Series 94

Electric Actuator

Standard Features

- Motor: Reversing, brushless, capacitor-run 120 VAC 50/60 Hz, single phase
- Overload protection: Integral thermal overload protection for motor windings with automatic reset
- Gear train: Permanently lubricated
- Corrosion resistant enclosure: Engineered resin rated NEMA Type 4X with stainless steel trim
- ISO mounting configuration: FO5 x 14mm star
- Conduit: Two 1/2" NPT conduit entries to eliminate cross feed between control, feedback, and power signals
- Position indication: Highly visible position indicator for positive position of valve
- Declutchable manual override: Push down on handle and rotate in the appropriate direction (CCW for open, CW for close)
- Limit switches: Standard end of travel limit switches can be used for light indication (not to be use with PLC for position confirmation)
- Corrosion resistant mounting: Mounting is with PPG or stainless steel bracket, stainless steel coupling, and stainless steel hardware
- CE compliant motor: All 120 VAC and 220 VAC motors are CE compliant and stamped as such
- Extended duty cycles: Our extended duty cycles are ideal for modulating and high cycling applications
- Output torque: Series 94 electric actuators have an output torque range from 150 in/lbs. to 300 in./lbs.
- Enclosure: Corrosion proof weatherproof rated Type 4X
- Captivated SS hex head slotted cover screws



Engineering Specifications

Size: A94, B94

Torque: 150-300 in/lbs

Voltage: 120 VAC 1Ph 50/60 Hz Amp Draw: A94 .5A, B94 .8A Conduit Entry: Two (2) 1/2" NPT Max Ambient Temperature: 150° F

Switches: Two single pole, double throw (Two SPDT)

15 amp rated

Cycle Time per 90º: A94, B94: 5 seconds

Options

- Auxiliary (additional) limit switches
- Heater and thermostat
- RHM (see page 199)
- Mechanical brake
- Transmitter
- Cycle length control module (CLC)
- Two-wire control
- Center-off
- Failsafe battery back up (Protek)
- Voltages
- Local Remote Station (LL200)

See page 187 for more details regarding options.

Engineering Data

	Torque	120 VAC		220 VAC		12 VDC		24 VDC		12 VDC		24 VAC		Cycle Time per	Weight
Model	(in/lbs)	Amp Draw	Duty Cycle	90 Degrees (seconds)*	(lbs)										
A94	150	0.5	100%	0.4	100%	2.0	75%	4.0	75%	2.0	75%	4.0	75%	5	3.5
B94	300	0.8	75%	0.6	75%	2.0	75%	4.0	75%	2.0	75%	4.0	75%	5	3.5

Note: Amp rating is considered locked rotor. Duty cycles are for ambient temperature (73° F).

*Cycle times are approximate.

Series 94 - w/RHM

Electric Actuator

Standard Features

- Motor: Reversing, brushless, capacitor run 120 VAC 50/60 Hz, single phase
- Overload protection: Integral thermal overload protection for motor windings with automatic reset
- Gear train: Permanently lubricated, solid gear that is Rockwell hardened
- Corrosion resistant enclosure: Engineered resin rated
 Type 4X with stainless steel trim
- ISO mounting configuration: F05/14mm star
- Conduit: Two 1/2" FNPT conduit entries to eliminate cross feed between control, feedback, and power signals
- Position indication: Highly visible position indicator for positive position of valve
- Declutchable manual override: Push down on handle and rotate in appropriate direction (CCW for open/CW for close)
- Limit switches: Two (2) SPDT end of travel limit switches can be used for light indication (not to be use with PLC for position confirmation)
- RHM Module: Module consisting of a heater and thermostat, and 2-SPDT 8A dry contact relays for PLC position confirmation, or auxiliary equipment
- Captivated SS hexhead slotted enclosure screws
- Corrosion resistant mounting: Mounting is with PPG or SS bracket, SS coupling and SS fasteners
- CE compliant motor: All 120 VAC and 220 VAC motors are CE compliant stamped as such
- Extended duty cycles: Extended duty cycles are ideal for modulating and high cycling applications
- Output torque: Series 94 Electric Actuators have an output torque range from 150 in/lbs to 300 in/lbs
- Enclosure: Corrosion proof weather proof rated Type 4X



Engineering Specifications

Size: A94, B94

Torque: 150-300 in/lbs

Voltage: 120 VAC 1Ph 50/60 Hz Amp Draw: A94 .5A, B94 .8A Conduit Entry: Two [2] 1/2" FNPT Max Ambient Temperature: 150° F

Switches: Two (2) single pole, double throw

(2-SPDT) 15 amp rated

Cycle Time per 90º: A94, B94: 5 seconds

RHM Module: Heater and thermostat with two (2) SPDT 8A

dry contact relays (Auxiliary switches)

Options

- Feedback Potentiometer
- Positioner (modulating PCB)
- Transmitter
- Mechanical brake
- Cycle Length Control Module (CLC)
- Two-wire Control
- Failsafe Battery Back Up (Protek)
- Voltages
- HMI/LRS Control Station

Engineering Data

	Torque	120 VAC		220 VAC		12 VDC		24 VDC		12 VDC		24 VAC		Cycle Time per	Weight
Model	(in/lbs)	Amp Draw	Duty Cycle	90 Degrees (seconds)*	(lbs)										
A94	150	0.5	100%	0.4	100%	2.0	75%	4.0	75%	2.0	75%	4.0	75%	5	3.5
B94	300	0.8	75%	0.6	75%	2.0	75%	4.0	75%	2.0	75%	4.0	75%	5	3.5

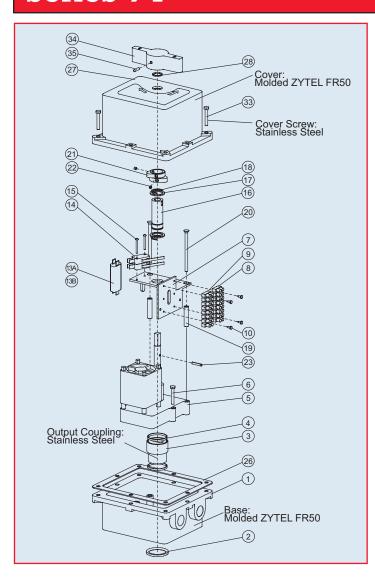
Note: Amp rating is considered locked rotor. Duty cycles are for ambient temperature (73° F).

^{*}Cycle times are approximate.



Series 94

Electric Actuator



(+) \oplus \oplus R0.070 Ø1.97 ISO F05 (+)(+) 4× M6×0.5 0.554+0.002 -0.000× 0.5 DEEP \oplus **(** \oplus

General Parts List

PARTS LIST										
NO.	Part Number	Quantity	Description							
1	7403002	1	Base							
2	7403000	1	Base Seal							
3	7403043	1	Output Coupling							
4	7403005	2	Coupling Gasket							
5	7403004	1	Motor(120VAC)							
6	ACTMSC	2	Motor Screw							
7	7403011	1	Base Plate							
8	7401420	1	Terminal Block 1-8							
9	7401425	1	Terminal Block 9-16							
10	ACTMSC	4	Terminal Block Screw							
13A	7401948	1	4.2 mFD Capacitor-A94							
13B	7402004	1	6.7 mFD Capacitor-B94							
14	7401460	2	Limit Switch							
15	ACTMSC	2	Limit Switch Screw							
16	7403016	1	Outer Shaft							
17	7403006	2	Outer Shaft Gasket							
18	ACTMSC	2	Retaining Ring							
19	ACTMSC	2	Standoff							
20	ACTMSC	2	Base Plate Screw							
21	7401480	2	Cam							
22	ACTMSC	4	Cam Set Screw							
23	ACTMSC	1	Pin							
26	7403007	1	Base Gasket							
27	7403001	1	Cover							
28	7403020	1	Cover Seal							
33	ACTMSC	8	Cover Screw							
34	7403003	1	Handle							
35	7401700	1	Handle Screw							

Sample Specification

All Series 94 electric actuators shall have a thermally protected, bi-directional (reversing type), capacitor run motor with a permanently lubricated gear train. 120 VAC and 220 VAC motors shall conform to CE and be indicated on motor housing. Actuator shall have a Zytel FR50 engineered resin housing with stainless steel trim, rated Type 4X. Each actuator to have a declutchable manual override, visual position indication, ISO mounting configuration, as manufactured by Asahi/America, Inc.