

# Copeland™ R744 Stream Refrigeration Units

With this range of outdoor refrigeration units, Emerson offers a solution which responds to the increasing demand for future proof refrigeration technology.

These models are designed for operation with the natural refrigerant CO<sub>2</sub> which has a very low global warming potential (GWP) of only 1.

The range features the latest technology like Stream series compressors which are characterized by their silent 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.

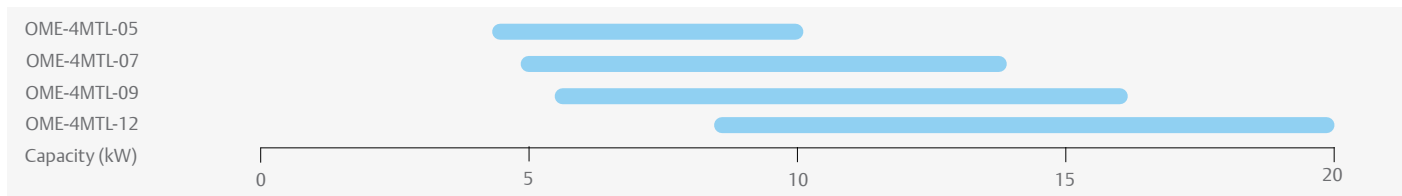
The refrigeration units are future-proof choice for various target applications:



Copeland R744 Stream refrigeration units

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

## R744 Stream Refrigeration Unit Line-up



## Technical Overview

Model	Displacement @ 50 Hz (m <sup>3</sup> /h)	Cooling Capacity @ 50 Hz (kW)	Receiver Capacity (l)	Suction Line Diameter (inch)	Liquid Line Diameter (inch)	Width/Depth/Height (mm)	Net Weight (kg)	Power Supply	Nominal Current (A)	Sound Pressure @10m - d(BA)*
OME-4MTL-05 (HP**)	4.6	8.69	24.9	3/4	5/8	1574/920/1135	450	3/N/PE ~ 50Hz 400/230V TN-S	19	42 - 44
OME-4MTL-07 (HP**)	6.2	11.80		3/4	5/8	1574/920/1135	450		22	42 - 44
OME-4MTL-09 (HP**)	7.4	14.25		7/8	5/8	1574/920/1135	462		27	42 - 44
OME-4MTL-12	9.5	<b>19.10</b>		7/8	5/8	1574/920/1135	473		33	<b>45 - 47</b>

Conditions EN13215: R744, evaporating temperature -10°C, ambient temperature 32°C, suction superheat 10 K

\* @ 10m: sound pressure level at 10m distance from the compressor, free field condition

\*\* 90 bar liquid line.

**Preliminary Data**

For detailed capacity data please refer to Emerson's Select software

## 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 commissioning 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 and monitoring functionality
- LCD Display to show the operation status
- OilWatch maintains correct system oil level
- Controller prepared for heat recovery
- Easy access for time saving service
- Built and tested in advanced industrial processes
- Individual compressor power consumption monitoring

### Design Pressure:

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