CryoWiz™

The CONCOA CryoWiz™ delivers a continuous supply of liquid nitrogen from a primary and secondary source automatically with no temperature change. The CryoWiz uses a proprietary algorithm and precise pressure and temperature sensors to monitor the demand for and supply of the liquid nitrogen. With a unique insulated switching mechanism, high flow pneumatic valves, and hot gas bypass programming, the CryoWiz automatically switches sources with virtually no change in delivered cryogenic temperature. Ensuring both consistent temperature and continuous supply, the CryoWiz is ideal for critical cryogenic applications such as cryopreservation and environmental chambers.

**Typical Applications**

- Cryopreservation
- Control Rate Freezers
- Environmental Chambers
- Subambient Gas Chromatography
- Cryogenic Research

**Features**

- Automatic Proprietary Control Algorithm
  - Ensures continuous efficient supply
- Insulated Switching Mechanism
  - Minimizes flash loss of liquid
- High Flow Pneumatic Control Valves
  - Supplies multiple freezers
- Hot Gas Bypass
  - Eliminates flash loss
- Single Compact NEMA 12 Enclosure
  - Occupies less space easy to install
- Remote Monitoring
  - USB and ethernet communication
  - 24,000 event date and time log
- Oxygen Deficiency Relay Contact
  - Ensures OSHA safe use
- Local Audible and Visual Alarm
  - On-board emergency monitoring
- Optional Remote Alarm
  - Advantium 1 PLUS
  - Advantium 2 PLUS
  - Advantium 16

**Materials**

- Enclosure
  - Powder coated NEMA 12
- Internals
  - Brass barstock
- Cryogenic Relief Valves
  - 50 PSIG (3.5 BAR)
    - 1/2" FPT
- Hot Gas Bypass
  - 1/2" FPT
- Maximum Inlet Pressure
  - 35 PSIG (2.4 BAR)
- Inlet Connection
  - 1/2" FPT
- Outlet Connection
  - 1/2" FPT
- Drain
  - 1/2" PVC

**Specifications**

- Alarm Output
  - 1 or 5 dry contact NC
- Alarm Inputs
  - O₂ deficiency relay
- Dry Nitrogen (Gaseous)*
  - 105 PSIG (7.5 BAR) max
  - 95 PSIG (6.6 BAR) min
  - Inlet: 1/8" FPT
  - * Required for pneumatics
- Communication Ports
  - USB (maintenance only)
  - Ethernet
- Power
  - 90-264 VAC, 47-63 Hz (US, UK, European, Australian, and Chinese adapters included)
- Weight
  - 40 lbs (18 kg)
Cryogenic Systems

Installation Information

Ordering Information

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<th>577 Series CryoWiz™</th>
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<tr>
<td><strong>Oxygen Deficiency Monitor</strong> Input</td>
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<td><strong>Remote Alarm Output</strong></td>
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<td><strong>USB Connection</strong></td>
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<td><strong>Ethernet Connection</strong></td>
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<td><strong>Power Cord</strong></td>
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<td><strong>Cryogenic Hose, Typical Both Inlets and Outlet</strong></td>
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<td><strong>Liquid Nitrogen Outlet to Freezer</strong></td>
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<tr>
<td><strong>Pipe-Away Gas Purge</strong></td>
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<tr>
<td><strong>System Relief Valve Pipe-Away</strong></td>
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<tr>
<td><strong>Dry Nitrogen Supply, 95-105 PSIG (6.6-7.5 BAR)</strong></td>
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577 Series

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<th>Order No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Cryogen Outlet Connection Relief Valve Assembly Inlet Web Server</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1: Nitrogen 0: 1/2&quot; FPT 1: CGA 295 1: CGA 295</td>
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<tr>
<td>1: 50 PSIG (3.5 BAR) 3: Standard</td>
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<tr>
<td>0: 1/2&quot; FPT 0: With Web Server</td>
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Related Option

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<td>Vacuum-jacketed hoses and headers</td>
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<td>580 3004</td>
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