40/-10°C	0/+35°C	-10/+35°C	L	W	Н	kg	dB(A)	
CMO 24	4	97	116	53	85	14	85	54	1400-2150	800	900	480	69	
CMO 26	6	146	175	79	127	21	127	81	1450-2175	800	900	520	71	
CMO 28	8	194	233	105	170	28	169	108	1475-2200	800	900	550	72	
CMO 34	4	113	136	62	100	17	99	63	1400-2150	800	900	480	70	
CMO 36	6	170	204	93	149	25	149	95	1450-2175	800	900	520	72	
CMO 38	8	228	273	123	199	33	198	127	1475-2200	800	900	550	73	

Nominal capacities are based on 1500 rpm and 5K liquid subcooling. All refrigerants make it possible to operate CMO compressors at speeds of up to 1800 rpm. 1500 rpm at 50 Hz. 1800 rpm at 60 Hz or VSD.

Design pressure, HP side: 28 bar Design pressure, LP side: 18 bar

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

All information is subject to change without notice.

Johnson Controls Denmark ApS · Sabroe Factory Christian X's Vej 201 · 8270 Højbjerg · Denmark Phone +45 87 36 70 00 · Fax +45 87 36 70 05 www.sabroe.com

