

ALSTOM

The NEW!

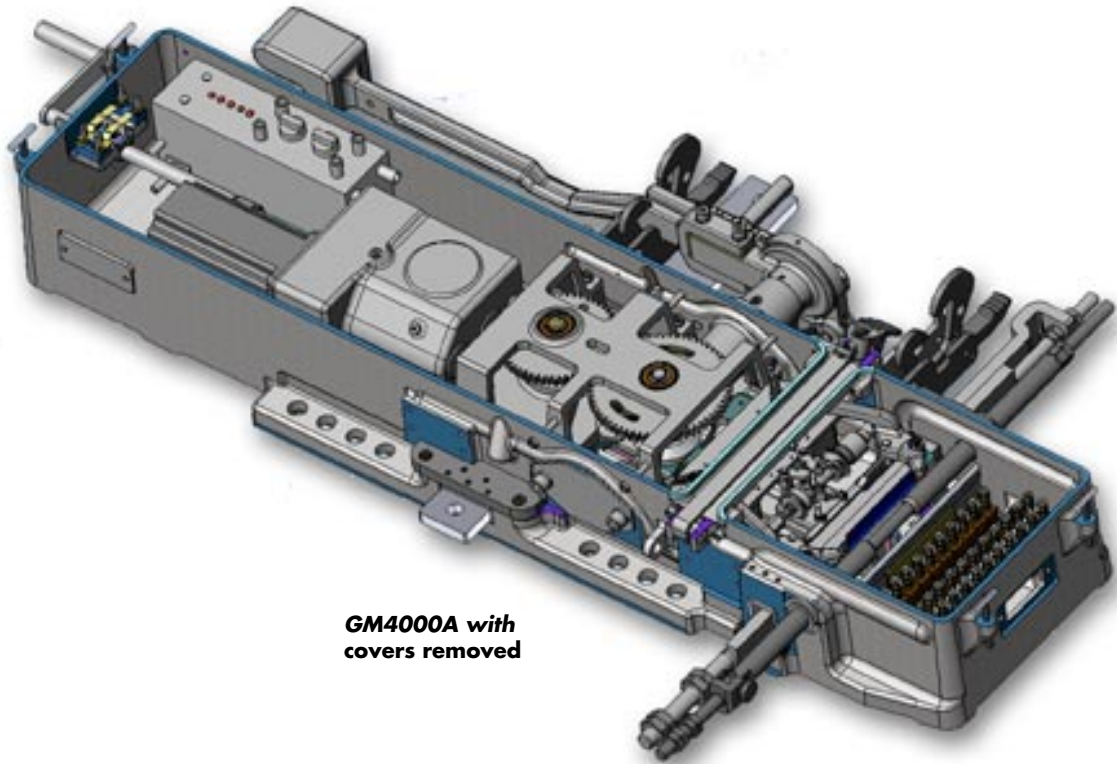
GM4000A™

Switch Machine



NEW!

GM4000A Overview



GM4000A with covers removed

The “NEW” GM4000A™ **Switch Machine** incorporates all of the features required to meet today's interlocking demands. The machine is easy to specify, order, install and maintain, because one model does it all. It's truly universal; there is no need to stock different versions or maintain large inventories of spare parts. The machine uses 50% fewer parts than traditional electric switch machines, and it's easily field-modified to match specific site requirements.

With a low profile, the “NEW” GM4000A™ is especially well-suited for mainline freight or subway and rapid-transit applications. With the capability to deliver more than 4,000 lbs of thrust, this machine is an ideal solution for long turnouts, installations plagued by snow and ice or short turnouts with welded heel blocks. A maintenance-free motor eliminates brushes and a dynamic snubbing device.

The machine's solid-state amplifier eliminates a mechanical clutch and provides universal power (85 to 160V AC/DC or 13 to 160V DC), field-configurable control (3, 4 or 5 wire), as well as consistent five-second overload protection.

The “NEW” GM4000A™ point-detection system indicates normal or reverse switch positions and breaks indication if a switch-point has moved away from the stock rail. This system is supplied with latch-out functionality that can be customer configured (restoring, non-restoring or disabled). Field-obstruction testing and adjustments are simplified with the help of LEDs and a point-detector adjusting nut that is exposed and easy to adjust.

The “NEW” GM4000A™ is field-configurable for single-or-dual control and right- or left-hand operation. The machine's universal footprint matches all industry standard layouts.

NEW!

GM4000A

Key Features

Competitively Priced!



GM4000A with covers installed

ADVANCED DRIVE TRAIN

- User selectable speed
- Maintenance free gearbox, no lubrication required

MAINTENANCE-FREE MOTOR & AMPLIFIER

- Brushless DC motor and solid-state amplifier
- No brushes.
- No dynamic snubbing wire
- No magnetic detent
- LED fault indicators
- Current overload protection
- Electronic clutch

MAIN DRIVE MODULE

- 8.25 inch low profile
- Single and dual control versions
- Hand throw and hand crank permits track switching without electrical power

OPTIONAL MAINTAINER TOOL KIT

- Swivel ended wrenches
- Spoon gauge
- Throw or roller grease

LOCK ROD MODULE

- Wide or narrow notch configuration
- 3.5 to 6.5 inch adjustable throw
- Left or right hand configurable

INTEGRAL LATCH STAND MODULE

- Left or right hand configurable
- Bolted directly to machine (No adjustment needed for tie shifting)
- Available with or without latch stands (GM4000 latch stands compatible with the "NEW" GM4000A machine)

ACCURATE POINT DETECTION SYSTEM

- Indicates normal or reverse switch position
- Breaks indication if point moves away from stockrail
- Configurable for restorable and no-restorable latchout modes (Local vs. remote reset)

SLIP LINK CAM BAR

- Allows flagging over a fouled switch without damaging hand throw arm
- Permits throw bar to complete full stroke when lock rod is followed

NEW!

GM4000A Specifications

Applications

Single Switch
Single-slip Switch
Double-slip Switch
Derail

Layout

Field-configurable for left- or right-hand throw

Control

Single or dual control

Mounting Requirements

Universal Footprint. Matches all industry standard layouts

Thrust

Maximum rated thrust (pounds)
4,000 lbs.

Maximum rated thrust (kilograms)
1,818.2 kg.

4,000 lb. thrust requires 85V minimum, 4-second operation time and 35A setting

Weight

Uncrated (pounds) 1,000 lbs.

Uncrated(kilograms) 454.5 kg.

Motor Type

Maintenance-free brushless DC 2 HP

Motor produces a maximum of 123 inch pounds of torque at 2500 rpm

Operating Voltage

85 - 160VAC/DC

13 - 160VDC

Machine will operate at 50Hz, 60Hz or 100Hz AC

Operating Current

25A Peak or 35A Peak

Operating Time

4 seconds @ 110V

15 seconds @ 110V

15 seconds @ 24V

Clutch Setting

Not required

Overload Protection

5-second overload timing begins at 20A

Dynamic Snubbing

Not required

Magnet Detent

Inherent in machine

Hand Crank

Available for maintenance and emergency use; with "push button" release of hand crank contacts and an independent access cover

Machine Access

Rapid cover release and closure hasp

Control Scheme

3, 4 or 5-wire

Control Voltage

8-36VDC

Throw Bar Stroke

6.5 Inches

16.5 Centimeters



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