

CryoDax 40 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 30.2kW	-40°C 18.5kW	-50°C 11.0kW	-60°C 5.5kW	-70°C 3.1kW
Nominal Heating Capacity	3,000 Watts				
Recirculating Flow/Pressure	30 Gpm at 35 PSI				
Stainless Steel Reservoir	20 gallons (Sealable)				
Recirculating Fluid	Syltherm HF or XLT				
Recirculating Supply / Return Fittings	1 1/4" Stainless Steel FNPT				
Facilities Requirements	Up to 21 Gpm at 70°F inlet, 20 Psi ΔP				
Maximum Heat Rejection	259,000 Btu/hr				
Facilities Supply / Return Fittings	1" Stainless Steel FNPT				
Electrical Service	440/480 VAC, 60Hz, 3 phase, 80 amp service 380/420 VAC, 50Hz, 3 phase, 80 amp service				
Dimensions	74" H x 60" W x 65" D				
Weight	2,200 lbs. dry weight approx.				
Warranty	12 Months, Parts and Labor				
Patents:	#4,742,689, #4,959,972, #4,934,155				
Refrigeration	Two 20 Hp semi-hermetically sealed compressors, R-507 refrigerant				



Standard Features

- **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** UL-508A, National Electrical Code NFPA-70, Electrical Standard for Industrial Machinery NFPA-79
- **Construction** Welded steel frame with aluminum panels, frame and panels are powder coated for durability, mounted on I-beam supports
- **Recirculation** 3.0 Hp canned-motor centrifugal pump, turbine fluid flowmeter in recirculating return, pressure gauge, over-pressure 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