

# GDI

## POWERING YOUR PRODUCTS

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 and high speed fabric applications), 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™ 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



#### Gates and Doors Inc.

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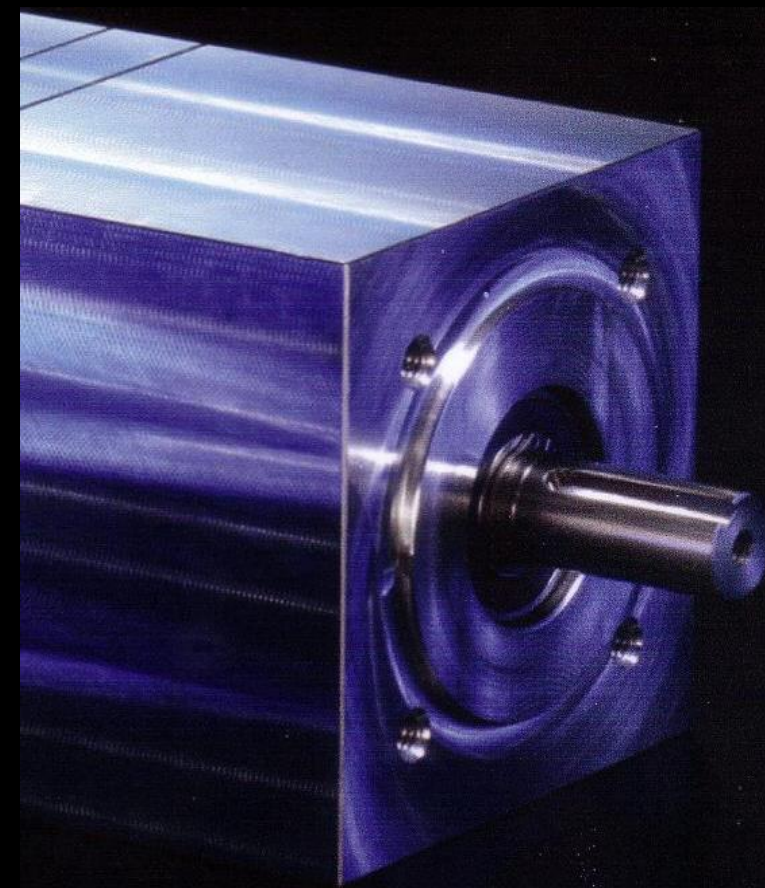
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Version 4

# GDI

Gates and Doors Inc.



## Adaptive Motor and Controller Systems

A New Spin on Motor Technology



JDMG – Door Operators

# JDMG FAMILY OF TROLLEY OPERATORS

## GM-9441 GearMotor With Trolley Mount

### FEATURES

- Ultra compact with less than 5 inch headroom required
- High quality advanced brushless servo motor technology
- Unique features, built to work with GDI's Adaptive controller system
- Planetary gears for high efficiency and high reliability
- Double shielded, precision stainless steel ball bearings

### BENEFITS

- Compact pre-assembled trolley power head assembly
- Light weight; Only 23 lbs. including trolley mount frame
- Simple mechanical installation
- Advanced DC brushless motor system
- Electronic overload protection (no mechanical clutch required)
- Smooth, soft start and soft stop reduces mechanical wear on door system (no jerking stop start motion)
- VERY QUIET operation
- Every operator works with 115, 208, 230, 460, 575VAC single/three phase, 50/60Hz

### DOOR SIZES, WEIGHTS, SPEEDS AND TYPES

- Models to work with wide range of DOOR SIZES, WEIGHTS, SPEEDS and TYPES
- Battery backup capable with GDI's Adaptive Controller System for up to hundreds of door cycles

### MECHANICAL

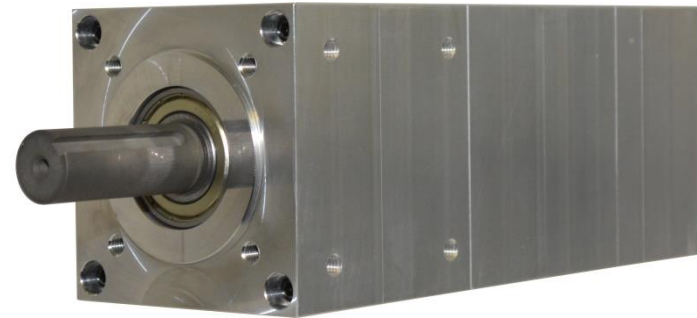
- High reliability, precision components
- Trolley head assembly includes quick mount holes for rapid swing up installation
- Left or right mounting (programmable opening direction)
- High reliability precision components

### OPTIONS

- Continuous system operation on battery power during loss of AC power (Includes intelligent battery charging with GDI's Adaptive Controller System)
- Fail-safe mechanical brake

### RELIABILITY

- DC brushless servo motor technology
- Double shielded, precision stainless steel ball bearings
- Environment; -20 deg. C to +50 deg. C;



## GMC-9334 Adaptive Control System

### FEATURES

- Soft start and soft stop operation
- Adjustable open and close speeds;
- Adjustable obstruction sensing
- Adjustable delay to re-open on reversing
- Internal electronic limit switches; set without mechanical adjusting
- Automatic or manual door size calibration with press of a button
- Adjustable time delay for automatic closing
- Intelligent Diagnostic™, clear text information display on LCD
- Simple menu operation with keypad and LCD
- 7 programmable inputs for loop sensors, Ultrasonic sensors, Radio control, other sensors etc.
- Two programmable outputs to control enunciator buzzer, light or interlock
- Programmable electronic Open/Close door position holding capability
- Electronic overload protection; no mechanical clutch
- Electronic lock (prevent operation)
- Cycle counter
- 24VAC and 24VDC to power accessories

### BENEFITS

- Self calibrating or manual calibration to any door size
- No mechanical limit switches required
- Closed loop system position and speed feedback ensures consistent motion profile
- Diagnostics on LCD display/control panel in simple English descriptions
- PLUG-and-PLAY of GMC-9334 controller polarized connectors to simplify service
- Every operator works with 115, 208, 230, 460, 575VAC single/three phase, 50/60Hz
- Multiple door interlock capability

### ENERGY EFFICIENCY

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

### OPTIONS

- 40-day PositionTrack™ provides immediate and continued operation after AC power loss
- Battery Backup; keeps door operational during AC power loss
- OptoBlock™ provides advanced industry grade optical isolation for electrically noisy environments
- Internet Ready! NetworkPower™ enables the networking of up to 128 GDI motor systems via a PC or over the Internet; For remote service analysis, monitoring, control and review of new installation operation
- Others; please call or visit GDI website for current offerings
- Force based and speed based obstruction sensing (available only in Canada)

### RELIABILITY

- Solid state, Digital signal Processor control
- Electronic clutch prevents damage to door frame and roller guides if the open button is pressed when the door is mechanically locked
- Automatic switch-over to battery backup (optional) to continue normal operation under AC FAILURE or BROWN OUT
- Cycle counter enables scheduled maintenance

