

## CryoDax 20

## **Low Temperature Chiller System**

With over three decades of experience and refinement of low temperature liquid chiller / heater systems, Mydax has designed the CryoDax series of chillers to provide Quality, Reliability and Performance for demanding industrial temperature control applications.

With a temperature range of -70°C to +80°C standard for CryoDax models and large cooling capacities at low temperatures, CryoDax X and CryoDax chiller systems offer industrial temperature control solutions for Extraction, Hydrogen Fueling, Semiconductor, Pharmaceutical, Automotive, Aerospace, Medical and Custom Applications.

## **Specifications**

Fluid Setpoint Range	-70°C to +80°C
Temperature Stability	± 1.0°C at temperatures below -30°C
Net Cooling Capacities (*Ratings on 60 Hz with standard pump)	-30°C -40°C -50°C -60°C -70°C 15.0kW 9.0kW 5.5kW 2.6kW 1.5kW
Nominal Heating Capacity	3,000 Watts
Recirculating Flow/Pressure	8 Gpm at 45 PSI, 4 Gpm at 90 PSI
Stainless Steel Reservoir	20 gallons (Sealable)
Recirculating Fluid	Syltherm HF or XLT
Recirculating Supply / Return Fittings	3/4" Stainless Steel FNPT
Facilities Requirements	Up to 11 Gpm at 70°F inlet, 20 Psi ΔP
Maximum Heat Rejection	129,000 Btu/hr
Facilities Supply / Return Fittings	1" Stainless Steel FNPT
Electrical Service	440/480 VAC, 60Hz, 3 phase, 50 amp service 380/420 VAC, 50Hz, 3 phase, 50 amp service
Dimensions	74" H x 38.75" W x 56" D
Weight	1,250 lbs. dry weight approx.
Warranty	12 Months, Parts and Labor
Patents:	#4,742,689, #4,959,972, #4,934,155
Refrigeration	20 Hp semi-hermetically sealed compressor, R-507 refrigerant

- Condenser Brazed plate heat exchanger with a water flow control .
  valve to automatically maintain condensing temperature
- Interfacing Remote contacts providing run and alarm status, RS-232 serial interface for remote control and monitoring
- Safety Standards ETL, UL-508A, National Electrical Code NFPA-70, Electrical Standard for Industrial Machinery NFPA-79

## **Standard Features**

- Construction Welded steel frame with aluminum panels, frame and panels are powder coated for durability, mounted on locking casters and leveling feet
- **Recirculation** 3.0 Hp SS sealless magnetic-drive turbine pump, turbine fluid flowmeter in recirculating return, pressure gauge, overpressure switch, brazed plate heat exchanger, copper piping



- Safety Interlocks Fluid low level and empty switches, refrigerant high and low pressure switches, fluid over-temperature switch, emergency off switch
- **Controller** PID type controller with a 5.7" color graphic touch-screen display providing fully proportional cooling and heating with the Mydax patented refrigeration circuit



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