FEATURES

Network any make or model of multiple compressors to meet load requirements - operate up to 32 compressors as a single, coordinated system.

Auto start and stop of individual compressors in the network.

Precision Pressure Regulation

Performance Reporting

Machine Protection

User Friendly

Connectivity

BENEFITS

Energy Savings - The Bay Compressor Controller's combined features result in substantially reduced energy costs.

Comprehensive Compressor Protection - All aspects are continuously checked and monitored against standards and alarm setpoints.

Pressure maintained within two PSI of setpoint. Less wasted air saves money.

Advanced Step Control optimizes system pressure without excessive unloader valve wear reducing energy costs and maintenance costs.

Easily configurable for all brands of reciprocating compressors and all unloading control schemes.

Leak Reduction - Reduced pressure means the amount of lost air from existing air system leakage is also

For compressed air systems, an energy solution begins with progressive, effective compressor control. Today, the Bay Compressor Controller offers the most sophisticated and comprehensive level of control available to record, report, monitor and manage a compressor. The Bay Compressor Controller's easy-to-use features and networking abilities can improve the efficiency of an entire compressor system, providing energy cost savings and management benefits. The Bay Compressor Controller retrofits any OEM reciprocating compressor.

Reduce Energy Costs
The immediate benefit from the Bay Compressor Controller comes through reduced energy costs associated with a compressed air system. Through precise pressure regulation, compressor networking, and leak reduction, the Bay Compressor Controller maximizes compressor system efficiency to cut energy expenses.

Precision Control
Precise and responsive Bay Compressor Controllers maintain system pressure to within two PSI or less of the setpoint, regardless of large shifts in air demand. A smaller pressure window means the system-wide pressure setpoint can be lower, reducing energy costs and saving money.

Advanced Reciprocating Control
The Bay Compressor Controller offers the most highly developed control available for reciprocating compressors.
- Three and five step control automatically adjusts the time between control steps based on the rate of change of the system air pressure.
- Minimum time settings for step control to avoid early wear of unloader valves.
- Minimum and Maximum Capacity Step settings for compressors that over-heat or have other problems running unloaded or at 100 percent load.

Functional Highlights
Performance Reporting
Only the Bay Compressor Controller offers the Performance Log function! Here you can access power consumption and system mass flow records along with a 12-month report of compressor and system efficiency - even retrieve daily performance data for the current and previous months.

Compressor Networking
Provides communication between all of your compressors—any make or model, allowing each to operate at peak efficiency, and intelligently respond to changes in system demand.

User Friendly
Bay's advanced controller is easy to use. Intuitive keypad with graphic, back-lit, color-capable LCD display is easy to read in any lighting. A multilevel security function restricts access to critical command functions.

Connectivity
The Bay Compressor Controller comes standard with a Modbus RTU communications port. Using this port the end user can integrate the Bay Controller into a wide variety of plant automation systems.

Monitoring, Reliability & Protection
The Bay Compressor Controller provides the most comprehensive compressor protection possible. Every relevant aspect of the compressor is continuously monitored and compared to established operating ranges and alarm setpoints. Operation events, start-ups, shutdowns, and setpoint changes, alarms and trips, (last 256 of each) are recorded and retained for diagnostic reference should a compressor problem ever occur. At start-up or shutdown, the Bay Compressor Controller controls auxiliary systems and ensures all permissive conditions are met prior to execution.

WHO WE ARE...

Bay is an energy solutions company that provides products and services to a broad range of industrial, commercial, and government customers. We provide cost savings for our clients through increased energy efficiency, improved system management, better reliability, and reduced downtime. Founded in 1983, Bay provides over 1.8 terawatt-hours (1,800 million kilowatt-hours) of annual energy savings for our customers in 70 countries. Our headquarters and network operations center is located in Maumee, Ohio.

OTHER PRODUCTS

BayWatch®
Web-based hosted monitoring and alerting system for single and multi-plant applications.

BayView® Server
Full featured, HMI/SCADA system for air compressors controlled by the Bay Compressor Controller.

BayView® Scheduler
Advanced scheduling system, automating compressor schedules and operating conditions.

BayView® 20/20
Customizable HMI/SCADA system for integrating varying plant systems.

Custom Controls
Advanced customized control systems for cooling towers, dryers, and other industrial applications.

Compressor Controller DCC

	Unit 1 200 HP Rotary Screw	Unit 2 600 HP Reciprocating	Unit 3 500 HP Centrifugal	Unit 4 300 HP Centrifugal	Unit 5 300 HP Reciprocating	
DCC Linked Operation Profile	Off	Off	75%	100%	100%	**Maximum Efficiency**
Unlinked Operation Profile (without the Bay Compressor Controller)	50%	0%	100%	50%	25%	**Inefficient**

Specifications & Requirements

Enclosure	NEMA 4 Rating
Dimensions H x W x D (in.)	24 x 20 x 7
Dimensions H x W x D (cm.)	60.9 x 50.8 x 17.8
Weight (lbs./kg.):	45 / 20.5
Power Requirements:	100 - 240 VAC 50/60 Hz 10 Amp
Display:	Color 640 x 480 graphic LCD with CCFL backlighting, with 15 key sensitive tactile feel membrane keypad.
Communications:	Modbus RTU, C-Link (RS-485)
Monitoring Inputs:	(13) 4-20 mA Analog Inputs (24 VDC); (10) RTD Temperature Inputs (3-wire, 100 Ohm Pt); (8) 24 VDC Digital Inputs; (1) 100-240 VAC (E-Stop Input); (1) 0-5 Amp (CT Input)
Control Outputs:	(4) 4-20 mA Analog Outputs (24 VDC); (12) 100-240 VAC Digital Outputs (Solid state relay, 5 Amp)
Expansion Capability:	Two additional expansion modules possible.

CHANGE FOR THE BETTER WITH ENERGY STAR

Cloud-Based Energy Management Systems, Integration, and Controls

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