# GDI

# **POWERING YOUR PROFITS**

GDI manufactures electric motor and controller systems which are being used in a broad range of applications including;- Vertical doors in balanced and unbalanced configurations (sectional, car wash, cold storage, pharmaceutical, food facility, rolling steel, grille, trolley, hangar door, rubber rollup doors and high speed fabric doors), Horizontal doors (single leaf, bi-parting, bi-fold), Barrier gates and Slide gates.

ALL of GDI's systems utilize the same advanced technology. This technology significantly increases energy efficiency and reduces motor size compared to induction motors used in industrial systems. Operation during loss of AC power can be provided by GDI's battery backup as well as GDI's Solar Power options.

GDI's ALGORYTHM<sup>TM</sup> DRIVE technology consisting of the electric motor, motor controller and advanced software provides significantly higher power density, dramatically better performance with ultra quiet operation and increased energy utilization efficiencies compared with induction motor based operators.

Applications using GDI's operators require less assembly and installation time, are easier to set up, and provide a variety of programmable features and functions...

The motor controller's NetworkPower™ capability enables up to 128 motor systems to be synchronized, controlled and monitored through any one of the networked motor controllers.

The built in controllers of the operators are internet ready for remote analysis, monitoring, control as well as for review of new installation operation from a remote location.

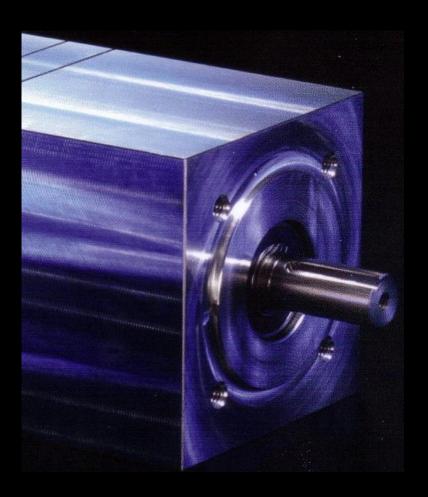
### SYSTEMS FOR A BROAD RANGE OF INDUSTRIAL & COMMERCIAL APPLICATIONS



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# **Adaptive Motor and Controller Systems**



A New Spin on Motor Technology

# SGWD FAMILY OF SLIDE GATE OPERATORS

# **UL 325 Compliant**

**Programmable Speed** 

**Profile Samples** 

Open

Time

Close

Calibrate

### Mechanical

# GMC-9334 - SGWD series Adaptive Controllers

### **FEATURES**

- High quality advanced DC brushless servo motor technology
- · Double shielded, precision stainless steel ball bearings
- Compact gear motor drive
- Electronic overload protection (no mechanical clutch required)
- Pre wired inputs for receiver terminals
- · Plug in ports for Loop detectors
- Class I, II, III and IV applications

### **BENEFITS**

- · Smooth and exceptionally quiet operation
- · Simple mechanical installation
- Electronic overload protection (no mechanical clutch required)
- Polarized connectors for easy maintenance
- Simple automatic slide gate calibration without mechanical devices
- Continuous operation (24/7)
- Two 115 V AC service outlets (one is switched)
- Magnetic lock not required to keep door closed

### **SPEED, POWER and TORQUE**

- Family of models to choose from for various gate lengths and weights
- Gate open/close speeds up to 38 in/sec (up to 4000 cycles per day)
- Battery backup capable with GDI's Adaptive Controller System

### **MECHANICAL**

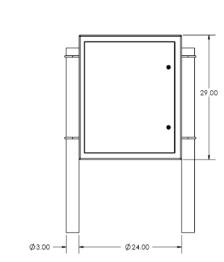
- 20 ft loop #50 or #60 chain included (chain size depends upon the model selected)
- DIN rail based wiring terminals for simplified installation and configuration
- Case is pedestal mounted (pedestals not included)
- Ergonomically engineered pedestal mounting (pedestals not included)
- · High reliability, precision components
- · Manual chain release
- Configurable for two (2) modes of operation;
  - 1. Locks closed and open positions
- 2. Torquelock<sup>™</sup> open and close positions; Enables gate to be pushed open or closed The gate recovers position on next cycle.

### **OPTIONS**

- Continuous system operation on battery power during loss of AC power (Includes intelligent battery charging with GDI's Adaptive Controller System)
- Automatic switch back to AC operation upon return of AC power
- A variety of interlocking capabilities
- High power 24VDC output for auxiliary devices not supported by battery backup
- Heate
- Plug in loop detectors
- Custom hardware

### **RELIABILITY**

- · High quality brushless servo motor
- · Double shielded, precision stainless steel ball bearings
- Cabinet designed for weather resistant operation
- Environment:; -20 deg. C to +50 deg. C; operates at lower temperatures with heating strips



### **FEATURES**

- Maintenance of a set motion profile over a wide variety of gate lengths (Advanced AlgorithmDrive<sup>TM</sup> 4-quad, closed loop technology)
- Adjustable motion profile; with 'S' curve soft start and soft stop gate movement
- 7 programmable inputs for loop sensors, Ultrasonic sensors, Radio control, other sensors etc.
- Obstruction sensing Controlled smooth, immediate or delayed reversing due to obstruction
  Gate length self programming simple automated or manual gate length programming
- Electronic feedback of gate position ensures long term, accurate gate positioning
- Two programmable outputs to control enunciator buzzer, light or interlock
- Field settable change of gate direction from left or right side operator position
- Intelligent Diagnostic<sup>™</sup>, clear text information display on LCD
- Simple menu operation with keypad and LCD (password access)
- Programmable position memory (electronic open/closed position holding)
- · Electronic overload protection; no mechanical clutch
- Key/switch electronic operator disable
- · 24VAC and 24VDC capability to power accessories
- Adjustable timer to close
- Computer interface
- Dual gate operation and the capability to Network up to 128 gates

### **BENEFITS**

- Self calibrating or manual calibration
- Closed loop system position and speed feedback ensures consistent motion profile with changing gate length, weight and even mechanical wear over time
- System status LCD display on GMS-9334 for simplified on-site intelligent diagnostics
- PLUG-and-PLAY with polarized connectors to simplify service
- Wide range of AC voltages; 115, 208, 230, 460, 575VAC single/three phase, 50/60Hz for every controller. Only one transformer required.
- Automatic limit settings External Limit switches not required

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### **ENERGY EFFICIENCY**

- GDI's advanced AlgorithmDrive<sup>™</sup> 4-quad, closed loop speed and position control technology
- Control algorithms maintain efficient operation under high torque demands in start/stop applications
- Soft start/stop peak current limiting minimizes electric energy usage costs
- HR-Drive<sup>™</sup> Hybrid energy technology system stores regenerative energy; can provide significant energy savings

# 4.00

### **OPTIONS**

- Computer based monitoring/control/communication via RS-232/CAN interface
- Internet Ready! NetworkPower<sup>™</sup> enables system access via a PC or over the Internet;
   For remote service analysis, monitoring, control and review of new installation operation
- Continuous system operation on battery power during loss of AC power (Includes intelligent battery charging)
- Power factor correction capability
- CAN/DEVICE NET and SDS communications capability
- Adjustable obstruction sensing
- Cycle counter
- Custom programmable parameters (eg: speed profile)

### **RELIABILITY**

- Advanced Solid state, Digital signal Processor control
- All-Electronic brake; Factory preset
- Automatic switch-over to battery backup (optional) to continue normal operation under AC FAILURE or BROWN OUT
- Cycle counter enables scheduled maintenance

