

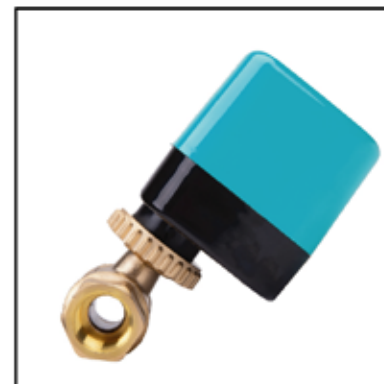


Electric Valve  
Specializing In-Fluid Control

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## ■ Product display



## ■ Product introduction

### 1. Summary

The electric ball valve is mainly used in the cold and hot water system of central air conditioning. It can accurately control the flow of cold and hot media according to the actual needs, and will not cause drastic changes in temperature, so as to achieve the purpose of real-time and accurate control of room temperature. The control valve is driven by a two-way motor, which is connected with the temperature controller through a common end, an open end and a closed end. The temperature controller continuously samples and processes field data, sends control signals to make the motor of the electric ball valve run or stop, controls the opening and closing degree of the electric ball valve, and cold water or hot water enters the fan coil to provide air conditioning or heating for the room; When the room temperature reaches the set value of the temperature controller, the temperature controller cuts off the power of the electric ball valve to make the valve opening in the best state, and the room temperature is always kept within the temperature range set by the temperature controller.

### 2. Characteristic

- Good dustproof and waterproof function (IP65)
- The temperature of the medium is not easy to transfer to the actuator
- Easy disassembly and assembly of actuator
- The actuator can be installed after the equipment and pipeline are installed, which is more conducive to improve the installation efficiency
- Due to the eccentric structure of the actuator, the valve can be installed close to the wall

- Remove the ball valve body of the driver, and the valve body can be opened and closed with ordinary tools
- The actuator can be assembled two directions for easier wiring and maintenance
- Large closing differential pressure and tight closing
- Direct water flow without slag blockage
- The valve can be opened flexibly to effectively prevent water hammer
- After the valve is in place, the motor will not bear any force and the service life of the motor will be longer

### 3. Technical indicators

- Nominal pressure: **1.0MPa**
- Closing differential pressure: **1.0MPa**
- Medium: hot and cold water, glycol aqueous solution within 60%
- Medium temperature: 1 ° C ~ 95 ° C (liquid)
- Control signal: ON / OFF , Special can be customized.
- Power supply: AC220V, 50 / 60Hz, 50 / 60Hz, AC24V, AC110-265V (general voltage can be customized) DC24V, (DC6-30V can be customized)
- Power consumption: 10W
- Operation time: 7-10 seconds (quickly customizable)
- Line Stroke: angular stroke 90 degrees
- Torsion Torque: 8nm
- Protection grade: IP65
- Structural form: two-way, three-way side outlet L-type and T-type



### Actuator model rules

A1		31		10	
Voltage	Code	Control mode	Code	O/S time	Code
AC220V	A1	Thre-one Control	31	2S	02
Special AC	A2	Thre-two Control	32	10S	10
DC24V	D1	Special Control	33		
Special DC	D2				

Note: 10 seconds is a conventional product, and 2 seconds needs to be customized

Note: A13110 represents an electric actuator with voltage of AC220V, control mode of three wire one control and switching time of 10 seconds

### Electric Actuator model rules

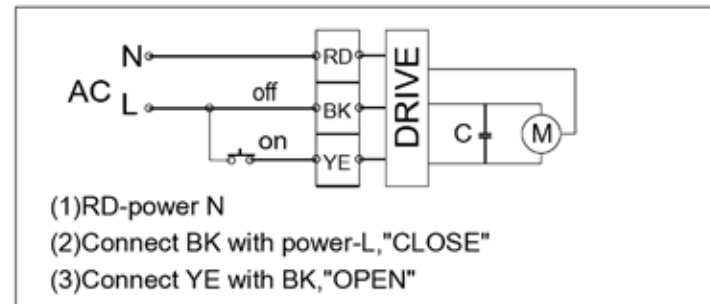
A1		31		10		02		150	
Voltage	Code	Control mode	Code	O/S time	Code	Valve form	Code	Caliber	Code
AC220V	A1	Thre-one Control	31	2S	02	Two way valve	02	Two way DN15	150
Special AC	A2	Thre-two Control	32	10S	10	Three way valve	03	:	:
DC24V	D1	Special control	33					Two way DN40	400
Special DC	D2							Three L-type DN15	15L
								Three L-type DN20	20L
								Three T-type DN15	15T
								Three T-type DN20	20T
								Three T-type DN25	25T

Note: 10 seconds is a conventional product, and 2 seconds needs to be customized

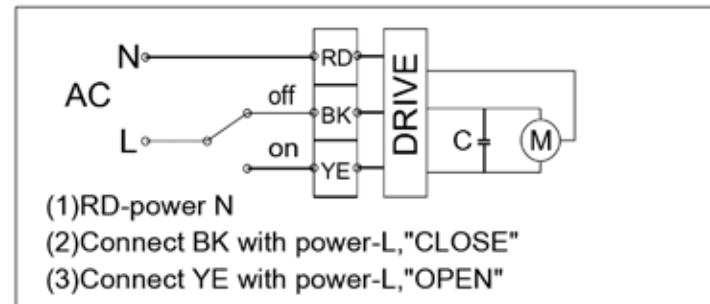
Note: A1311002150 represents a two-way electric valve with AC220V voltage, three wire one control, 10 second switching time and DN15 caliber

### ■ Wiring diagram

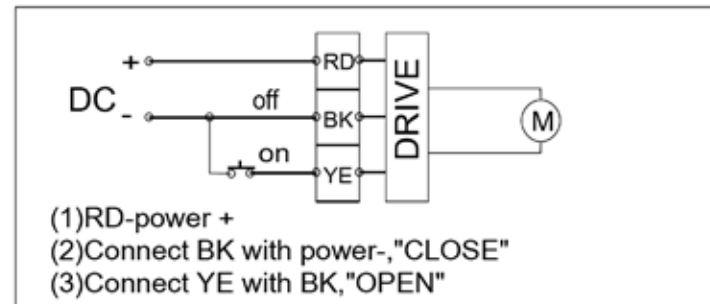
#### AC Thre-one Control



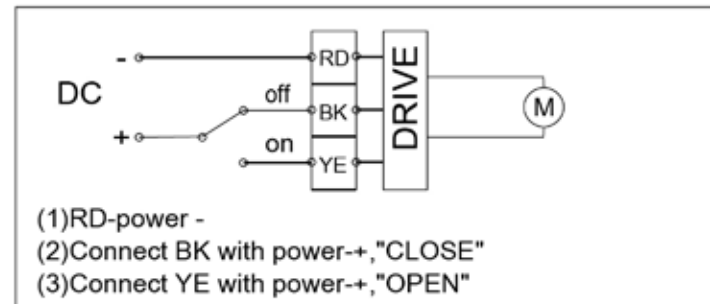
#### AC Thre-two Control



#### DC Thre-one Control



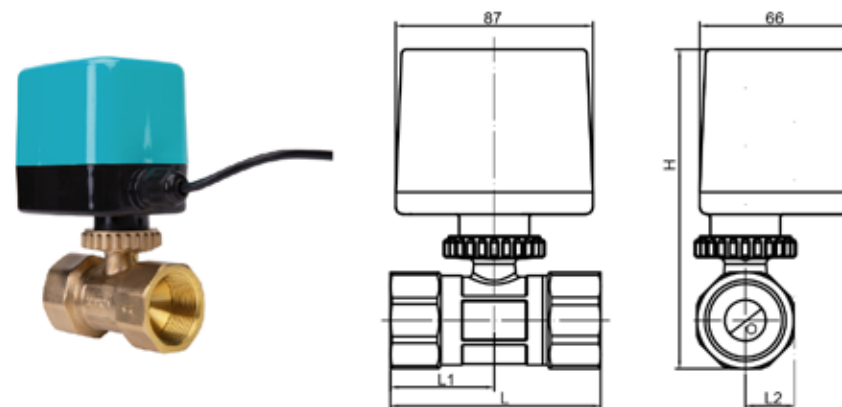
#### DC Thre-two Control



If you need special control methods, please contact our technology department for customization.

### ■ Product dimension drawing

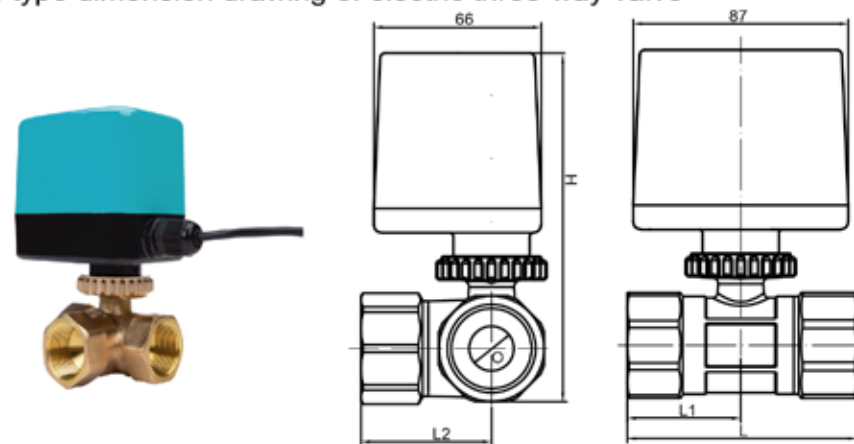
#### Dimension drawing of electric two-way valve



Actuator	Weight (g)
AC Actuator	390
DC Actuator	340

Caliber	Size( mm )					Valve weight (g)
	L	L1	L2	H	O	
DN15	66	33	13	126	Φ13	271
DN20	67	33.5	16	127	Φ13	289
DN25	88	44	20	130	Φ13	420
DN32	100	50	24	142	Φ23	665
DN40	102	51	27.5	148	Φ28	886

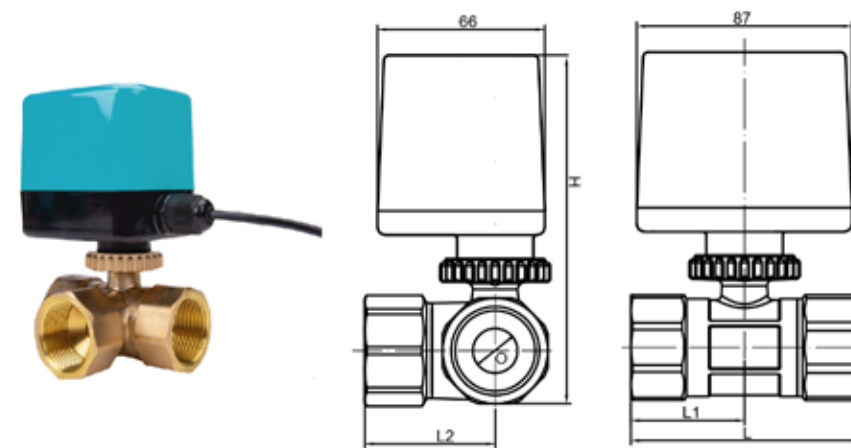
L-type dimension drawing of electric three-way valve



Actuator	Weight (g)
AC Actuator	390
DC Actuator	340

Caliber	Size( mm )					Valve weight (g)
	L	L1	L2	H	O	
DN15	66	33.5	39	46	Φ13	350
DN20	67	33	39.5	46	Φ13	365

T-type dimension drawing of electric three-way valve



Actuator	Weight (g)
AC Actuator	390
DC Actuator	340

Caliber	Size( mm )					Valve weight (g)
	L	L1	L2	H	O	
DN15	66	33	39	46	Φ12	350
DN20	67	33.5	39.5	46	Φ12	365
DN25	88	44	43	52	Φ16	588

Schematic diagram of electric three-way L-type valve

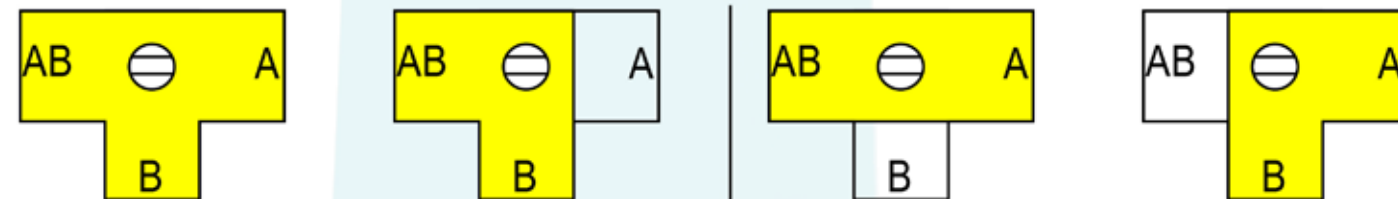


Valve on-off state

Actuator status	OPEN	CLOSE
Valve on-off state	Port A and port B are connected	Port AB and port B are connected

When selecting the valve, please select according to the on-off condition. In case of special circumstances, please contact the technical department of our company.

Schematic diagram of L-type rotation of electric three-way valve



Valve on-off state 1

Valve on-off state 2

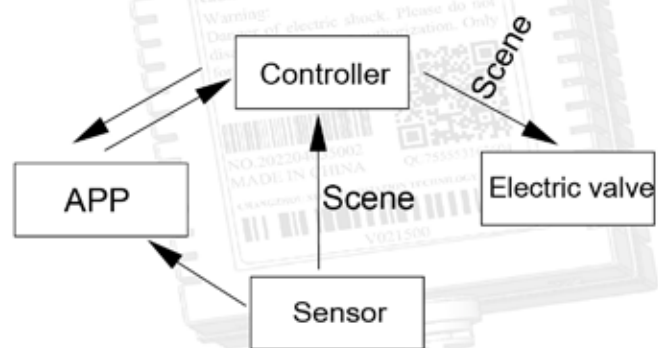
Actuator status	OPEN	CLOSE
Valve on-off state 1	Port AB ,Port A and port B are connected	Port AB and port B are connected
Valve on-off state 2	Port AB and port A are connected	Port B and port A are connected

When selecting the valve, please select according to the on-off condition. In case of special circumstances, please contact the technical department of our company.

## Introduction To Intelligent Controller

The company can only use electric valves and related controllers for the Internet of things. The corresponding electric valve in the home can be opened or closed remotely. It can set the scene through intelligent sensors to achieve automatic control, and feed back the status to the mobile app or send the information to the customer in real time. The customer will deal with it according to the alarm.

The following figure shows the working principle of control



## Intelligent controller model rules

V		02		150		00	
Control	Code	Type	Code	Caliber	Code	Sensor	Code
Valve	V	Nothing	00	Nothing	000	Nothing	00
Sensor	I	Two way	02	2 way DN15	150	natural gas	01
Valve+Sensor	VI	Three way	03	:	:	leakage and rainwater	02
				2 way DN40	400	.....	.....
				3 L-type DN15	15L		
				3 L-type DN20	20L		
				3 T-type DN15	15T		
				3 T-type DN20	20T		
				3 T-type DN25	25T		



### ■ Instructions for intelligent controller

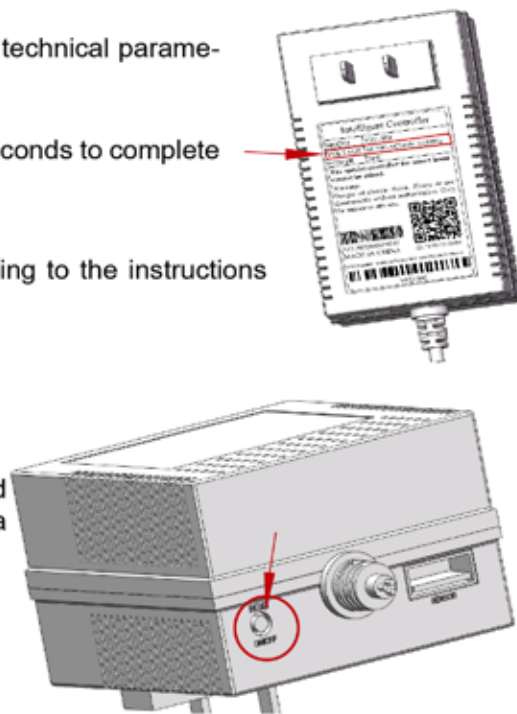
- 1、 Determine whether the input voltage is correct according to the technical parameters on the controller. The voltage is shown in the right figure
- 2、 Plug the controller into the power supply and wait for about 10 seconds to complete the initialization of the controller.



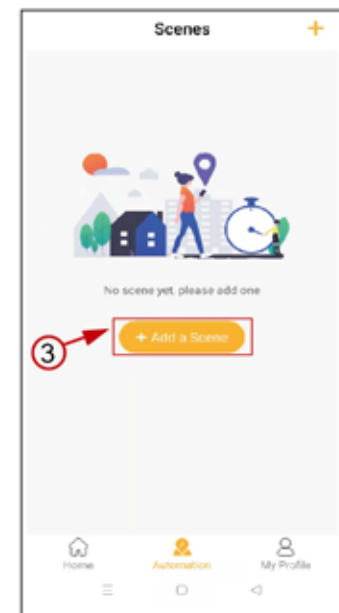
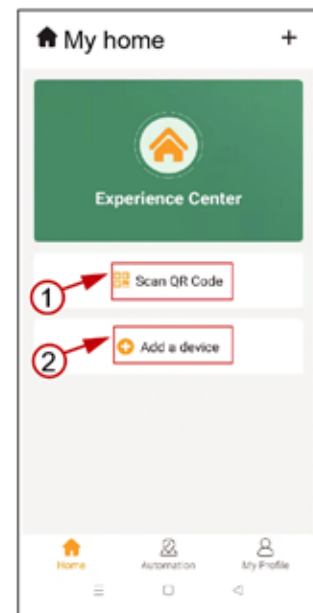
- 3、 Set the distribution network according to the instructions and steps on the controller

- 4、 The distribution network setting button is shown in the figure.

- 5、 When the controller is equipped with a valve, this button is also a manual control button



### ■ APP introduction



After registering and logging in the app, the home page is shown in the figure above. 1 add device for scanning device code, or add device through 2. You can set the scene through 3.

### ■ Intelligent controller status

State	Indicator light	Buzzer	Operation
Networking	Always on	No reaction	
Not networked	Bright breath	No reaction	
Off-line	Bright breath	No reaction	
Distribution network	Flash fast	Ring 1S	Long press the distribution network key for 10 seconds, the indicator light flashes and the buzzer rings Ring for one second to enter the distribution network state
Primary alarm	Always on	Gap sound	Sensor primary alarm
Secondary alarm	Always on	Rapid sound	Sensor Secondary alarm

### ■ Security check

1. Scan the QR code on the packaging box or product label of the product with wechat or relevant QR code scanning tools. Or enter it in the browser <http://www.w-ipts.com>, enter the 14 bit anti-counterfeiting code in the search box



2. The location of the QR code is indicated in the figure above.
3. The scanning result is product related information.