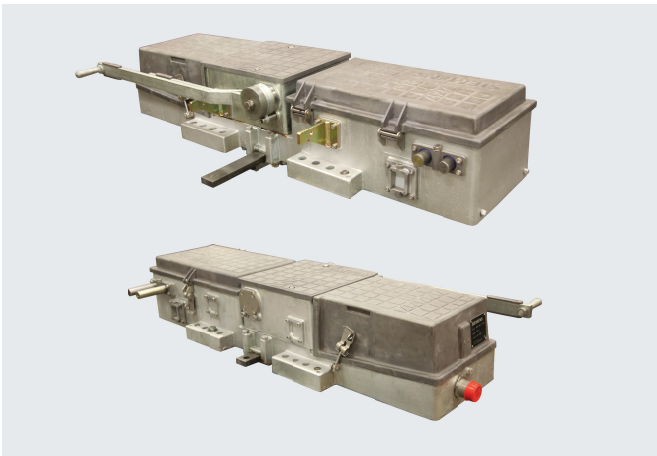


www.siemens.com.au/rail-components

Switchguard M23A MkIII Electric Point Machine

Dual Control



Benefits

Less maintenance—6 monthly inspections, 12 monthly maintenance

Shorter lead time to repair—improved access to all components; plug coupled switches; modularised gearbox and clutch as first-line replaceable items

Improved track stability—lower height allows mounting closer to track

Improved corrosion resistance galvanised case

Easy re-handling

Lever stands mount on case—no special sleepers required

Lubricated for life bearings

Improved reliability from case seals

Dependable and Robust

Rely on the M23A MkIII internally locked, internally detected, non-trailable point machine. It's robust for reliable service on suburban, mainline, heavy haul and yard applications, even on non-ideal track.

The proven mechanism, detection and locking are enhanced for less and faster maintenance, easier installation and easier access.

Low Maintenance Improvements

Keep your railway running and your maintenance budget low with improvements such as:

- modularised gear set and semi-sealed clutch as first-line replaceable items
- plug-couplable detection and cut-out switches
- one piece detection switch chassis
- easy access to internal components
- high corrosion resistant galvanised casting and stainless steel fixings

Easy Installation

Now even easier to install with:

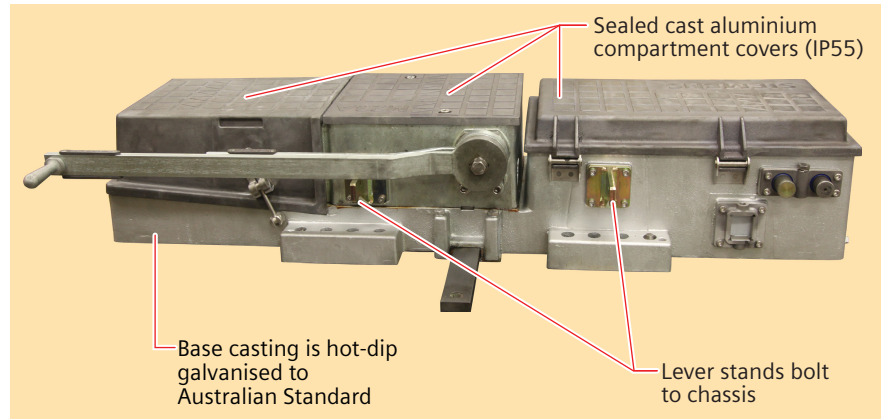
- low height gearbox, allowing it to be fitted closer to track
- lever stands that mount on chassis, eliminating the need for special sleepers
- fast, on-site rehandling

Description

Use the M23A MkIII point machine to operate any set of points—single switches, double slip switches, catch points, swing nose frogs, dual gauge, crossovers and derails. The M23A MkIII point machine is an extremely robust machine that can tolerate less than ideal layouts.

Mount the machine on two sleepers and with the new, low height gearbox, this can be close to the rail giving greater stability. Siemens can supply rodding kits and point layout designs to assist.

The M23A MkIII point machine has a choice of ac and dc (including ac immune) motors that combine with one of three different gear ratios selected for point power and throw speed. The mechanism controls the lock box and point throw bar drive via the gearbox and clutch. The MkIII uses a modular, semi-sealed clutch and a modular gearbox, each of which can be quickly changed on site as first-line replaceable items. Its hand throw levers can also be quickly and simply swapped between sides on site while the padlockable lever stands now bolt to the case, so you don't need special sleepers.



Ordering

Please specify:

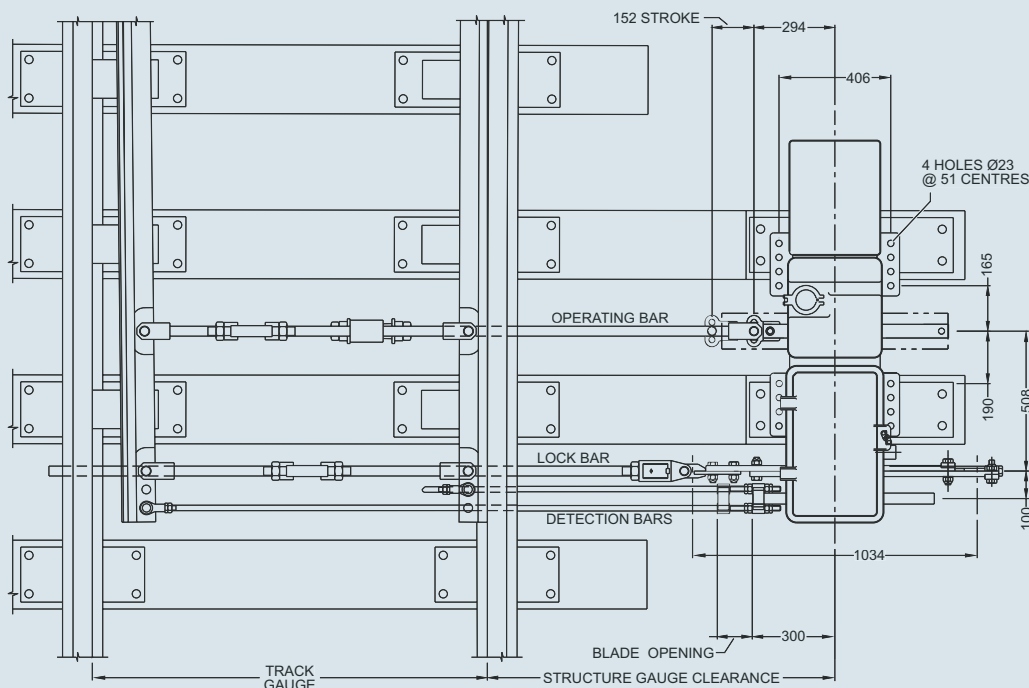
- motor details (voltage, ac or dc, ac immunity)
- gear ratio—110:1 (new) 189:1 (standard) or 360:1 (low voltage applications)
- configuration—see page 4
- rodding kit
- the side (left or right; see below and last page) for the hand throw lever

If the side is not specified, the levers are fitted on the right (as shown throughout this datasheet).

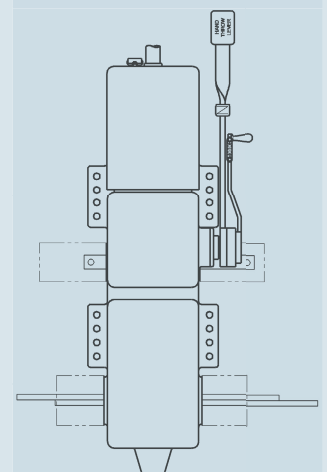
See also:

- Datasheet 2A-8—Series 84M MkIII Point Machine
- Datasheet 2A-12—Switchguard M3A and M23A Electric Point Machines
- Datasheet 2A-14—Switchguard S650 Point Machine

Typical installation

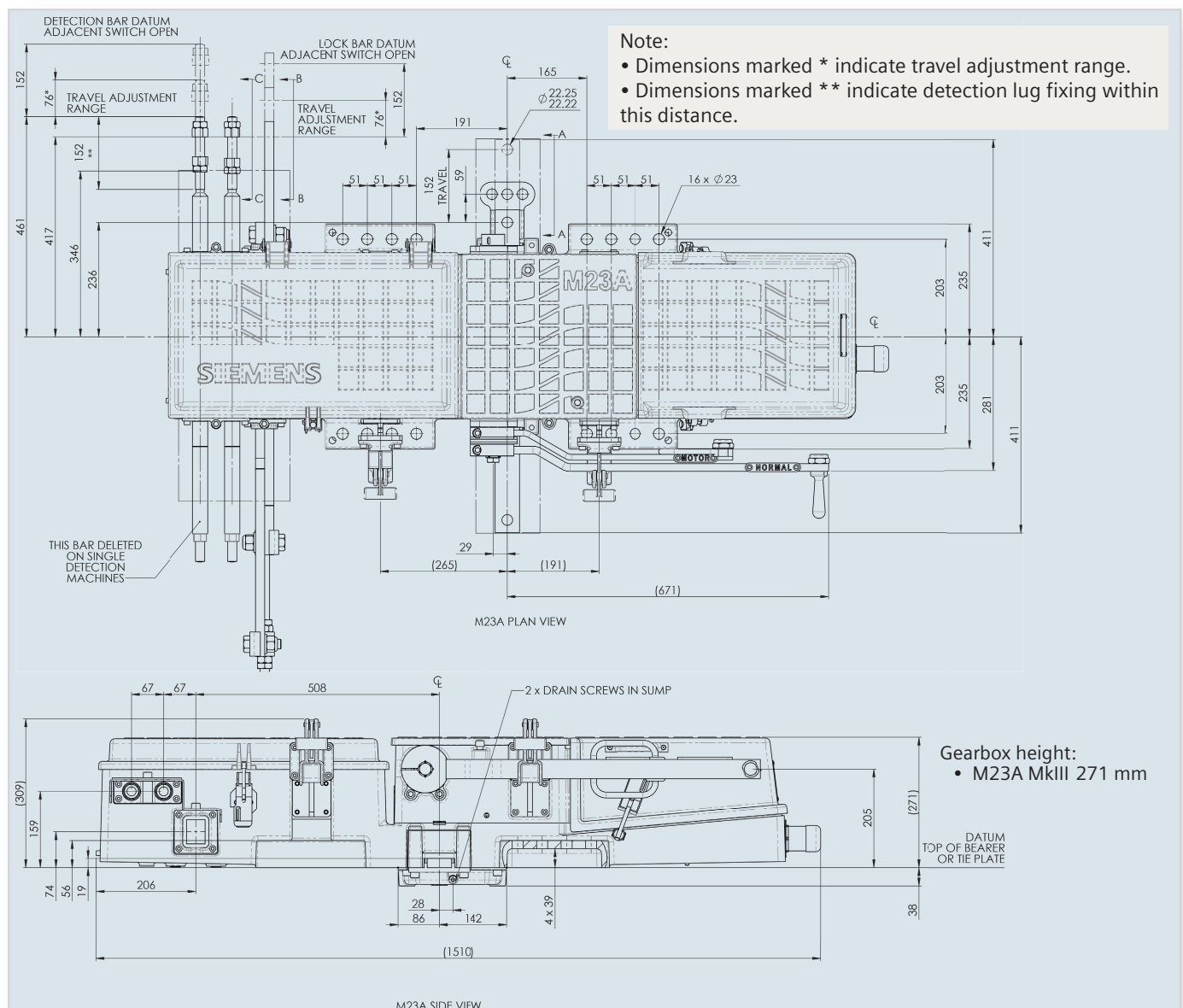


Showing levers fitted to right-hand side

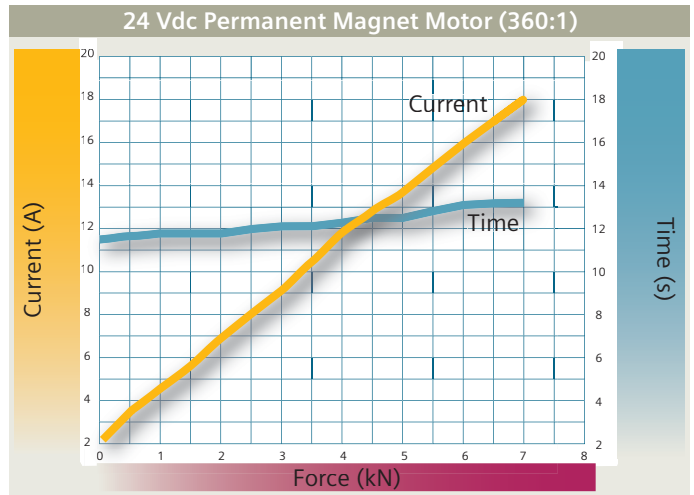
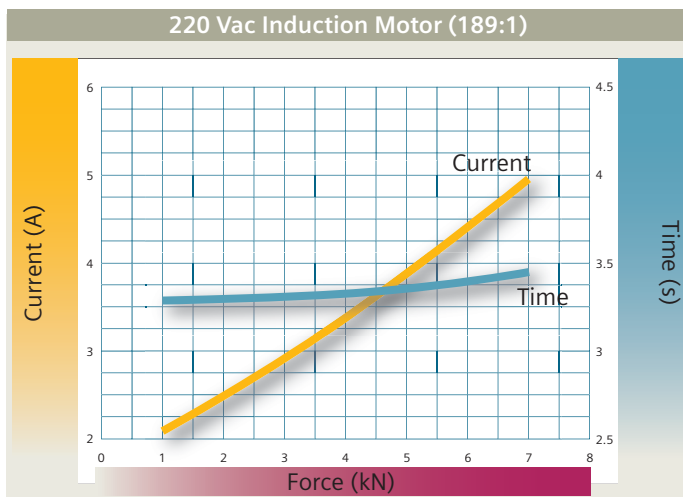


Specifications

	M23A MkIII					
Electrical						
Voltage	220 Vac	110–120 Vac	110 Vdc		24 Vdc	
Motor type	ac induction	ac induction	split field	permanent magnet	split field	permanent magnet
Current	See performance graphs overleaf					
Mechanical						
Gearbox ratio	110:1		189:1		360:1	
Factory clutch setting	3 kN operation, 5 kN slip					
Maximum clutch setting	7 kN slip					
Stroke	Throw bar: 152 mm Standard lock bars and detection rods: 25–145 mm setting range (special bars also available)					
Weight excluding bars	~250 kg					
Dimensions	See figure below Outer dimensions of shipping crate: 1880 mm x 1010 mm x 700 mm					
Environmental	Suitable for all non-freezing environments					
IP rating	IP55					



Typical performance curves



The graphs show the different point machine models' ability to handle various loads; illustrated is the typical relationship between current draw (A), motoring time (s) and load force (kN). A polynomial trend line was used to get a smooth curve.

Configurations

