

GUARDIAN®

INTEGRATED ENGINE + COMPRESSOR CONTROL



GX SERIES

- Ideal for medium to large HP applications or panel retrofits
- Incorporates industry standard non-proprietary hardware and software
- User-friendly operator screens - password protected for maintenance and configuration
- Integrated controls viewable on HMI for:
 - Waukesha ESM
 - AFR
 - Emissions
 - Caterpillar ADEM
 - Detonation
 - Ignition
- CSA Approved Class 1 Division 2 Hazardous areas

THE GUARDIAN® SOLUTION

The **GUARDIAN®** Series of PLC - based solutions are designed for control of electric or engine driven screw or reciprocating compressors.

Based on sustainable Allen-Bradley technology, customers can choose from a suite of **GUARDIAN®** Solutions, available with a range of hardware platforms, IO capacity, size of HMI, and level of complexity to best meet the needs of the particular application.

The **GUARDIAN®** Solution incorporates integrated control schemes for engine, compressor, and auxiliary equipment. Users benefit through process optimization, reduced downtime, more production, reduced emissions and lower fuel usage.

Hundreds of successfully installed solutions means that we have the experience to match the right **GUARDIAN®** Solution to your application, providing years of trouble free operation, all backed with support available 24/7/365.

FEATURES

- Allen-Bradley Control/CompactLogix PLC
- Alternate PLC platforms available
- 15" PC-based Colour HMI
- All inputs configurable for :
 - Class A/B/C Shutdowns
 - Alarm
 - Cooldown/Hard Stop
 - Emergency Shut Down (ESD)
 - Tag Name and Description
 - Imperial/Metric Unit Conversion
 - Alarm Setpoints
 - Process Control Setpoints
 - Process and Raw Ranges
- Individual channel Class B Timers
- 32 Built-in PID Loops configured for multiple processes, including standard features:
 - Online Tuning
 - Online Setpoint Adjustment
 - Auto-Manual Selection
 - Low/High Select Logic
- Maintenance mode for online bypass of switches, transmitters, or thermocouples
- One-touch start sequencing for easy operation
- Real-time and historical trending

SPECIFICATIONS

Panel Power: 24 VDC, 10 A nominal

Digital Inputs – up to 120

- 24 VDC, NO or NC
- Non-incendive

Digital Outputs – up to 64

- Dry or wetted relay contacts
- Solid state outputs

Analog Inputs – Up to 128

- Thermocouple
- 4-20 mA

Analog Outputs – Up to 32

- 4-20 mA

Operating Temperature

- PLC 0 to 60 °C, 32 to 140 °F
- HMI 0 to 50 °C, 32 to 122 °F

Enclosure

- Typical 900 W x 1500 H x 300 D mm (36" x 60" x 12")
- Front access

Stands and instrumentation

- Options for panel mounting of transmitters, solenoids, and I/P's
- Optional stand available

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