

CO₂ Secondary Refrigerant System

Secondary refrigerant systems require a pump to circulate a secondary coolant throughout a facility. These systems utilize an extra heat exchanger for temperature drop. The extra condensing heat exchanger requires a temperature difference to drive the heat transfer and so the MT evaporating temperature must be lower than the secondary CO₂ temperature. However, the better heat transfer properties of CO₂ in the cabinets allows the circulating fluid to operate at 30.2°F instead of 26.6°F with glycol. In this model, a temperature difference of 9°F has been applied so that the MT evaporating temperature is 21.2°F

Typical Secondary System: MT Glycol, LT CO₂

