Astechnic
诺 一

AT31
Electric Actuator

Foshan NUOE Combustion Control Technology Co., Ltd.
Tel: 4000-8397-18 Web: http: //www. astechnic.net E-mail: Astechnic @ 163.com

Foshan NUOE Combustion Control Technology Co., Ltd.

AT31 Electric Actuator

Overview

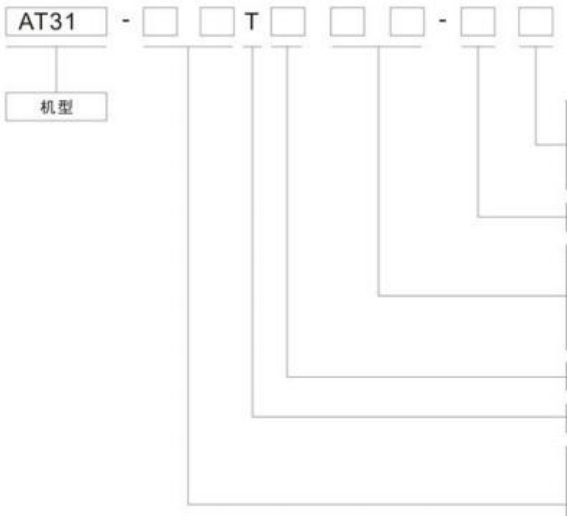
AT31 electric actuators are used to drive 0-90 °rotation in all situations, such as driving butterfly valves, linear valves and other valves. It is used to automatically regulate the flow of gas or air. Two of the cam (N1 and N2) of the actuator are used to adjust the opening, N1 adjusts the minimum angle and N2 adjusts the maximum angle. There are three control modes: three-point control, analog control and two-point control. Three-point control and analog control are suitable for continuous control applications, while two-point control is suitable for on / off or large / small fire pulse control.

- The valve position indicator can display the valve position on the valve body.
- Its standard adjustable cam can accurately adjust the valve position.
- AT31 has a choice of primary and black colors.

Technical Parameters

- Supply voltage: 220-240VAC 50Hz
- Power: 11VA
- Rotation angle: adjustable, factory default 0-90°
- 0-90° travel time: 5S, 15S, 30S, 60S optional
- Feedback resistance: 1KΩ
- Auxiliary cam load: 2A @250VAC
- Degree of protection: IP54
- Operating temperature: -20~+60° C

Type selection table



Cam configuration
(2): 2 cams
(4): 4 cams
Default: 4 cams

J: with reducer, there is no reducer by default

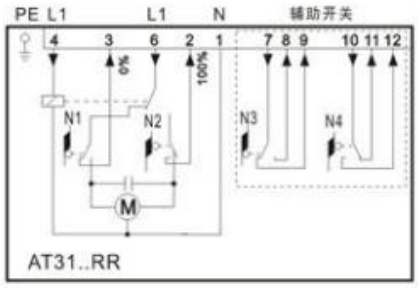
Control Mode
E: Continuous signal control
RR: Two-point control
R: 3-point control (with 1KQ feedback potentiometer)
Default: 3-point control (without 1KQ feedback potentiometer)

Torque 3: 3Nm

T: The supply voltage is 220VAC 50Hz
Travel time (0-90°)
60: 60S
30: 30S
15: 15S
05: 5S

Wiring diagram

Wiring diagram of two-point control actuator



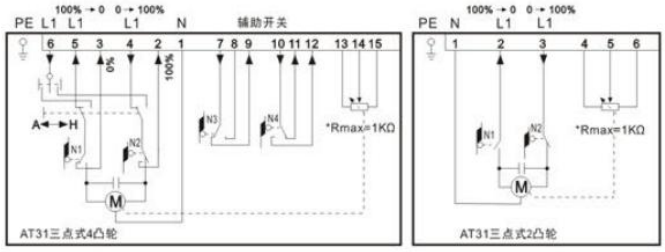
Terminal block definition:

1. Neutral line (N) 4. Control line (L) 6. Power supply (L)

7, 8, 9: auxiliary switch N3 output

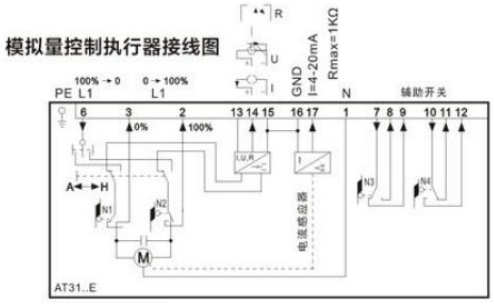
10, 11, 12: auxiliary switch N4 output

Wiring diagram of three-point control actuator



Terminal Definition: 1. Neutral line (N); 4. Open the control line (L); 5. Off control line (L); 6. Power supply (L); 7, 8, 9: auxiliary switch N3 output; 10, 11, 12: auxiliary switch N4 output; 13, 14, 15: Feedback resistors

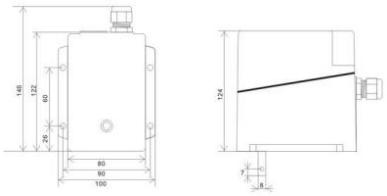
Analog control actuator wiring diagram



Terminal block definition:

1. Zero line (N); 6. Power supply (L); 7, 8, 9: auxiliary switch N3 output; 10, 11, 12: auxiliary switch N4 output; 14, 15: analog signal input; 14 is positive; 15 is negative; 16, 17: current feedback output; 16 is negative; 17 is positive

Specification dimension diagram



Precautions for Installation

- AT3 1 actuators cannot be installed in the following environments.
  a. Where there are special chemicals and corrosive gases (ammonia, sulfur, chlorine, ethylene, acid gas, etc.).
  b. In water, in humid (humidity not exceeding 90%) or in dewy environment.
  c. Where the temperature is too high (more than 60 degrees) and vibrates frequently.
- The voltage of the power supply must not exceed the rated voltage, otherwise the motor will be burned out.
- In the selection, attention should be paid to the matching of torque and load, so as not to affect the service life of the actuator.
- The control signal line should be isolated from other strong interference wires (especially the ignition high voltage wire). The wire should be shielded and the shielding layer should be well grounded.
- Be sure to check whether the wiring is correct before powering on, so as to avoid damaging the actuator due to wiring errors.

Astechnic 诺一

Foshan NUOE Combustion Control Technology Co., Ltd.

AT31 Electric Actuator

Product Code

No.	Product Code	Product Model	Color	Description
1	112010310001	AT31-60T3 (2)	Primary color	Switch control, travel time is 60 seconds, torque is 3 Nm, two cam.
2	112010310002		Black	Switch control, travel time is 60 seconds, torque is 3 Nm, two cam.
3	112010310003	AT31-30T3(2)	Primary color	Switch control, travel time is 30 seconds, torque is 3 Nm, two cam.
4	112010310004		Black	Switch control, travel time is 30 seconds, torque is 3 Nm, two cam.
5	112010310005	AT31-15T3 (2)	Primary color	Switch control, travel time is 15 seconds, torque is 2 Nm, two cam.
6	112010310006		Black	Switch control, travel time is 15 seconds, torque is 2 Nm, two cam.
7	112010310007	AT31-05T3 (2)	Primary color	Switch control, travel time is 5 seconds, torque is 1.2 Nm, two cam.
8	112010310008		Black	Switch control, travel time is 5 seconds, torque is 1.2 Nm, two cam.
9	112010310009	AT31-60T3 (4)	Primary color	Switch control, travel time is 60 seconds, torque is 3 Nm, four cam.
10	112010310010		Black	Switch control, travel time is 60 seconds, torque is 3 Nm, four cam.
11	112010310011	AT31-30T3 (4)	Primary color	Switch control, travel time is 30 seconds, torque is 3 Nm, four cam.
12	112010310012		Black	Switch control, travel time is 30 seconds, torque is 3 Nm, four cam.
13	112010310013	AT31-15T3 (4)	Primary color	Switch control, travel time is 15 seconds, torque is 2 Nm, four cam.
14	112010310014		Black	Switch control, travel time is 15 seconds, torque is 2 Nm, four cam.
15	112010310015	AT31-05T3 (4)	Primary color	Switch control, travel time is 5 seconds, torque is 1.2 Nm, four cam.
16	112010310016		Black	Switch control, travel time is 5 seconds, torque is 1.2 Nm, four cam.
17	112010310017	AT31-60T3E	Primary color	Analog (4-20mA) control, travel time is 60 seconds, torque is 3 Nm, four cam.
18	112010310018		Black	Analog (4-20mA) control, travel time is 60 seconds, torque is 3 Nm, four cam.
19	112010310019	AT31-30T3E	Primary color	Analog (4-20mA) control, travel time is 30 seconds, torque is 3 Nm, four cam.
20	112010310020		Black	Analog (4-20mA) control, travel time is 30 seconds, torque is 3 Nm, four cam.
21	112010310021	AT31-15T3E	Primary color	Analog (4-20mA) control, travel time is 15 seconds, torque is 2 Nm, four cam.
22	112010310022		Black	Analog (4-20mA) control, travel time is 15 seconds, torque is 2 Nm, four cam.
23	112010310023	AT31-05T3E	Primary color	Analog (4-20mA) control, travel time is 5 seconds, torque is 1.2 Nm, four cam.
24	112010310024		Black	Analog (4-20mA) control, travel time is 5 seconds, torque is 1.2 Nm, four cam.
25	112010310027	AT31-60T3R(4)	Primary color	with feedback potentiometer (1KΩ), travel time is 60 seconds, torque is 3 Nm, four cam.
26	112010310028		Black	with feedback potentiometer (1KΩ), travel time is 60 seconds, torque is 3 Nm, four cam.
27	112010310029	AT31-30T3R(4)	Primary color	with feedback potentiometer (1KΩ), travel time is 30 seconds, torque is 3 Nm, four cam.
28	112010310030		Black	With reverse bun potentiometer (1KΩ), travel time is 30 seconds, torque is 3 Nm, four cam.
29	112010310031	AT31-15T3R(4)	Primary color	with feedback potentiometer (1KΩ), travel time is 15seconds, torque is 2 Nm, four cam.
30	112010310032		Black	with feedback potentiometer (1KΩ), travel time is 15 seconds, torque is 2 Nm, four cam.
31	112010310033	AT31-05T3R(4)	Primary color	with feedback potentiometer (1KΩ), travel time is 5 seconds, torque is 1.2 Nm, four cam.
32	112010310034		Black	with feedback potentiometer (1KΩ), travel time is 5 seconds, torque is 1.2 Nm, four cam.
33	112010310035	AT31-05T3RR	Primary color	Two-point control, travel time is 5 seconds, torque is 1.2 Nm, four cam.
34	112010310036		Black	Two-point control, travel time is 5 seconds, torque is 1.2 Nm, four cam.
35	112010310037	AT31-60T3R-J	Primary color	Switch control, equipped with reducer and feedback potentiometer (1KΩ), travel time is 60 seconds, torque is 3 Nm, four cam.
36	112010310038		Black	Switch control, equipped with reducer and feedback potentiometer (1KΩ), travel time is 60 seconds, torque is 3 Nm, four cam.
37	112010310039	AT31-30T3R-J	Primary color	Switch control, equipped with reducer and feedback potentiometer (1KΩ), travel time is 30 seconds, torque is 3 Nm, four cam.
38	112010310040		Black	Switch control, equipped with reducer and feedback potentiometer (1KΩ), travel time is 30 seconds, torque is 3 Nm, four cam.
39	112010310041	AT31-05T3R-J	Primary color	Switch control, equipped with reducer and feedback potentiometer (1KΩ), travel time is 5 seconds, torque is 3 Nm, four cam.
40	112010310042		Black	Switch control, equipped with reducer and feedback potentiometer (1KΩ), travel time is 5 seconds, torque is 3 Nm, four cam.
41	112010310043	AT31-60T3E-J	Primary color	Analog (4-20mA) control, equipped with reducer, travel time is 60 seconds, torque is 3 Nm, four cam.
42	112010310044		Black	Analog (4-20mA) control, equipped with reducer, travel time is 60 seconds, torque is 3 Nm, four cam.
43	112010310045	AT31-30T3E-J	Primary color	Analog (4-20mA) control, equipped with reducer, travel time is 30 seconds, torque is 3 Nm, four cam.
44	112010310046		Black	Analog (4-20mA) control, equipped with reducer, travel time is 30 seconds, torque is 3 Nm, four cam.
45	112010310047	AT31-05T3E-J	Primary color	Analog (4-20mA) control, equipped with reducer, travel time is 5 seconds, torque is 3 Nm, four cam.
46	112010310048		Black	Analog (4-20mA) control, equipped with reducer, travel time is 5 seconds, torque is 3 Nm, four cam.
47	112010310049	AT31-05T3RR-J	Primary color	Two-point control, equipped with reducer, travel time is 5 seconds, torque is 1.2 Nm, two cam.
48	112010310050		Black	Two-point control, equipped with reducer, travel time is 5 seconds, torque is 1.2 Nm, two cam.
49	112010310051	AT31-60T3R(2)	Primary color	with feedback potentiometer (1KΩ), travel time is 60 seconds, torque is 3 Nm, four cam.
50	112010310052		Black	with feedback potentiometer (1KΩ), travel time is 60 seconds, torque is 3 Nm, two cam.
51	112010310053	AT31-30T3R(2)	Primary color	with feedback potentiometer (1KΩ), travel time is 30 seconds, torque is 3 Nm, two cam.
52	112010310054		Black	with feedback potentiometer (1KΩ), travel time is 30 seconds, torque is 3 Nm, two cam.
53	112010310055	AT31-15T3R(2)	Primary color	with feedback potentiometer (1KΩ), travel time is 15 seconds, torque is 3 Nm, two cam.
54	112010310056		Black	with feedback potentiometer (1KΩ), travel time is 15 seconds, torque is 3 Nm, two cam.
55	112010310057	AT31-05T3R(2)	Primary color	with feedback potentiometer (1KΩ), travel time is 5 seconds, torque is 1 Nm, two cam.
56	112010310059		Black	with feedback potentiometer (1KΩ), travel time is 5 seconds, torque is 1 Nm, two cam.
57	112010310058	AT31-60T3-J (4)	Primary color	Three-point control, equipped with reducer, travel time is 60 seconds, torque is 3 Nm, four cam.
58	112010310060		Black	Three-point control, equipped with reducer, travel time is 60 seconds, torque is 3 Nm, four cam.
59	112010310061	AT31-30T3-J (4)	Primary color	Three-point control, equipped with reducer, travel time is 30 seconds, torque is 3 Nm, four cam.
60	112010310062		Black	Three-point control, equipped with reducer, travel time is 30 seconds, torque is 3 Nm, four cam.
61	112010310063	AT31-05T3-J (4)	Primary color	Three-point control, equipped with reducer, travel time is 5 seconds, torque is 3 Nm, four cam.
62	112010310064		Black	Three-point control, equipped with reducer, travel time is 5 seconds, torque is 3 Nm, four cam.