



United Technologies

MiniCOOL₂

The ultimate CO₂ refrigeration system for small to medium sized installations



LT Cooling Capacity 3 – 100kW
MT Cooling Capacity 35 – 185kW

CO₂ systems for small to medium sized installations

Efficient, natural refrigeration

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

MiniCO₂OL racks form part of the Carrier **CO₂OLtec**[®] range of the CO₂ refrigeration plant. **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 an ozone friendly 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

- 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 option for external weatherproof housing
- 2 to 3 MT compressors
- 0 to 2 LT compressors
- Variable Speed Drive (VSD) for primary MT compressor
- 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 electrical panel incorporating rack and gas cooler controls
- Eckelmann controls as standard, with option for either Danfoss or Wurm
- Specially designed service modules allow all maintenance activities to be carried out from the front and one side, thus saving plant room space
- Standardised, factory produced units

Optional features

- External weatherproof housing
- Danfoss or Wurm controls
- VSD for primary LT compressor
- Auxiliary condensing unit
- Increased maximum allowable pressure levels
- Eco compressor
- Add-on CO₂OLheat[®] space heating system



Low temperature	
Designation	Cooling Capacity (kW)*
BCM 100-3010	3
BCM 100-3020	4
BCM 250-3010	5
BCM 250-3AB0	7
BCM 250-3020	9
BCM 250-3AD0	9
BCM 250-3BD0	11
BCM 250-3040	14
BCM 250-3DF0	17
BCM 250-3060	20
BCM 250-3FJ0	28
BCM 250-3090	36
BCM 250-3FN0	46
BCM 250-3JN0	54
BCM 250-3130	72

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

Medium temperature	
Designation	Cooling Capacity (kW)**
CCP 255-3290	37
CCP 355-3290	50
CCP 255-3310	55
CCP 255-3360	56
CCP 355-3310	74
CCP 355-3360	82
CCP 355-3400	123
CCP 355-3410	152
CCP 355-3430	183

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

