

### 3 Warnings on Wiring

■ Before installation, please make sure voltage practicable range.

Voltage	DC		AC	
	5V	9-24V	9-24V	110-220V
Practicable range	3.6-5.5V	9-28V	9-28V	95-255V

Please don't surpass the upper limit and lower limit of practicable range.

The circuit will be burned if surpassing the upper limit. The circuit will work improperly if surpassing the lower limit.

■ The wire terminal is for inspection on production line. Users should cut it when using.

### 4 Technical Parameters

Series	Voltage	Power	Max Torque	Operating time
B2	DC 5V	3W	2Nm	5-7S
★ B3	DC 5V	3W		
B5	AC/DC 9-24V	5W		
	AC 110-220V	6W		

Inform respectively:

We are not responsible for informing the user if the manual changes.

Address: Jinping Road#10, Nankai Industrial Park, Nankai Distric, Tianjin, China

Tel: 86-22-27692977 27696109 Website: WWW.KLD.CN

# KLD

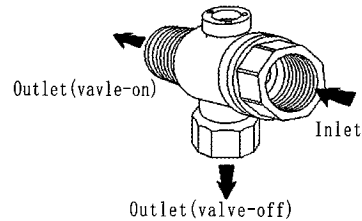
## Motorized Valve

# MANUAL

## 1 Warnings on Installment and Usage

### 1.1 Warnings to KLD20 Series

- Need to be installed according to wiring graph and pay attention to working voltage.
- As for IP67, don't use it in too moist and sodden occasion for long time.
- If the water quality is poor, we suggest installing filter. Dirt particles in the water, such as small sand, rock, etc, may damage sealing.
- Flow direction: .
  - a.No require to 2-way(direct) series:
  - b.To 3-way (Tee) series , please refer right graph.

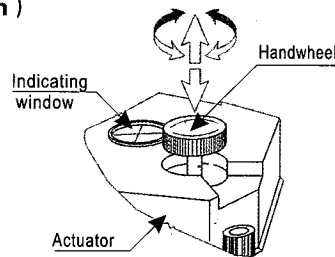


### 1.2 F type (damp-proof)

- F type should not be exposed to water, and the vent is not allowed to be watered.
  - F series have the function of excluding damp, and they should not be cut supply power before the valve is totally in place.
  - The vent should face the earth. There are two rubbers in the actuator. Please remove the one which faces the earth.
- Attention: F-type users should pay special attention to the above warnings. If user doesn't operate according to the manual, he should take on all the responsibilities if the valve work improperly.

### ★ 1.3 KLD20S ( With manual override function )

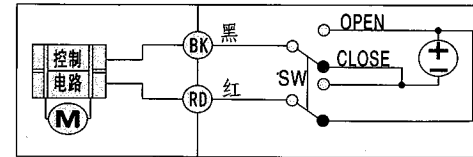
- Manual override is permitted to use only when power is cut.
- Lift the handwheel, and turn it left and right until the valve is in place.
- When the blackline on the indicator is horizontal, the valve is on; When vertical, the valve is off.
- Please press down handwheel after using manual override in order to work properly when power is supplied.



20S manual override chart

## 2 Instructions on Wiring

### 2.1 B2 Control Mode



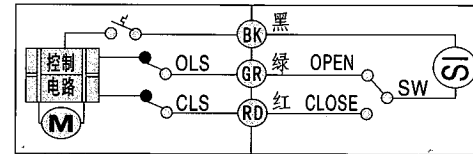
B2 Control Mode Chart

#### Instructions:

1. When SW is connected with [OPEN], the valve will close and keep off.
2. When SW is connected with [CLOSE], the valve will open and keep on.

Note: SW is double connection plane switch

### ★ 2.2 B3 Control Mode

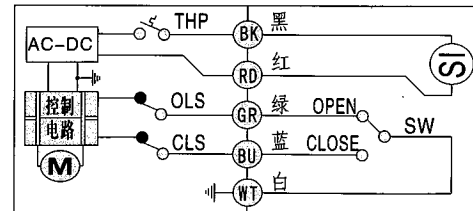


B3 Control Mode Chart

#### Instructions:

1. DC: SW connects positive, BK connects negative.
2. When SW is connected with RD, the valve will close and keep off.
3. When SW is connected with GR, the valve will open and keep on.

### 2.3 B5 Control Mode



B5 Control Mode Chart

#### Instructions:

1. DC: RD connects positive. BK connects negative.  
AC: The wires can be connected arbitrarily.
2. When SW is connected with BU, the valve will close and keep off.
3. When SW is connected with GR, the valve will open and keep on.

#### Attentions:

- 1.Regarding B5, control terminal (blue,white, green)can't connect with power supply.
- 2.When the valve totally opens or closes, the motor power will be cut automatically. ( F type will run heating resistance automatically)