

NATURAL REFRIGERANT CARBON-DIOXIDE (CO₂) CHILLERS

Natural Refrigerant Carbon-Dioxide Chillers from the Budzar Green line of Budzar Industries are ideal for medium temperature cooling and suitable for either indoor or outdoor configurations and are both energy efficient and environmentally friendly.

The Natural Refrigerant Carbon-Dioxide Chiller from Budzar Industries combines expert custom engineering and world-class CO₂ system components to deliver a top quality industrial chiller.

Other features include:

- Transcritical and/or Subcritical design
- Brazed or welded joints
- Electronic Expansion Valve
- Variable speed gas cooler fan controls
- Stainless Steel or Copper piping
- Modulating hot gas
- High pressure safety controls
- Digital PLC Control & Display
- Easily accessible components
- Programmable Logic Controller
- Heat Reclaim options

The Carbon-Dioxide Chillers from Budzar Industries feature precise temperature control and are ideal for commercial and industrial refrigeration systems, transport refrigeration, compact systems, dairies, and supermarkets. The CO₂ chillers are based on more than 40 years of engineering, designing, and manufacturing experience in the process heat transfer industry.

Benefits of Carbon-Dioxide

- High density gas which results in a greater cooling effect with a low circulating mass
- High energy content at higher temperatures
- Very low viscosity
- Cost effective
- Global Warming Potential (GWP) 1
- Ozone Depletion Potential (ODP) 0
- Relatively insensitive to pressure losses
- Heat reclamation
- No long-term side effects
- Non-flammable
- Low toxicity (only dangerous in high concentrations)



PROGRAMMABLE LOGIC CONTROLLER PROVIDES:

PROGRAMMABILITY

- Software may be customized, transferred from a personal computer and updated via programming key

DISPLAYED INSTRUMENTATION INFORMATION

- Pump discharge pressure and flow
- Compressor suction pressure, temperature and superheat
- Liquid refrigerant temperature and sub-cooling
- Evaporator inlet and outlet temperature
- Compressor pump status

CONTROLLER FUNCTIONS

- Selectable controlled parameter (supply or return temperature)
- Head pressure control via fan motor cycling

HIGH TECHNOLOGY

- All alarm situation, values of the monitor parameters and the status of the controlled devices are saved for service/-maintenance review
- Troubleshooting information is displayed when circumstances require assistance
- The controller identifies marginal operating conditions and adjusts chiller operation

Budzar Industries also designs and manufactures specialized equipment for non-standard applications. Our engineers have extensive experience in process chilling and heating applications for such industries as: chemical, defense, energy, extraction, food, medical, pharmaceutical, plastics, rubber, tire and, semiconductor. We take the time to understand your current and future needs and design solutions targeting high quality and fast payback.

