

DATASHEET ELECTROMECHANICAL ACTUATOR (electronic locking device)

Product code: 550.100.000.1236





INTRODUCTION

Electromechanical actuator (Electronic Lock) was designed for remote internal locking doors or gates by help of suitable controller or telematics terminal unit.

The device is dedicated for operation in harsh environment conditins and was created in collaboration with security and telematics service operators.

The gearmotor steel pin assembly supports the intensive use by those who make dozens of openings per day. The electronic parts are sealed by the silicone compaund, that provides an extraordinary protection against dust, humidity and low temperature also allowing the use of high pressure washers when cleaning refrigerated environments.

Application

The device is intended for remote locking /unlocking doors or gates of cargo trailers, box trucks, refregirators, containers, shelters and cabinets for various telecommunication, electrical, control equipment and instruments.

Wiring legend

Wire color	Description	Connection		
Red	Power supply	VCC(+)		
Black	Power supply	GND (-)		
Blue	Control signal	Positive polarity (VCC) / negative polarity (GND)		
Brown	Locked/Unlocked status signal	Logical input (Low-High)		

Control signal (polarity) applied to BLUE wire

VOLTAGE (POLARITY)	LOCK's ACTION		
 GND (NEGATIVE) signal (command) (permanently connected) 	LOCKING (pin is drawned out)		
NOT CONNECTED or permanently disconnected	LOCKING (pin is drawing out)		
+ VCC (positive) not earlier than 10 seconds after applied control signal (command)	UNLOCKING (pin is drawing in)		

Feedback signal on BROWN wire

LOCK'S STATUS	FEEDBACK SIGNAL	
LOCKED	VCC(+)	
UNLOCKED OR PIN MOVING OUT	GND(-)	

Operational mode

The Electronic Lock reacts with the control signal placed on the Signal Input (Blue wire). If the command (control signal) is changed during pin travel, the Electronic Lock has only acknowledged the new command ten seconds after the movement of the pins completed.

Specification

Parameter		Value
Power supply voltage		12-24 (9-28)
Operational temperature	°C	Minus 30_Plus 65
Minimum current for input signal level identification (VCC / GND)	mA	20
Maximum current supported by gear-motor assembly		10 (at 24V)
Electronic current limit for gear-motor		600
Current draw in non operational mode		14 (13,8 VDC)
Current draw in non operational mode	mA	20 (28,2 VDC)
Rated current draw in operation (pin is moving)	mA	1200 (13,8 DC)
Rated current draw in operation (pin is moving)	mA	650(28,2 VDC)
Dimensions & weight		
Pin maximum length		56
Pin diameter		18
Pin length when drawn out		55
Pin length when drawn in		4,5
Weight		1,5

Mounting







A special part of the design is its locking structure. Its holes are coated in steel, and this allows:

1. Increased mechanical resistance to screw tightening during clamping.

2. Increased structural resistance against frontal, lateral impacts by load movements.

3. Possibility of using a drill directly in the holes, thus eliminating the need to use jig.

The mounting method is defined by installer in every case and the following fasteners are usually used (are not supplied in set with actuator and supplied by installer from local market):

1. M8 screw! Use high quality grade fasteners

- 2. M8 screwed rivets
- 3. Blind rivets
- 4. Washers
- 5. Grover pucks
- 6. Mounting plates (steel or aluminum)
- 7. Polymer spiral protection for electrical wire.

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Connection to the telematics device





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Extra parts and materials for installation



Relay image



Fasteners for mounting

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