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**Approvals**



UL Listed: UL 873 and CSA C22.2 No. 24-93

**Attention**



The installation and maintenance of this product must be done under the supervision of an experienced and trained specialist. Never perform work if gas pressure or power is applied, or in the presence of an open flame.

**Safety first  
O.K.**

On completion of installation on the EMA, perform a function test.



Please read the instruction before installing or operating. Keep the instruction in a safe place. You find the instruction also at [www.dungs.com](http://www.dungs.com). If these instructions are not heeded, the result may be personal injury or damage to property.

**IFGC CSA  
UL ANSI  
NFPA**

This product is intended to be used in combination with a control valve to modulate the flow of gas or air.



Any adjustment and application-specific adjustment values must be made in accordance with the equipment manufacturers instructions.

**Explanation of symbols**

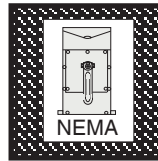
- 1, 2, 3 ... = Action
- = Instruction

## Specification EMA 405 Series

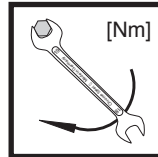
**EMA** These actuators meet the requirements for damper control or valve control applications where it is desirable to power the crank arm in one direction (CW) to 90 degrees and return it to a normally closed position (CCW) via spring return upon power interruption



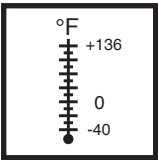
**EMA 405 & EMA 405-1**  
**Electrical Ratings**  
 120 VAC (+10 % / -15 %); 60 Hz  
**Electrical Connection**  
 1/2" NPT conduit knockout  
**Power Consumption**  
 45 VA Running  
 45 VA Holding



**Enclosure Rating**  
 NEMA Type 1



**Torque**  
 16 in/lb output



**Ambient Temperature**  
 -40 °F to +136 °F (-40 °C to + 58 °C)  
 Note: Surface temperature during normal operation can reach 40 °F above ambient.

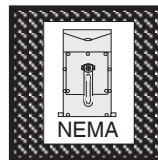
**Cycling Rate:**  
 EMA is rated for 100 % duty cycling & continuous cycling. Cycle life rating is 100,000 cycles (0-90°/cycle).

## Specification EMA 418 Series

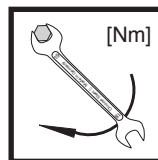
**EMA** These actuators meet the requirements for damper control or valve control applications where it is desirable to power the crank arm in one direction (CW) to 90 degrees and return it to a normally closed position (CCW) via spring return upon power interruption



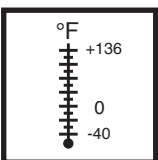
**EMA 418-2**  
**Electrical Ratings**  
 120 VAC (+10 % / -15 %); 60 Hz  
**Electrical Connection**  
 1/2" NPT conduit knockout  
**Power Consumption**  
 120 VA Running  
 42 VA Holding



**Enclosure Rating**  
 NEMA Type 1



**Torque**  
 60 in/lb output



**Ambient Temperature**  
 -40 °F to +136 °F (-40 °C to + 58 °C)  
 Note: Surface temperature during normal operation can reach 40 °F above ambient.

**Cycling Rate:**  
 EMA is rated for 100 % duty cycling & continuous cycling. Cycle life rating is 100,000 cycles (0-90°/cycle).

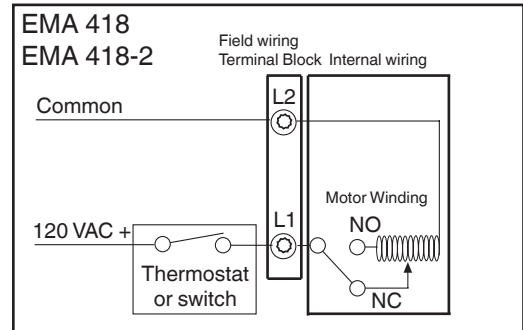
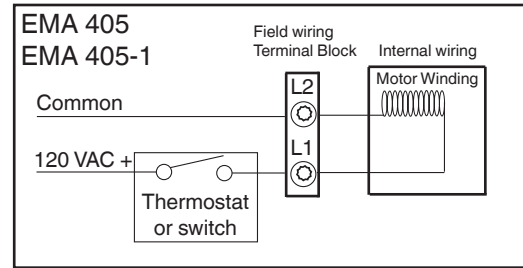
Model No.	Order No.	Travel	Opening time no load	Opening time full load	Torque (in.- lbs.)	Weight Lbs. (actual/shipping)
EMA-405	269227	180°	20 s	60 s	16	8
EMA-405-1	269228	90°	10 s	60 s	16	8
EMA-418-2	269242	90°	10 s	30 s	60	8

## Wiring

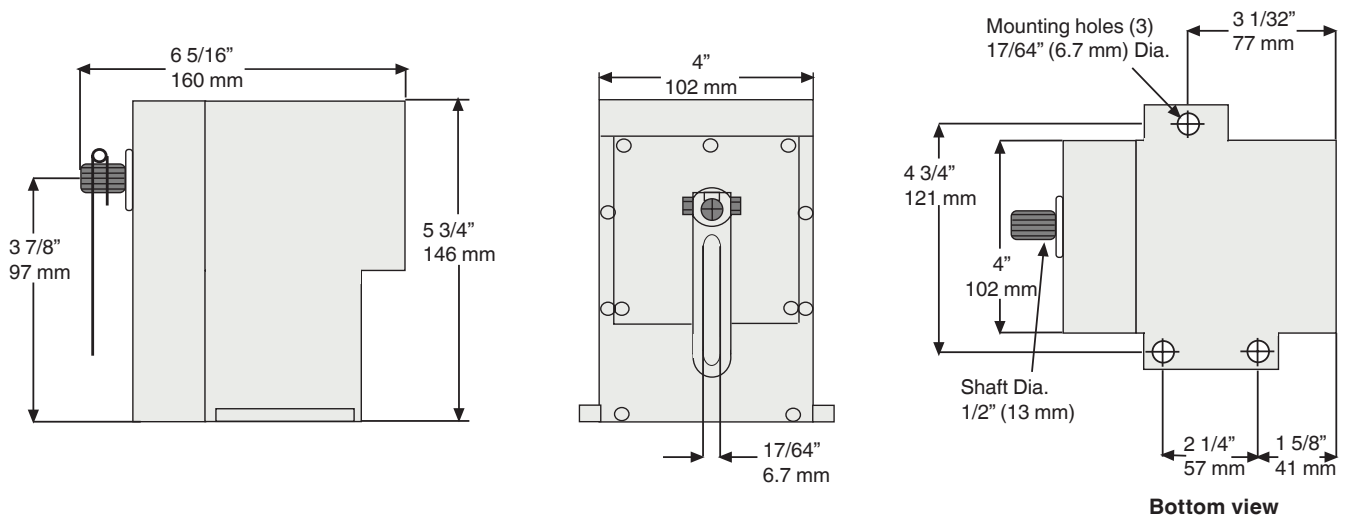
- 1) Inspect unit before installing, look for broken parts or leaks.
- 2) Disconnect all power to the actuator before wiring to prevent electrical shock and equipment damage.
- 3) Do not exceed the electrical ratings given in the specifications and on the actuator.
- 4) Attach a flexible 1/2" NPT conduit to the actuator. Use NEMA Type 4 compatible type connectors.
- 5) Connect the wiring to the appropriate terminals.



**All wiring must comply with local electrical codes, ordinances and regulations.**



## Dimensions



We reserve the right to make modifications in the course of technical development.



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