



**BETTIS™**

**TorqPlus™**  
Electric Valve  
Actuators  
and Controls

  
**EMERSON™**  
Process Management

**EMERSON. CONSIDER IT SOLVED.™**

# INQUIRIES

Your inquiries for Bettis electric actuators can be processed efficiently when supplied with the information requested on this page. Please use this page as a guide or submittal. If you need assistance, just ask your Bettis sales representative.

## Customer

Co. \_\_\_\_\_  
 St. \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Zip \_\_\_\_\_  
 Attn: \_\_\_\_\_

## Detail

Job \_\_\_\_\_  
 \_\_\_\_\_  
 Item \_\_\_\_\_ of \_\_\_\_\_ Qty. \_\_\_\_\_  
 Mark/Tag \_\_\_\_\_

## Valve Information

Mfg.: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Fig No. \_\_\_\_\_  
 Rotation to CLOSE Position:  Clockwise  Counterclockwise as viewed from above (Std. is CW)  
 Maximum Sizing Torque, lb-in: \_\_\_\_\_ (Safety factor included)

## Actuator Information

Application:  Open-Close, 2 position, Service  Spring Return  
 Jogging Multi-position Service  Fail CW  
 Automatic Modulating Service  Fail CCW

Ambient Temperature: From \_\_\_\_\_ °F to \_\_\_\_\_ °F (-40°F to +140°F standard)

Nominal Operating Speed: \_\_\_\_\_ seconds per 90° (min-max range)

Motor Voltage: \_\_\_\_\_ Ph/ \_\_\_\_\_ Hz/ \_\_\_\_\_ VAC or VDC \_\_\_\_\_

Control Voltage: 1Ph/ \_\_\_\_\_ Hz/ \_\_\_\_\_ VAC (3-phase motor only)

Motor Duty Cycle:  30% or  100%

Total Number of Limit Switches: \_\_\_\_\_

Enclosure:  Type 4 CSA Certified for: non-hazardous indoor and outdoor locations to protect against wind-blown dust and rain, splashing water and hose-directed water.  
 Type 4 and 7 CSA Certified for: hazardous and non-hazardous indoor and outdoor locations to protect against wind-blown dust and rain, splashing water and hose-directed water plus locations classified as Class I and II, Groups C, D, E, F and G as defined in the National Electrical Code.

## Integral Control Items (as required)

- Motor Brake (standard on EM-100 in 1Ph/60Hz/115VAC and all 800-Series with torques of 6,000 lb-in or greater)
- Multi-Turn Control: Set for \_\_\_\_\_ output turns (maximum of 30)
- Heater and Thermostat: 1Ph/ \_\_\_\_\_ Hz/ \_\_\_\_\_ VAC
- Three Position Operation: Set for \_\_\_\_\_ °/ \_\_\_\_\_ °/ \_\_\_\_\_ ° Stops
- Control Relay for:  normally clockwise or  normally counterclockwise operation and operating on  1Ph/ \_\_\_\_\_ Hz/ \_\_\_\_\_ VAC or  \_\_\_\_\_ VDC
- Single Feedback Potentiometer: \_\_\_\_\_ Ohm/4 Watt
- Electronic Positioner: with  4-20mA or  0-10v or  1-5v input and set for minimum output at  clockwise or  counterclockwise position
- Electronic Position Transmitter: 4-20 mA output set for minimum output at  clockwise or  counterclockwise position

## Separate Controls (as required)

- Manual Operating Station:  Type 4 or  Type 7 enclosure suitable for  wall mounting or  close coupling
  - 1Ph/ \_\_\_\_\_ Hz/ \_\_\_\_\_ VAC to include:
  - (\_\_\_\_\_) \_\_\_\_\_ Position Selector Switch marked \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_
  - (\_\_\_\_\_) Push Buttons marked \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_
  - (\_\_\_\_\_) Lights marked and colored \_\_\_\_\_ - \_\_\_\_\_ / \_\_\_\_\_ - \_\_\_\_\_ / \_\_\_\_\_ - \_\_\_\_\_
  - (\_\_\_\_\_) Reversing Starter with 1 Ph/ \_\_\_\_\_ Hz/ \_\_\_\_\_ VAC control voltage
- Other \_\_\_\_\_

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**Important:** Due to Emerson's continuing commitment to engineered product advancement, data presented herein is subject to change.

Certified dimensional drawings and wiring diagrams are available on request. Consult factory with model designation and serial number.

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