

Functional Characteristics

1 General information

The MAG EVO system is a single-panel Low-Energy-Mode sliding door operator for small and light interior doors with an admissible weight from 44 lbs to 175 lbs per door panel. The opening and closing speed respectively depend on the weight of the door panel and can be adjusted via a potentiometer (infinitely variable).

2 Commissioning

During the first commissioning of the operator, the installer has to perform a learning cycle according to the commissioning instructions. When the installer connects the system to the power supply (plugs it in) the light indicator at the operator will blink and the operator has no function. The door can be opened and closed manually. Following the learning cycle the light indicator goes on and the operator is ready for operation.

3 Energy Modes (Maximum Force Limited)

With the aid of a sealed switch (located inside the operator), the system can be switched from Low-Energy-Mode to Full-Energy-Mode.

Low-Energy-Mode

The standard ANSI 156.19 states the energy with which a swing door panel hits an obstacle must be limited. The MAG EVO system operator moves the sliding panel at a low speed corresponding to ANSI 156.19 energy. The potentiometer (located inside the operator) can only be used to reduce this calculated speed.


Full-Energy-Mode

The forces are limited in this mode as well. The speed is infinitely variable with the aid of a potentiometer (located inside the operator). Even though the door may open at a fast speed. The closing cycle always remains in Low-Energy-Mode

4 Operation modes

- OFF:** The operator is switched off. You can move the door by hand.
- AUTOMATIC:** When the system has been activated via pushbutton, radio remote control or similar, the operator opens the door and closes after expiration of the adjusted hold-open time.
- PERMANENT OPEN:** The operator opens the door and holds it in "open" position until it receives an other signal.

When the system is delivered, the MAG EVO system is adjusted to AUTOMATIC Mode.

 An external program switch is required to change the operation mode.

5 Functions in AUTOMATIC Mode

Push & Go

As soon as the door is moved manually into opening direction by approximately 3/8" [10 mm], the operator will automatically move the door panel further in the desired direction. The door closes automatically.

Permanent Open via double-click

A double-click on the push button (activate the pushbutton twice in quick succession) will open the door. When you double-click on the button for a second time or move the door panel by hand, the door will close.

Opening/closing via pushbutton

As soon as you push the button or move the door manually the door will open. When you push the button for a second time or move the door panel by hand, the door will close.

Express-Function

The door can be moved manually in its driving direction and there will be no extra resistance. However, when the maximum speed is exceeded, the driving resistance will increase in line with the speed by which it is exceeded. As soon as the user has released the door panel, the operator will softly slow it down to maximum speed. This function is activated during all opening and closing cycles.

6 Safety functions

Static forces in Low-Energy-Mode.
The system does not exceed a value of 15 lb during opening and closing cycles.

Opening cycle

As soon as the door hits an obstacle during an opening cycle, it will immediately stop and remain in its position for 3 seconds. Then the operator will try to continue the opening cycle. If the door panel hits an obstacle three times during an opening cycle, it will close.

Closing cycle

When the door panel hits an obstacle while closing, it will immediately stop and perform an opening cycle.


7 Safety sensors

You can install sensors to detect obstacles. An automatic sensor test can be activated or deactivated via the DIP switches located inside the operator.


The door will stop immediately when the sensor detects an obstacle during an opening cycle and will continue the cycle as soon as the obstacle has been removed. In case the obstacle is not removed, the door will close on completion of the adjusted hold-open time. The door will stop immediately and reverse when the sensor detects an obstacle during the closing cycle. This function is not activated while the door is in closed position (then the sensor is deactivated).

8 Power failure

In the event of a power failure, the door can be opened and closed by hand.

 However, in this case the operator does not slow down (brake) the door panel, so that the user has to move (hold) it all the way by hand.

As soon as the voltage returns, the operator will automatically perform a position initialization.

 During this position initialization, it is essential that the movement range of the door is free of obstacles.