

## CryoDax 50 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 34.6kW   21.0kW   13.0kW   6.8kW   4.0kW
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 24 Gpm at 70°F inlet, 20 Psi ΔP
Maximum Heat Rejection	296,000 Btu/hr
Facilities Supply / Return Fittings	1" Stainless Steel FNPT
Electrical Service	440/480 VAC, 60Hz, 3 phase, 100 amp service 380/420 VAC, 50Hz, 3 phase, 100 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 25 Hp semi-hermetically sealed compressors, R-507 refrigerant



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| <ul style="list-style-type: none"> <li>• <b>Condenser</b> Brazed plate heat exchanger with a water flow control valve to automatically maintain condensing temperature</li> <li>• <b>Interfacing</b> Remote contacts providing run and alarm status, RS-232 serial interface for remote control and monitoring</li> <li>• <b>Safety Standards</b> UL-508A, National Electrical Code NFPA-70, Electrical Standard for Industrial Machinery NFPA-79</li> </ul> | <h3>Standard Features</h3> | <ul style="list-style-type: none"> <li>• <b>Construction</b> Welded steel frame with aluminum panels, frame and panels are powder coated for durability, mounted on I-beam supports</li> <li>• <b>Recirculation</b> 3.0 Hp canned-motor centrifugal pump, turbine fluid flowmeter in recirculating return, pressure gauge, over-pressure switch, brazed plate heat exchanger, copper piping</li> <li>• <b>Safety Interlocks</b> Fluid low level and empty switches, refrigerant high and low pressure switches, fluid over-temperature switch, emergency off switch</li> <li>• <b>Controller</b> PID type controller with a 5.7" color graphic touch-screen display providing fully proportional cooling and heating with the Mydax patented refrigeration circuit</li> </ul> |
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