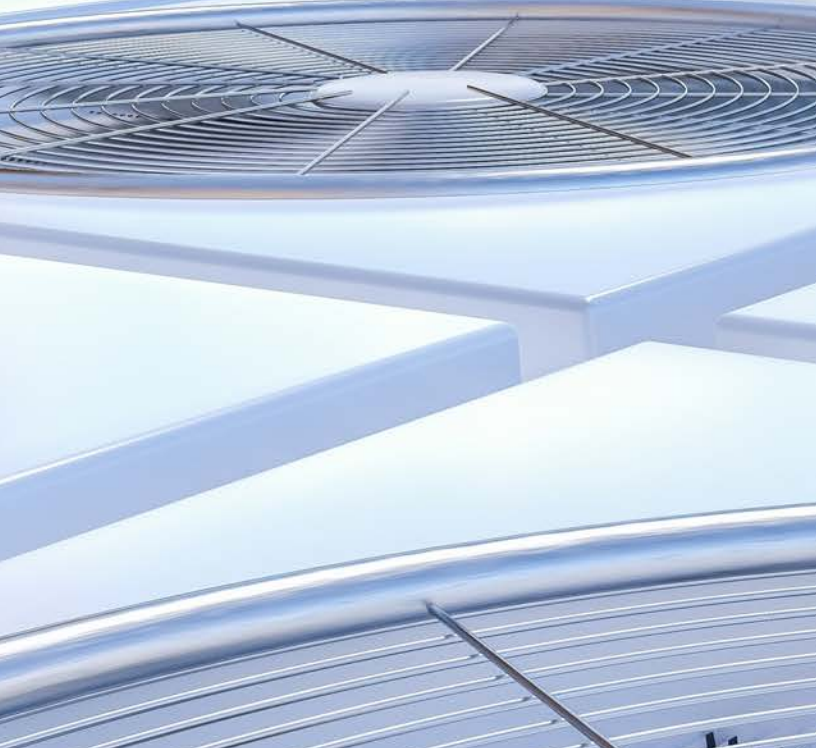
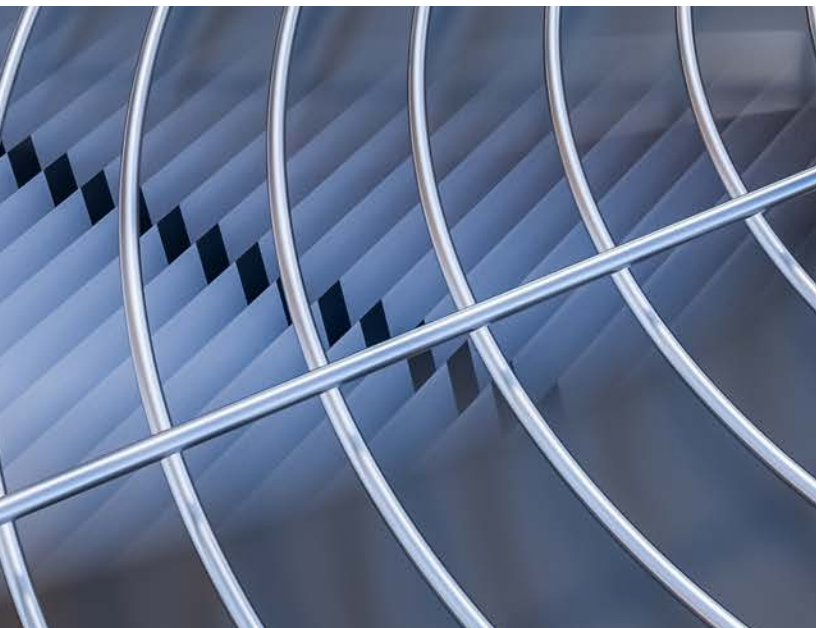


Industrial Refrigeration Control System

Customized controls that reduce costs, improve productivity and promote safety.



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Industrial Refrigeration Control Systems (RCS)

Logix® custom industrial refrigeration control systems optimize energy savings while improving productivity, safety, efficiency, and sustainability. Whether controlling an entire refrigeration system or individual components, Logix offers the personalized customization required to meet requirements for energy management, operational flexibility, and evolving connectivity technologies. Our technology controls every component of the refrigeration system within one common controller platform, ensuring all components run optimally and in sync.

The best energy management systems in the business.

Our Axiom™ III processor and Clarity™ refrigeration management software work together to provide the networking, remote access, and notification features vital to optimizing production operations. Logix modern connectivity integrates and communicates with the latest equipment controllers, including PLC's, compressor controllers, and micro controllers.

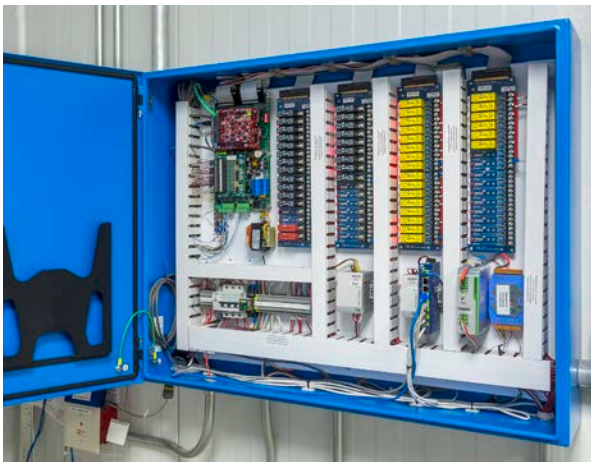
Logix® Axiom™ III Processor

Industrial-grade Axiom microprocessor panels provide distributed control of compressors, evaporators, condensers and other mechanical equipment for maximum efficiency and safety. As your plant expands, simply add Logix control modules to meet your increased control needs. An added module could take the form of another control panel, or additional processing capacity in an existing Logix control panel. Our modules integrate easily and seamlessly into your control configuration, reducing startup installation costs.

- 70% more I/O capability than the previous Axiom II processor
- Capable of integrating with local utilities/smart grid, plant PLC's, building management systems, cloud computing, and other AI platforms
- Updates provided remotely
- Store up to 10 years of running data

Modern connectivity

- Integrate with 3rd party applications to automate demand response from Utilities
- Utilize with AI Cloud Computing and IoT devices to boost plant productivity
- Enterprise-level KPI Dashboard distills data to focus on key issues



A sustainable hardware solution for extreme industrial conditions.

The Logix Control Panel hardware has been field-tested in harsh, electrically "noisy" environments to ensure dependable reliability in the most adverse industrial conditions.

- Industrially hardened analog inputs/outputs
- UL Type 4 cabinets suitable for washdown environments
- UL Listed for safety and code compliance
- Widely available off-the-shelf components (PC 104 bus)
- Self-diagnosis tools include Watch Dog timer and Self Test software to ensure uptime

Logix® Clarity™ Refrigeration Management Software

Clarity refrigeration management software enables you to effortlessly visualize and maintain your refrigeration with real-time animated graphics and powerful data analysis tools. Clarity records, stores and retrieves all system conditions, including temperatures, pressures, amperage, control modes, operating settings, and other vital metrics. You can now identify and correct trends that contribute to product loss, high energy bills, and lost revenue.

- Easy-to read functional graphics
- Color coded to represent current operating conditions of system (On/Off)
- Easy management of setpoints and real-time read outs of all sensor points
- Simple calibration ensures all equipment operates properly
- Software is virtually tested to ensure seamless on-site startup
- Operation manuals and sensor documents available within the program
- Ensures your facility stays compliant with process safety management
- Full remote access from any connected device with Logix Clarity Client Software

Automatic alarm notifications help keep your products and employees safe.

Clarity's notification features alert personnel of any system alarm or equipment failure through email, text, or voicemails.

- Immediate alarm annunciation for equipment failures
- Direct monitoring of ammonia sensors
- Alarm notifications via email, text, or voicemails
- Recorded history of alarm event and failure history
- User defined data logging/trending helps diagnose issues
- Updated to latest industry standards

Built-in security features designed to minimize risk.

Clarity's password protection restricts access with a system of multiple authority levels, and records user access history.

- 9 levels of password protection with a history of user access
- Site specific, unique, communication protocol, unpublished and encrypted
- Physical separation of refrigeration network and office network with dual Nic Cards

NEW Industrial Grade CO_2 System Controller

- Utilizes Industrial Grade RCS Panel with new Axiom III Processor
- Holistic approach controls not only the CO_2 rack, but the entire refrigeration system – ensuring maximum system efficiency
- Integrated high pressure valve and flash gas valve strategies utilize optimal discharge pressures for lowest annual energy consumption
- Comprehensive subcritical and transcritical operation provides improved transitioning between both modes, providing added flexibility during extreme conditions
- Innovative heat reclaim strategies available for advanced energy sustainability
- Built-in safety and alarming designed for CO_2 operation and compliant with latest industry standards

LOGIX®

Technical Specifications

Digital Inputs and Outputs

- Up to 128 digital inputs and outputs individually fused, optically isolated, and phase independent
- LED indicator lights display on/off status of modules quickly and safely
- Wide range of AC and DC voltage modules available for any system's needs

Analog Inputs and Outputs

- Up to 64 Analog Inputs and 12 Analog Outputs
- Industrially hardened
- 16 bit (0.005%) high input resolution
- Wide variety of input voltage and current ranges (Analog Inputs)
- Fast conversion rate of 20 measurements per second (Analog Inputs)
- Digital filtering of unwanted electrical noise and interference (Analog Inputs)
- Isolated 4-20 mA or 0-10 Volt output range (Analog Outputs)

Memory Configuration

- No battery required for data storage
- 8 GB of on-board program and data memory

Communication Devices

- Two high-speed, optically isolated communications ports for multi-point, error corrected data transfer to multiple control panels and 3rd party equipment
- Dual Ethernet networks support robust connectivity
- Supports high-speed binary data transfer to remote computer systems
- Binary error-correction communication protocol ensures rapid, reliable, and exact microcontroller data transfer in electrically "noisy" industrial environments

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