

TurboLogix®

TurboLogix is a user-friendly open architecture PLC based control system for the control, monitoring and protection of all makes and models of centrifugal compressors. Over the last 15+ years it has demonstrated reliable performance in hundreds of installations.

The PLC brings flexibility, availability, and serviceability from several resources, including Air Relief and/or the user's on-site staff. TurboLogix systems offer immediate integration into user's distributed control systems and several energy efficiency modes of operation.



TurboLogix Control Panel

TurboLogix Technology

TurboLogix utilizes the combination of Allen-Bradley's PLC hardware and field proven TurboLogix control and energy management software. Customers have a robust open architecture system that is unmatched in the industry. Compressor activity can be monitored via a 10.5" LCD based operator interface that offers real time data viewing/trending or tied into a user's system via Ethernet for high-speed data acquisition.

Basic System Configurations

- NEMA 12 enclosure (48" X 30" X 10") with sub-panel
- Allen Bradley CompactLogix L23E processor, I/O and power supply
- 10.5" color touchscreen operator interface, Ethernet Interface
- 120vac 15-amp circuit breaker
- AC fusing and terminals
- DC fusing and terminals
- One 120vac 10amp isolation relays for main motor starters control
- 500 VA control power transformer with primary and secondary fuses
- Prelube pump motor starter (IEC Rated)
- Oil heater contactor (IEC rated)



Compact Flash Module for Compressor Data & Event Backup

TurboLogix® Upgrades

TurboLogix® Basic

- Allen-Bradley CompactLogix hardware standard
- Open software architecture
- Modbus & Allen-Bradley communication included
- 10.5" color touch-screen operator interface standard
- Optional 15" operator interfaces available
- Extensive data trending/event logs plus backup
- Maintenance timers
- Enhanced Cascade PID Inlet Control
- Energy saving compensated turn-down
- Fully field-configurable
- Simplified installation and startup
- DCS-friendly
- Enhanced reliability
- TotalCare Connect Cloud Compatible

TurboLogix® Engineered

- **Includes all of the features of TurboLogix® BASIC**
- Customized design panel to fit your needs and all environments
- Allen-Bradley ControlLogix upgrade hardware available
- Replace or integrate with current or obsolete system

TurboLogix® Retrofits

- **Includes all of the features of TurboLogix® BASIC and ENGINEERED**
- Designed for quick, easy drop-in retrofit upgrades
- Retrofit solutions available for any OEM controller
- In-house manufacturing to ensure quick delivery
- Modbus RTU, TCP/IP and Allen-Bradley Ethernet IP communication interfaces standard

Loadsharing Power Savings

- Energy saving "throttle alignment" to provide utmost "inlet guide" savings from all units
- "Wakeless" system testing to provide non-disruptive removal of compressors from a system
- "Peer-to-Peer" design – no external black box or special hardware required
- Ethernet-based communication network
- Automated management system (start/stop, load/unload) of compressors
- Compatible with electric and turbine driven centrifugal compressors
- Fastest installation and setup anywhere in the world

Enhanced Performance Monitoring Package

- Hardware/software enhancement to pinpoint issues that cause frequent downtime
- Features include performance measurements for electricity usage/costs, inlet and bypass valves performance, compressor performance loss due to dirty inlet filters, oil pressure loss due to dirty oil filters and maintenance alerts
- Highly desirable upgrade for preventative maintenance, enhanced troubleshooting, field performance analysis and cloud-based analytics
- Helps minimize field service calls and prevents downtime – saving customers money

All systems support remote monitoring option with text and email alerts