Copeland R744 stream refrigeration units

This range of semi-hermetic R744 refrigeration units for transcritical applications responds to the increasing demand for future-proof refrigeration technology.

These refrigeration units are designed for operation with the natural refrigerant CO₂ which has a very low global warming potential (GWP) of only 1.

The range of Stream semi-hermetic outdoor units is an assembly of high quality components which are adjusted for efficient and reliable operation. The integrated frequency inverter controls the compressor speed exactly to the capacity demand of the application. EC-fans remove the heat from the gas cooler in the most efficient and silent way.

The state-of-the-art electronic controller allows for precise adjustment and control of all relevant parameters and comprises numerous electronic protection functions for highly reliable operation.

The refrigeration units are the future-proof choice for various target applications:

- · Convenience stores
- · Forecourt sites
- · Cold rooms
- Fast food stores, bars and restaurants





Technical overview

Model	Displacement (m³/h)	acity (kW)	Receiver Capacity (I)	tion Line eter (inch)	Suction Line Diameter (inch) Liquid Line Diameter (inch)	Width/Depth/ Height (mm)	Net Weight (kg)	Motor Version/ Code	Maximum Operating Current (A)	Locked Rotor Current (A)	Sound Pressure @10m - d(BA)**
		Capacity	Re	Suc				3 Ph∗	3 Ph*	3 Ph*	
OME-4MTL-05	4.6	8.69	20	3/4	5/8	1574/920/1135	450	EWL	13	81	43
OME-4MTL-07	6.2	11.80	20	3/4	5/8	1574/920/1135	450	EWL	18	81	44
OME-4MTL-09	7.4	14.25	25	7/8	5/8	1574/920/1135	462	EWL	21	94	45
OME-4MTL-12	9.5	18.80	25	7/8	5/8	1574/920/1135	473	AWM	27	145	45

Conditions EN13215: R744, Evaporating Temperature -10°C, Ambient Temperature 32°C, Suction Superheat 10 K \pm 3 Ph: 380-420V/50Hz

Features and benefits

- Future-proof solution with natural GWP 1 refrigerant, not impacted by F-Gas legislation
- · Low carbon footprint
- Silent operation due to special attenuation on panels and sound optimized EC fans
- High energy efficiency through inverter controlled compressor and EC fans
- Space saving design
- Time saving comissioning by pre-set parameters
- High reliability with electronic protection against incorrect voltage, phase, current and discharge temperature
- State-of-the-art controller for precise system control
- · Modbus communication functionality
- · LCD display to show the operation status
- · OilWatch maintains correct system oil level
- · Controller prepared for monitoring
- · Easy access for time saving service
- Built and tested in advanced industrial processes

Design pressure

- 90 bar in receiver and liquid line
- · 120 bar on high-pressure side



 $[\]star\star$ @ 10m: sound pressure level at 10m distance from the compressor, free field condition