## MNM2 Motor Operator



Catalog MNM2-150243AL

## Ordering Information

## Standard Equipment

Type "MNM2" motor operators come complete with an integral power supply ( 120 volt AC input, 10 amp charger, 12 volt gelled, electrolyte batteries), advanced battery test system (loss of AC alarm, low voltage DC alarm, user definable load and check test functions), galvanized steel mounting bracket, an operator control panel with local/remote switch, open/close push buttons and local indicating lights, 8 form "c" auxiliary contacts for customer use, DC knife switch, adjustable heater with recirculating fan and data logger, 15 amp GFI receptacle, terminal blocks, door operated interior convenience light, torque relief knob, swing handle for manual operation, external coupling/de-coupling mechanism, removable door with lift-off hinges, door hold back, screened louvre with removable dust filter, heavy duty stainless steel three point door latch, drawing pocket, an aluminum enclosure, door open status indication contact, local/remote switch position indication contact, DC knife switch position indication contact and swing handle removed status indication contact with remote operation lock-out for operator safety.

Type: MNM2
Torque: 10,000, 15,000, 20,000 inch-lbs
Operating Speed: 0-2, 3-5, 6-8, 9-13 seconds
Motor Control Voltage: 24 VDC

## Description

A single speed, torsional output motor operator with integral power supply (batteries and charger) for the control of group operated disconnect switches. This unit is automation-ready and includes alarms and contact indication of motor operator status and condition. A two-speed unit is available for switches with blade latching devices requiring normal open and fast slam close.

## Application

Provides local, remote and automatic operation of switches in distribution and transmission applications, including operation through relay, supervisory control and automatic transfer/ sectionalizing schemes.

## Features \& Benefits

- High ratio of features to cost
- Quick, simple field installation saves time and cost
- Maintenance-free design
- Unit is automation-ready providing a platform for easy integration of an rtu, radio, line sensors, relays and other automation related devices within a single enclosure
- Operates all makes and models of switches - eliminates need to design for, order, maintain and train personnel on multiple styles of operators


## To Be Specified on Order

To obtain pricing information or to place an order, the following minimum information must be specified:

- Catalog Number
- Torque: $10,000,15,000$ or 20,000 inch-lbs
- Motor Control Voltage: 24 VDC
- Operating Speed Range: 0-2, 3-5, 6-8, 9-13 seconds
- Enclosure: Aluminum or stainless steel
- Mounting structure with details and control pipe offset dimension
- IPS of switch control pipe
- Direction to open: CW or CCW
- Optional equipment or non-standard features
- Manufacturer and catalog number of switch to operate

An Order Specification checklist is available to assist you in organizing and completing the information required. You may obtain a copy of the checklist by contacting SEECO, your local sales representative, or on-line at www.seecoswitch.com

Optional features, ratings and product specifications are listed on the following page.

Catalog Numbers and Ratings

| Operating Voltage | Operating Speed | Enclosure Material | Torque (inch-lbs) |  |  | Weight, Lbs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10,000 | 15,000 | 20,000 | Install | Ship |
| 24 VDC | 0-2 | AL | MNM2-100240AL | MNM2-150240AL | MNM2-200240AL | 305 | 340 |
|  | 3-5 |  | MNM2-100243AL | MNM2-150243AL | MNM2-200243AL | 305 | 340 |
|  | 6-8 |  | MNM2-100246AL | MNM2-150246AL | MNM2-200246AL | 305 | 340 |
|  | 9-13 |  | MNM2-100249AL | MNM2-150249AL | MNM2-200249AL | 305 | 340 |
|  | 0-2 | SS | MNM2-100240SS | MNM2-150240SS | MNM2-200240SS | 325 | 360 |
|  | 3-5 |  | MNM2-100243SS | MNM2-150243SS | MNM2-200243SS | 325 | 360 |
|  | 6-8 |  | MNM2-100246SS | MNM2-150246SS | MNM2-200246SS | 325 | 360 |
|  | 9-13 |  | MNM2-100249SS | MNM2-150249SS | MNM2-200249SS | 325 | 360 |


| Optional Equipment | Let- |
| :--- | :--- |
| ter |  |
| Operation Counter | A |
| DC-to-DC Converter - $24 / 12$ | B |
| DC-to-DC Coverter - 24/48 | C |
| Main AC Breaker | D |
| Main DC Breaker | E |
| AC Knife Switch | S |
| Switch Pooition/Coupled Status | G |
| Motor Current Monitor | H |
| Sliding Link Terminal Blocks | I |
| Protective Shroud | J |
| Auto-Throwover Control | K |
| Reciprocating Operation Adapter | L |
| Enlarged Door |  |
| Pre-Wire RTU/Comm Device | M |
| Heat Shields | N |
| DC-to-DC Converter - 48/12 | O |
| Stop Push Button | P |
| Miscellaneous Optional Feature | Z |

(1) To specify an option, add a hyphen (-) to the base catalog number and your desired option by letter. Reference the following example: MNM2-100243AL-AFGJ for optional operation counter, AC knife switch, switch position/coupling status indication and protective shroud.
(2) To designate two speed operation (normal open, fast slam close) for switches with blade latching mechanisms, add a "-T" to the base catalog number. Reference the following example: MNM2-200240SS-T.
(3) For a more complete description of optional equipment, please refer to the Overview Section for the MNM product family, which immediately precedes this catalog section


## Dimensional Data



## Specifications

Operating Voltage Temperature Range Motor
Pipe Coupling
Torque
Operating Speed
Rotation

24 VDC
$-40^{\circ} \mathrm{F}$ to $+160^{\circ} \mathrm{F}$ 3/4 HP DC motor 1-1/2, 2, 2-1/2 inch IPS
10,000, 15,000, 20,000 inch-lbs
$0-2,3-5,6-8,9-13$ seconds ( $180^{\circ}$ ) $0-359^{\circ}$
(1) A complete product specification can be found immediately following these MNM product catalog sections. The specification provides a more detailed technical description than this catalog section, with an emphasis on industry standards, design criteria, and product features and functionality. Sample specifications (templates), for customer use in creating their own internal specification, can be obtained by contacting SEECO's Engineering department.


