

AE Series Electric Actuator Instruction Manual

For safe and proper operation, please carefully read this manual before using and save it for reference

Important note: The content of this manual is subject to change due to quality improvements or any other reasons without notification.

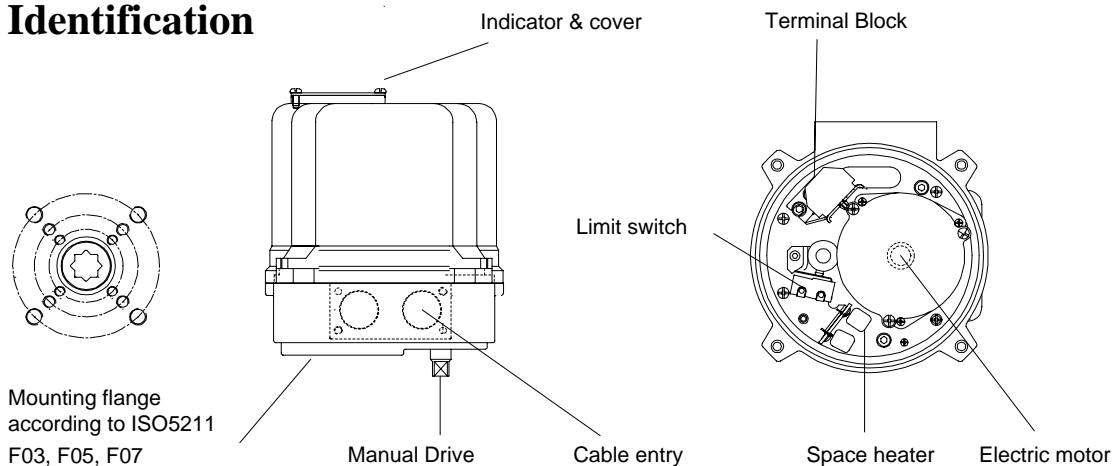
After receiving actuator, please check the followings.

- 1) Individual test report, electrical wiring (inside of actuator) is provided.
- 2) Visual check : Painting, position indicator, etc
- 3) Specification : Make sure you have correct actuator.

1. Pre-Installation

- 1) Selection of valve and actuator : Review all specifications of actuator carefully before making selection, include 30% torque safety factor.
- 2) Do not operate actuator before setting limit switches.
- 3) After electrical wiring, ensure cable entries are properly secured.
- 4) Ensure correct voltage is being supplied to actuator.
- 5) Storage : Keep actuator dry, clean and cool.
- 6) Trouble : Please refer to enclosed trouble shooting, do not dismantle the actuator without consulting with factory.

2. Identification



3. Mounting

EA actuators are suitable for direct mount on ISO standard flanged valves and dampers.

There is no limitation in mounting actuator on valve. In a vertical pipeline, it is recommended that the conduit entry is pointing downward in order to avoid water flow in through the cable entry.

When actuator is mounted on valve, the following procedure is recommended.

- 1> Watching the indicator, put actuator at fully closed position (Clockwise).
- 2> Valve stem must be properly machined to match with female drive shaft of actuator. An adapter may be required.
- 3> Close the valve and mount actuator on valve.

4. Switch adjustment

1) Required tools for setting

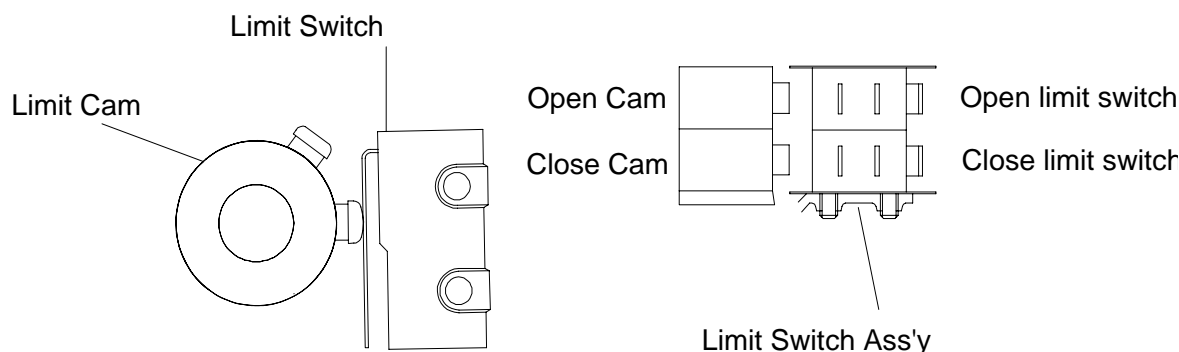
Allen-Wrench 1 set(M2, Metric)

2) Manual operation

- ① Manual drive shaft is located at bottom of actuator. (AE 350)
- ② Clockwise direction is closed, Counterclockwise is open.
- ③ From fully closed position to fully open position requires approximately 9 turns.
- ④ Do not to manually operate the actuator past the setting of the limit switch.

3) Limit switch setting

- 1> Put actuator at fully closed position by watching indicator.
- 2> Turn the close cam until cam activates the lever of the limit switch and makes a “clicking” sound.
- 3> Tighten cam set screw(M2) to fix cam position.
- 4> Repeat for the open position



5. Electrical wiring

1) Before wiring

- 1> Cable entries are machined with PG13.5 tap and sealed with plug before delivery.
- 2> Leave the plug in place if both entries are not used.
- 3> Seal the entries by using rubber or metallic packing after wiring.

2) Electrical wiring

- 1> Verify actuator voltage matches supply power.
- 2> Wiring diagram is supplied together with actuator. (In vinyl pack or inside of top cover).
- 3> Complete the wiring as per the given wiring diagram.
- 4> Supply electric power to heater for keeping inside of actuator clean and dry of condensation.
- 4> Make sure that one relay operates one actuator only (Cannot operate two or more actuators with one relay)

Electrical wiring should be performed by properly licensed personnel.

6. Simple trouble shooting

Trouble	Cause	Counter plan
Actuator doesn't work at all	Check if power is on	Power on
	Check if voltage is too low	Check power
	Motor and supplied power is different	Check motor power and supplied power
	Wiring is not correct and tight or loosen	Do wiring again tightly
	Coil of motor is damaged	Change the motor
	Capacitor is damaged	Change the capacitor
	Setting of limit and torque switch is not correct	Do setting switches again

7. After sales service

- 1) Do not disassemble actuator, if actuator is disassembled in any way warranty is void.
- 2) Jomar warranties its actuators to be free of factory defects for a period of one year from date of purchase.

8. Mechanical Travel Stop Adjustment (AE 880 and Larger)

The mechanical travel stops, located under the conduit entries, must be adjusted so that the cam cannot travel past the Limit Switch in either the open or closed position.

AE Series Electric quarter turn actuator
Installation and maintenance manual

9. Manual Override

The AE series Actuators are equipped with a manual override function.

To ENGAGE manual override – Move lever to manual position. (AE 880 and Larger) **Actuator must be idle to engage manual override.**

To DISENGAGE manual override – Actuator must be energized (run electrically) to disengage the manual override. You cannot manually disengage the manual override.

10. Maintenance

1) Lubrication :

Lubrication is performed at the factory level, no further lubrication is required under normal operating conditions

In very dry condition below 15% RH or temperatures higher than 140°F, it is required to lubricate once every two years.

2) Regular operation :

Electrical power always should be supplied to the actuator and should be cycled weekly.

Should you have any further questions, please contact us at your convenience.