577 SERIES 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, control rate freezers, and environmental chambers.

Typical Applications

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

Features

High Flow Pneumatic Control Valves accomodate multiple freezers

Automatic Proprietary Control Algorithm ensures continuous efficient supply of liquid nitrogen

Insulated Switching Mechanism reduces heat transfer to deliver cryogen with no change in temperature **Dynamic Hot Gas Bypass** minimizes flash loss of liquid

Ethernet Port/Webserver permits remote monitoring of functions, e-mail alerts, and remote configuration

Oxygen Deficiency Monitor Input ensures OSHA safe use

Local Audible and Visual Alarm enables on-board emergency monitoring

Selectable "Keep-full" or "On-demand" Operation Mode supports new applications with the push of a button Optional Altos 2 or Advantium 16 Remote Alarm provides audible and visible warnings of cylinder depletion

Materials and Specifications

Maximum Inlet Pressure: 35 PSIG (2.5 BAR)

Internals: Brass barstock

Cryogenic Relief Valves: 50 PSIG (3.5 BAR); 1/2" FNPT

Hot Gas Bypass: 1/2" FNPT

Inlet/Outlet Connections: CGA 295

Drain: 1/2" PVC

Alarm Output: 1 or 5 dry contact NC

Alarm Input: O₂ deficiency monitor relay

Pneumatic Gas: 95 PSIG (6.5 BAR) -105 PSIG (7.5 BAR)

Pneumatic Input: 1/8" FNPT

Communication Ports: Ethernet; USB (maintenance only)

Enclosure: NEMA 12 Powder coated steel

Power: 90-264 VAC, 47-63 Hz (US, UK, European, Australian, and Chinese adapters included)

Weight: 40 lbs (18 kg)

Conformances (power supply): Safety approvals CCC, CE, FCC, PSE, RCM, UKCA, UL/cUL ; CRN OH17950.5 **Conformances**: CE marked; Cleanliness meets or exceeds CGA G-4.1; CRN OH5216.5





CONCOA

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Installation Information



Order No. Description

- 577 1113-01-100 CryoWiz liquid nitrogen automatic switchover system with web server technology.

Related Options	
Order No.	Description
57V Series	Vacuum-jacketed headers
551 Series	Vacuum-jacketed hoses
580 3004	Oxygen deficiency monitor