



United Technologies

MiniCOOL₂

Compact CO₂ refrigeration system for small to medium sized installations



LT Cooling Capacity 3 – 58 kW
MT Cooling Capacity 21 - 189 kW

Compact, cost-effective CO₂ systems for small to medium installations

MiniCOOL₂

Compact CO₂ refrigeration system

Efficient, natural refrigeration

The new Carrier range of compact **MiniCO₂OL**[®] refrigeration racks utilise natural refrigerant carbon dioxide (CO₂) to provide sustainable, energy efficient refrigeration solutions across a wide range of cooling capacities.

The compact **MiniCO₂OL** system is part of Carrier's **CO₂OLtec** range of CO₂ refrigeration plants. **CO₂OLtec**[®] systems demonstrate average energy savings of approximately 10 percent as compared to traditional HFC refrigeration systems in mild to cold climates, resulting in attractive life cycle costs and low return on investment periods.

CO₂ is a climate neutral refrigerant; it has a Global Warming Potential (GWP) of just one, an Ozone Depletion Potential (ODP) of zero and is not subject to F-Gas regulations.

Product features

- Economical, value-engineered product range
- Dual temperature, transcritical booster CO₂ rack incorporating medium temperature (MT) and low temperature (LT) refrigeration within a single frame
- Compact design for indoor installation, with external option available
- 2 to 3 MT compressors
- 0 to 2 LT compressors
- Variable Speed Drive (VSD) for primary MT compressors
- Maximum allowable pressure levels as detailed below (alternatives available):
LT suction = 25 bar
MT suction/common liquid = 45 bar
Discharge/gas cooler return = 120 bar
- Integrated, detachable electrical panel included, serving rack, gas cooler, and electrical consumers
- Eckelmann controls as standard, with option for Danfoss
- Standardised, factory produced units

Low temperature		Medium temperature	
Designation	Cooling Capacity (kW)*	Designation	Cooling Capacity (kW)**
BCM100-3710	3	CCP255-3240	21
BCM100-3720	4	CCP255-3ZA0	26
BCM250-3710	5	CCP255-3280	37
BCM250-3AB0	7	CCP355-3280	51
BCM250-3720	9	CCP255-3310	56
BCM250-3AD0	10	CCP355-3AB0	57
BCM250-3BD0	11	CCP255-3380	61
BCM250-3740	14	CCP355-3BA0	64
BCM250-3DF0	18	CCP355-3310	76
BCM250-3760	22	CCP355-3380	87
BCM250-3FJ0	31	CCP355-3EF0	101
BCM250-3790	39	CCP355-3FE0	114
BCM250-3FN0	50	CCP355-3390	134
BCM250-3JN0	58	CCP355-3HF0	153
		CCP355-3410	156
		CCP355-3JF0	173
		CCP355-3430	189

* Evaporating temp. at rack = -35°C
Without optional LT VSD

** Evaporating temp. at rack = -8°C
Ambient temperature = 32°C

Optional features

- Configurable heat recovery module
- Flexible integration of electrical consumers into e-box
- Attenuated indoor or outdoor housing
- Mounted, close-coupled gas cooler
- Danfoss or Wurm controls
- Factory mounted condensing unit
- Modular receivers in order to achieve PED Cat III
- Increased maximum allowable pressure levels
- Active oil management
- Eco compressor
- Integrated discharge muffler

The manufacturer reserves the right to change the product specifications without notice.

