



United Technologies

MaxiCOOL₂

The ultimate CO₂ refrigeration system for large supermarkets, hypermarkets and cold storage applications



LT Cooling Capacity 8 – 170kW
MT Cooling Capacity 60 – 355kW

CO₂ systems for medium to large applications

Efficient, natural refrigeration

The Carrier **MaxiCO₂OL**[®] range of refrigeration racks utilise natural refrigerant carbon dioxide (CO₂) to provide sustainable, energy efficient refrigeration solutions across a wide range of cooling capacities.

MaxiCO₂OL 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

- Transcritical booster CO₂ refrigeration rack for medium to large installations
- Compact design for indoor installation
- 3 to 6 medium temperature (MT) compressors
- 3 to 4 low temperature (LT) compressors located on a separate LT booster frame
- 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

- 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		Medium temperature	
Designation	Cooling Capacity (kW)*	Designation	Cooling Capacity (kW)**
BCM 350-3010	8	CCP 455-3290	63
BCM 350-3AB0	9	CCP 555-3290	77
BCM 450-3010	10	CCP 455-3310	94
BCM 350-3BA0	11	CCP 455-3360	108
BCM 350-3020	13	CCP 555-3310	114
BCM 450-3AB0	14	CCP 355-3400	123
BCM 450-3020	17	CCP 555-3360	133
BCM 350-3040	21	CCP 455-3400	161
BCM 450-3BD0	22	CCP 455-3410	200
BCM 350-3FB0	24	CCP 555-3400	200
BCM 350-3FD0	27	CCP 655-3400	238
BCM 450-3040	27	CCP 455-3430	240
BCM 350-3060	30	CCP 555-3410	248
BCM 450-3FA0	33	CCP 655-3410	295
BCM 450-3FD0	37	CCP 555-3430	298
BCM 450-3060	40	CCP 655-3430	355
BCM 350-3JF0	46		
BCM 350-3090	53		
BCM 450-3JF0	63		
BCM 450-3090	71		
BCM 350-3NF0	82		
BCM 350-3NJ0	90		
BCM 350-3130	108		
BCM 450-3NJ0	126		
BCM 450-3130	145		

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

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

