

Copeland™ compressors for transcritical CO₂ refrigeration

Designed for durability and
best-in-class performance

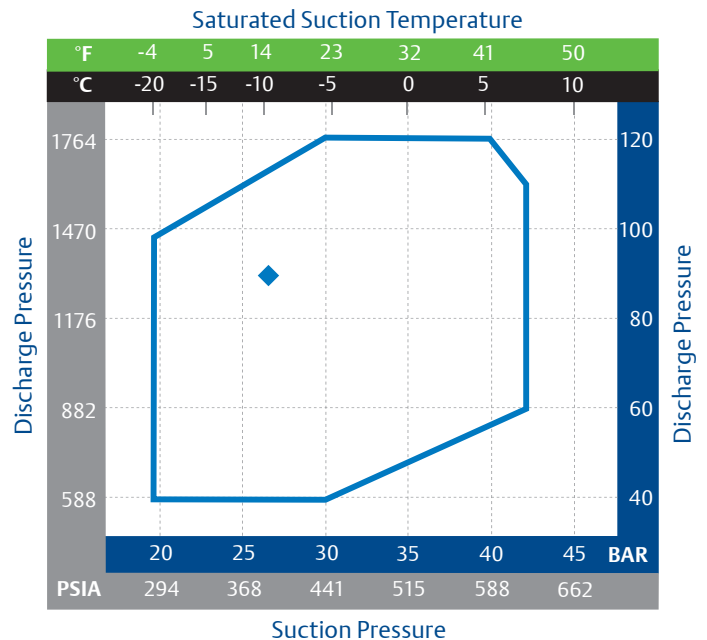


The Copeland™ line of 4 cylinder CO₂ compressors is the ideal solution for R-744 transcritical booster systems. It is characterized by a design operating pressure of 1740 psig (120bar). Refrigerant flow and heat transfer have been optimized for superior efficiency. All compressors are equipped with CoreSense™ technology, offering faster system troubleshooting and protection from problems before they occur.

Designed for flexibility in system design and operation

- Compact dimensions
- UL Recognized
- Integrated high pressure ASME certified safety valves
- Discharge temperature protection
- Service valve rotates 360° for ease of piping design
- 3 sight glasses for mounting of oil management control and visual oil level inspection while running
- One oil port for oil equalization in parallel system
- Oil splasher system ensures lubrication at constant and variable speed on 4MTLS40 to 4MTLS15M models
- Accessories available

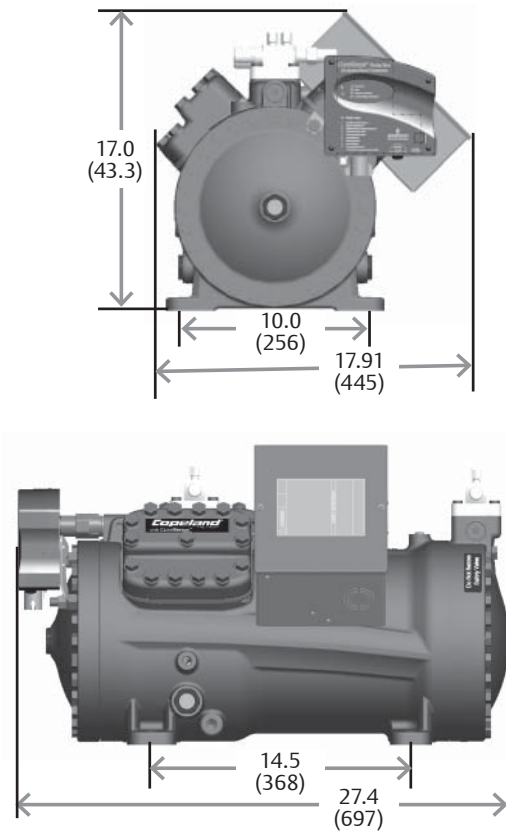
Operating envelope with R-744



Designed for durability and performance in R-744 applications

- Low sound and vibration
- Large discharge chamber reduces pulsation
- High s/d standstill pressures of 1958 psia (135 bar) high side and 1305 psig (90 bar) low side
- Burst pressures in excess of 5x safety factor high side
- Cylinder head and discharge plenum design minimizes heat transfer to suction side
- Stepless capacity modulation when applied with inverter
- CoreSense™ Protection

Dimensions



Technical overview

Model	60 Hz Displacement CFH (m³/h)	60 Hz Cooling Capacity* kBtu/hr (kw)	Pressure (High/Low Side)		Footprint in. (mm)	Motors		
			Maximum Operating psig (bar)	Pressure Relief psig (bar)		FSC 208-230v/3Ø/60 Hz	FSD 460v/3Ø/60 Hz 380v/420v/3Ø/50Hz	TSE 575v/3Ø/60 Hz
4MTLS40K	197 (4.6)	40 (12)	1740 / 610 (120 / 42)	1958 / 1305 (135 / 90)	14.5 x 10 (368 x 256)	FSC 208-230v/3Ø/60 Hz	FSD 460v/3Ø/60 Hz 380v/420v/3Ø/50Hz	TSE 575v/3Ø/60 Hz
4MTLS53K	262 (6.1)	53 (15)						
4MTLS64K	317 (7.4)	64 (19)						
4TMLS82K	407 (9.5)	82 (24)						
4TMLS11M	531 (12.5)	107 (31)						
4TMLS15M	765 (17.9)	154 (45)						
4MTLS20M	966 (22.7)	195 (57)						
4MTLS22M	1134 (26.6)	229 (67)						
4MTLS28M**	1363 (32.0)	275 (81)						

* Evaporating 14°F (-10°C), gas cooler exit: 95°F/1305 psi (35°C/90 bar), suction superheat 18°F (10 K), subcooling 0°F (0K)

**Summer 2019 Launch Date