

EMA Series Installation Instructions



DUNGS®

SPECIFICATIONS

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) and return it to a normally closed position (CCW) via spring return upon power interruption.

EMA 405 (180°) & 405-1(90°)

Electrical Ratings

120 Vac (+10% / -15%); 60 Hz

Power Consumption

45 VA Running

45 VA Holding

Electrical Connection

1/2" NPT conduit knockout

Ambient Temperature

-40°F to +136°F (-40°C to +58°C)

Enclosure Rating

NEMA Type 4

Torque

16 in/lb output

Approvals

UL Listed; CSA Certified

EMA 418 (180°) & 418-1(90°)

Electrical Ratings

120 Vac (+10% / -15%); 60 Hz

Power Consumption

120 VA Running

42 VA Holding

Electrical Connection

1/2" NPT conduit knockout

Ambient Temperature

-40°F to +136°F (-40°C to +58°C)

Enclosure Rating

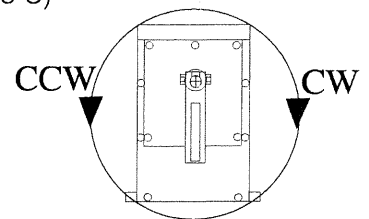
NEMA Type 4

Torque

60 in/lb output

Approvals

UL Listed; CSA Certified



ATTENTION

- Read these instructions carefully.
- Failure to follow them and/or improper installation may cause explosion, property damage and injuries.
- Installation must be done with the supervision of a licensed burner technician.
- The system must meet all applicable national and local code requirements.
- Check the ratings in the specifications to make sure that it is suitable for your application.
- Never perform work if gas pressure or power is applied, or in the presence of an open flame.
- Once installed, perform a complete checkout.
- Label all wires prior to disconnection when servicing actuators. Wiring errors can cause improper and dangerous operation.
- Verify proper operation after servicing.

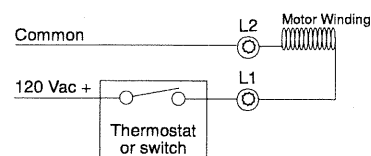
WIRING

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

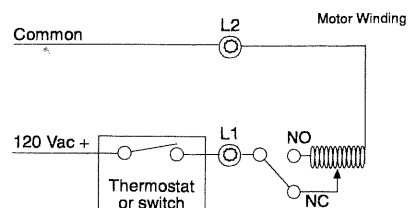


CAUTION: All wiring must comply with local electrical codes, ordinances and regulations.

EMA 405 & 405-1



EMA 418 & 418-1

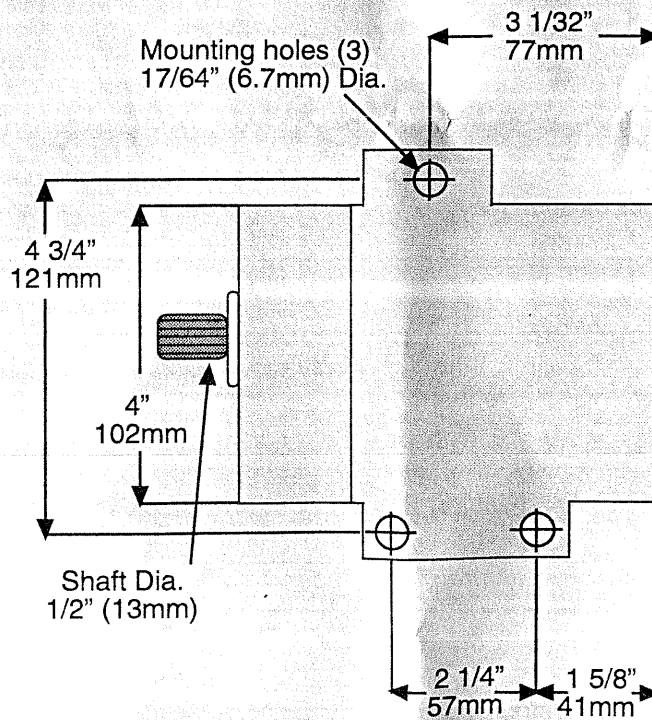
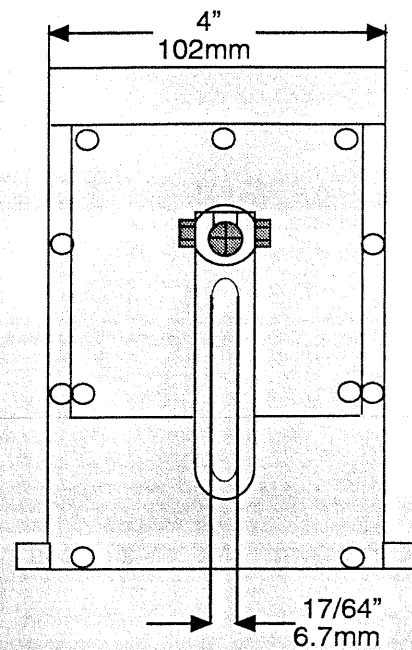
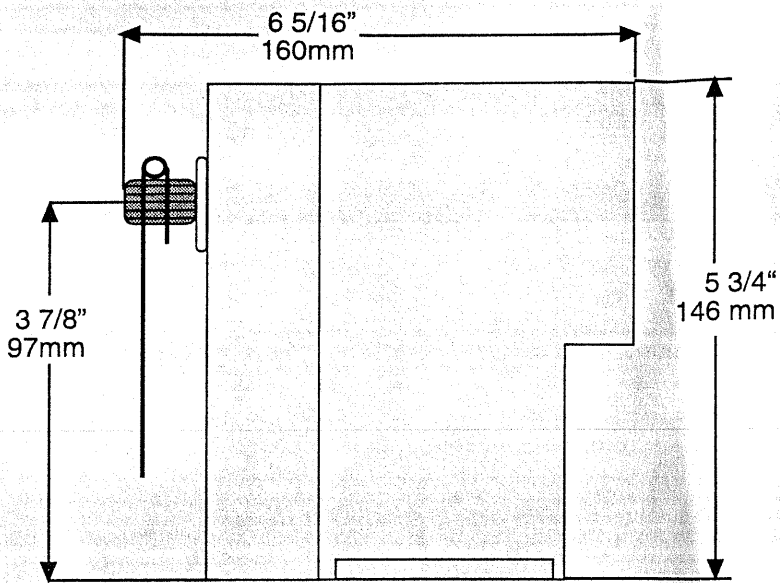


KARL DUNGS INC.

524 Apollo Drive, Suite 10 Lino Lakes, MN 55014 U.S.A.

Phone: (651) 792-8912 Fax: (651) 792-8919 E-mail: info@karldungsusa.com

DIMENSIONS



Models Available & Weights

Model Nos.	Travel	Part #	Opening time no load (Seconds)	Opening time full load (Seconds)	Torque (in.- lbs.)	Weight Lbs.
EMP-405	180°	43117	20	60	16	8
EMP-405-1	90°	43117-1	10	30	16	8
EMP-418	180°	43199	20	60	16	8
EMP-418-1	90°	43199-1	10	30	16	8