

# ENVIRONMENTAL CONTROL SYSTEM SOLUTIONS

## environment control

Professional solutions for intelligent lighting, ventilation and smoke exhaust in modern buildings

DESIGNED BY RICHMAT

Qingdao Richmat Intelligence Technology Inc.

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WEB



WECHAT



**Richmat 豪江**

2024

Learn about Richmat  
in a minute

## 20 years experience in manufacture



### 2020 Globalization

Established Hebei,  
Guangzhou, Korea and U.S. branches,  
become a multinational corporation.



### 2017 Base

2016-2018, built up  
the 2nd,3rd and 4th production base.  
All Linear actuator,controller and plastic  
injection are self-developed.



### 2015 Growing up

Recognized by European and U.S.  
market.



### 2013 Medical Care

Gain reputation in medical care area.



### 2008 Certificate

Certificated by IOS9001.



### 2003 Establishment

Company founded and started  
with dualactuator.

## Richmat<sup>®</sup> You need it, Richmat bring it to you.

Richmat can help you build up your own smart,  
convenient and comfortable product series.

We devote ourselves to provide satisfied after-  
sales service, for every single client.

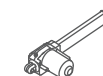
## Qingdao Richmat Intelligence Technology Inc.



Richmat is a professional actuators and controllers producing join-stock  
company integrated the development, production and marketing. Headquartering  
in Qingdao, China.



Richmat is dedicated to smart home, medical care, smart office and industrial  
transmission area and had been awarded dozens of patents, Richmat products are  
sold all over the world with the highest quality and reputation.



Richmat has devoted to the design, development and manufacture of actuators,  
the main products include: linear and dual actuator, hand controls, controllers  
and corresponding accessories, to meet your needs.



ISO9001



RoHS



IEC60601-1



## Trust RICHMAT

# Chain window opening motor

Quiete

Convenient

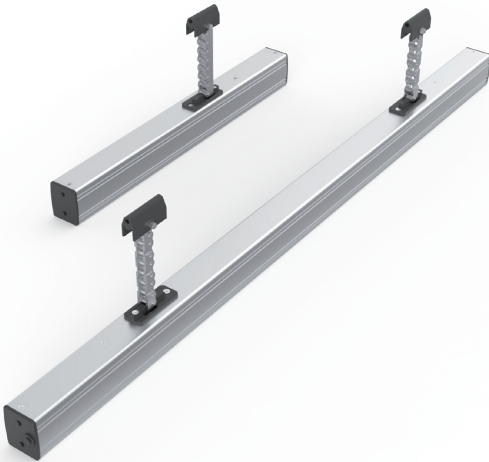
Efficient

The chain adopts high-strength 304 stainless steel material, which can be firmly locked and effectively prevent shaking after the chain is extended.

The body adopts anodized alumina sandblasting process to improve the life and effectively prevent oxidation.

### Small footprint

The chain window opening motor can fix the fuselage on the same side of the window eave, and expand and expand the window through the unilateral fixed stainless steel chain, occupying very small space;



### Easier installation

After fixing the fixed base on both sides of the motor and connecting the chain with the window, the installation can be completed. For the construction of the factory building, the construction period can be effectively saved

### Environment control

Ventilation and lighting solutions for all kinds of places

### Can be selected according to demand

RICHMAT industrial traditional fields have been widely used in many industries, environmental control is only one of its representative products, if you have other product needs, you can contact our engineers for inquiries;

Industrial automation

Farm machinery

Clean energy

Special machinery

## LW2 Series

### Product feature

- AL alloy housing
- 10,000 lifetime
- Strong anti-bending chain
- Anti-corrosion
- Electric blocking rotation
- Anodizing

### Performance parameter

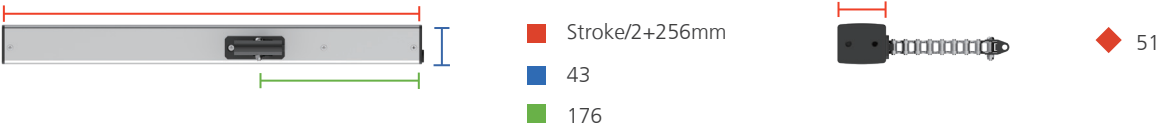
400N	10mm / s
Push/Pull	On load speed
1000N	Stroke/2+256 mm
Self-lock	Installation length



### Certification

- CCCF

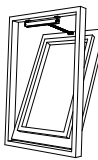
### External dimension (mm)



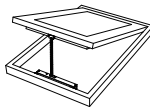
### Applicable window type (part)



- Hopper window



- Top-hung window



- Skylight

### Product selection table

Product model	Working Voltage	Push/Pull	Max current	Stroke	Speed	Temperature	IP Class
HJLW2-0300	DC24V ± 10%	400N / 400N	1.0A	300 mm	10 mm / s	-20℃ - 75℃	IP32
HJLW2-0400	DC24V ± 10%	400N / 400N	1.0A	400 mm	10 mm / s	-20℃ - 75℃	IP32
HJLW2-0500	DC24V ± 10%	400N / 400N	1.0A	500 mm	10 mm / s	-20℃ - 75℃	IP32



Product feature

LW3Series

- AL alloy housing

• 10,000 lifetime
- Anti-corrosion

• Electric blocking rotation

Performance parameter

1000N

Push/Pull

6mm / s

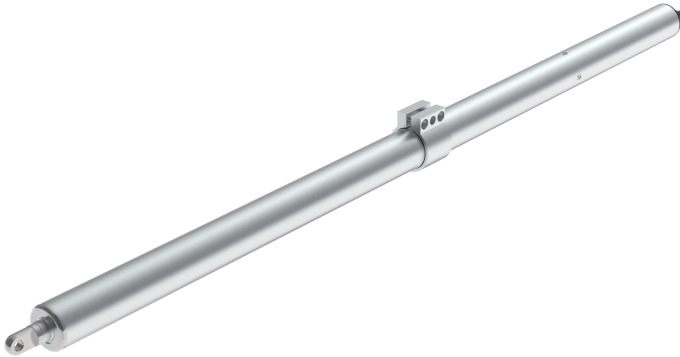
On load speed

2000N

Self-lock

Stroke+310 mm

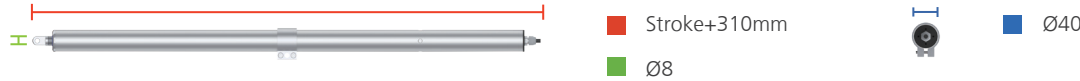
Installation length



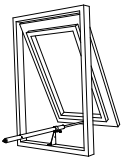
Certification

- CCCF

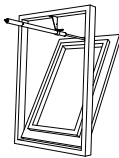
External dimension (mm)



Applicable window type (part)



- Hopper window



- Top-hung window



- Skylight

Product selection table

Product model	Working Voltage	Push/Pull	Max current	Stroke	Speed	Temperature	IP Class
HJLW3-0400	DC 24V ± 10%	1000N / 1000N	1.2A	400mm	10 mm /s	-20℃ - 75℃	IP65
HJLW3-0500	DC 24V ± 10%	1000N / 1000N	1.2A	500mm	10 mm /s	-20℃ - 75℃	IP65
HJLW3-0600	DC 24V ± 10%	1000N / 1000N	1.2A	600mm	10 mm /s	-20℃ - 75℃	IP65

Product feature

LW4Series

- AL alloy housing

• 10,000 lifetime

• Strong anti-bending chain
- Anti-corrosion

• Electric blocking rotation

Performance parameter

800N

Push/Pull

10mm / s

On load speed

1500N

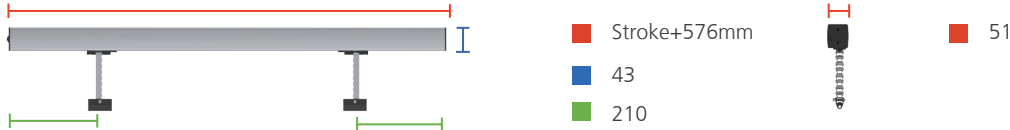
Self-lock

Stroke+576 mm

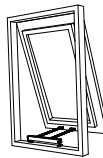
Installation length



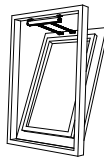
External dimension (mm)



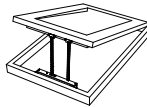
Applicable window type (part)



- Hopper window



- Top-hung window



- Skylight

Product selection table

Product model	Working Voltage	Push/Pull	Max current	Stroke	Speed	Temperature	IP Class
HJLW4-0300	DC 24V ± 10%	800N / 800N	2.0A	300mm	10 mm /s	-20℃ - 75℃	IP32
HJLW4-0400	DC 24V ± 10%	800N / 800N	2.0A	400mm	10 mm /s	-20℃ - 75℃	IP32
HJLW4-0500	DC 24V ± 10%	800N / 800N	2.0A	500mm	10 mm /s	-20℃ - 75℃	IP32



Product feature

• AL alloy housing

• 10,000 lifetime

• Anti-corrosion

•  Original factory microswitch

Performance parameter

800N

Push/Pull

9.5mm / s

On load speed

800N

Self-lock

Stroke+220 mm

Installation length

Certification

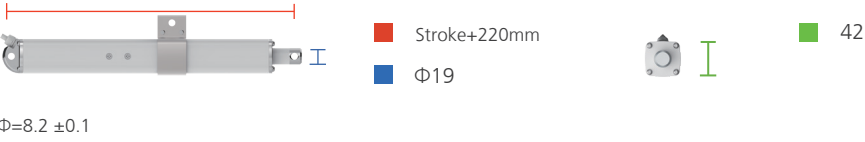
• CCCF

A301S

Series



External dimension (mm)



Applicable window type (part)



Product selection table

Product model	Working Voltage	Push/Pull	Max current	Stroke	Speed	Temperature	IP Class
HJA301S-0300	DC 24V ± 10%	800N / 800N	2.0A	300mm	7 mm /s	-20℃ - 75℃	IP65
HJA301S-0400	DC 24V ± 10%	800N / 800N	2.0A	400mm	7 mm /s	-20℃ - 75℃	IP65
HJA301S-0500	DC 24V ± 10%	800N / 800N	2.0A	500mm	7 mm /s	-20℃ - 75℃	IP65

Product feature

• AL alloy housing

• 10,000 lifetime

• Anti-corrosion

•  Original factory microswitch

Performance parameter

1000N

Push/Pull

9mm / s

On load speed

1000N

Self-lock

Stroke+120 mm

Installation length

Certification

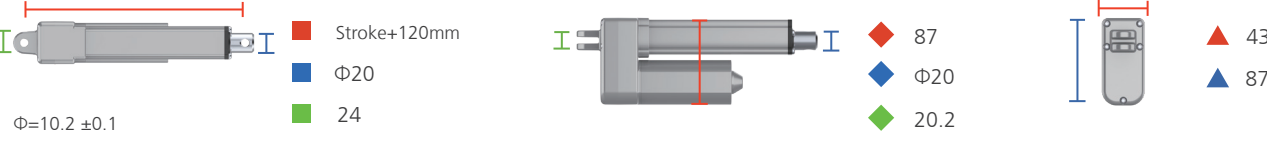
• CCCF

A71

Series



External dimension (mm)



Applicable window type (part)




Product selection table

Product model	Working Voltage	Push/Pull	Max current	Stroke	Speed	Temperature	IP Class
HJA71-0300	DC 24V ± 10%	1000N / 1000N	2.6A	300mm	9.0 mm /s	-20℃ - 75℃	IP65
HJA71-0400	DC 24V ± 10%	1000N / 1000N	2.6A	400mm	9.0 mm /s	-20℃ - 75℃	IP65
HJA71-0500	DC 24V ± 10%	1000N / 1000N	2.6A	500mm	9.0 mm /s	-20℃ - 75℃	IP65

# A72

Series

## Product feature

- AL alloy housing
- 10,000 lifetime
- Anti-corrosion
-  Original factory microswitch

## Performance parameter

1000N

Push/Pull

7mm / s

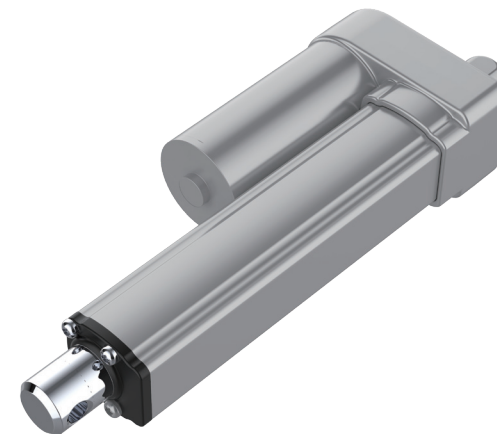
On load speed

1000N

Self-lock

Stroke+130 mm

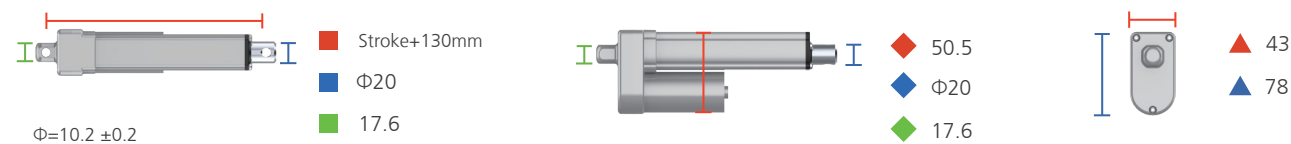
Stroke



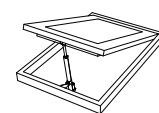
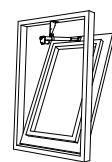
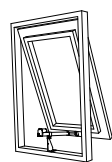
## Certification

- CCCF

## External dimension (mm)



## Applicable window type (part)



- Hopper window

- Top-hung window

- Skylight

## Product selection table

Product model	Working Voltage	Push/Pull	Max current	Stroke	Speed	Temperature	IP Class
HJA72-0300	DC 24V ± 10%	1000N / 1000N	2.0A	300mm	7 mm /s	-20°C - 75°C	IP65
HJA72-0400	DC 24V ± 10%	1000N / 1000N	2.0A	400mm	7 mm /s	-20°C - 75°C	IP65
HJA72-0500	DC 24V ± 10%	1000N / 1000N	2.0A	500mm	7 mm /s	-20°C - 75°C	IP65

# C81

Series

## Product feature

- Emergency opening
- Group ventilation
- Automatic control
- Buzzer alarm

## Performance parameter

AC 180 - 240V

Input voltage

DC 24 V

Output voltage

42 A

Output current

1000 W

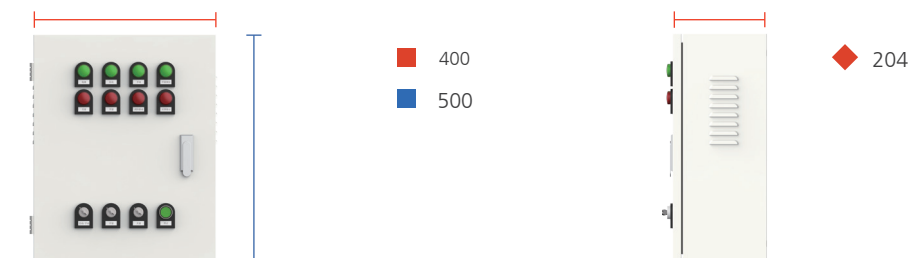
Output power

## Certification

- CCCF



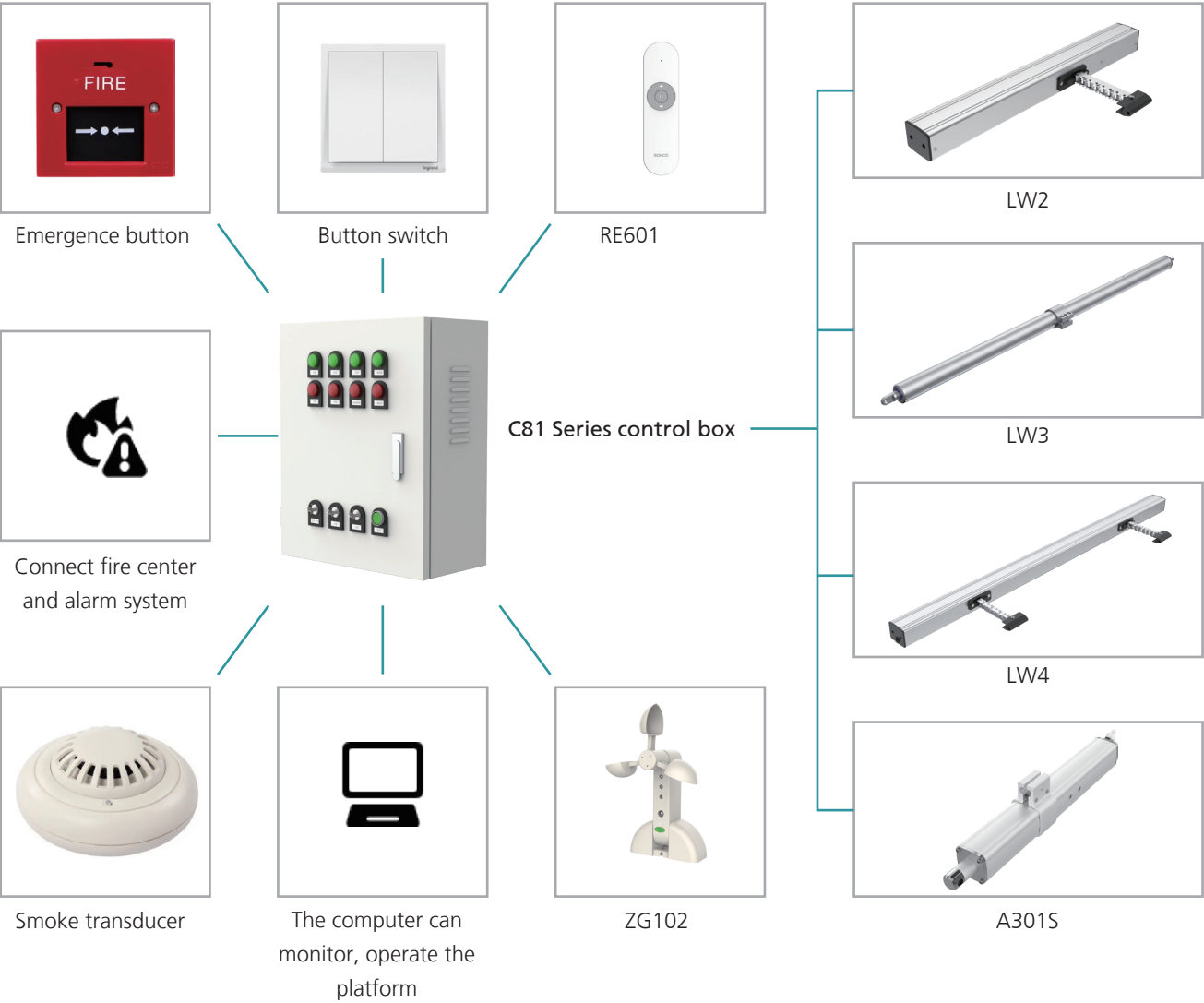
## External dimension (mm)



# Control system diagram

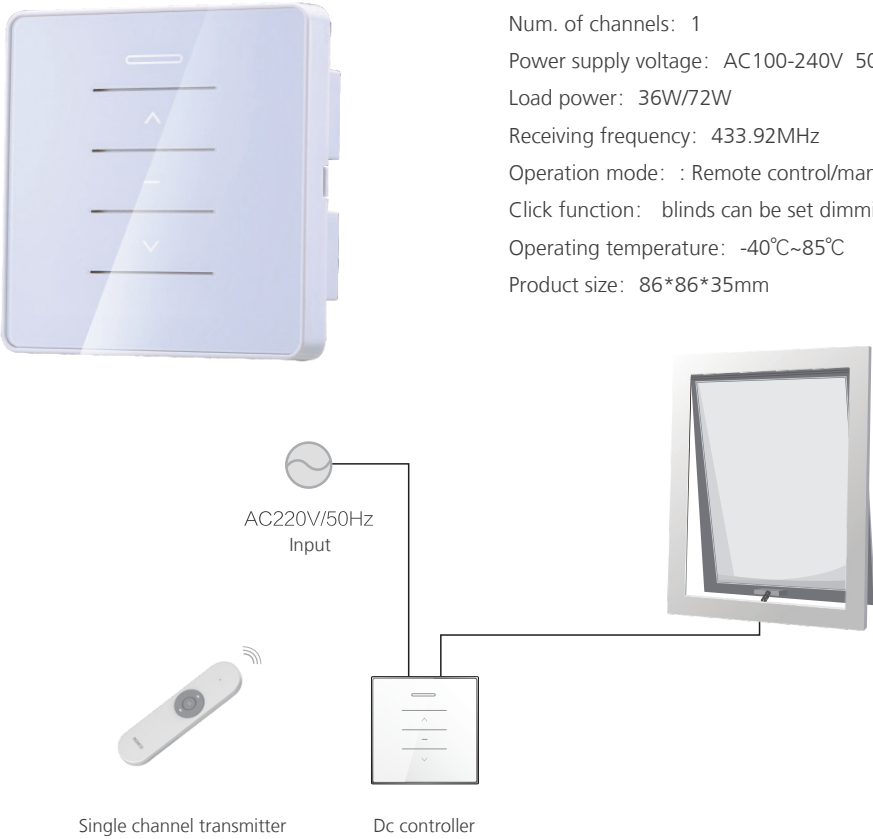
Diversified connections, easy operation

The C81 control box can be connected to a variety of control rods and control systems, whether it is a screw motor or a linear screw motor, which can be quickly accessed and supports sensing facilities such as wind and rain sensors.Users can use handheld or wireless remote control to control and drive the complete set of systems,which is greatly convenient for daily work and life.



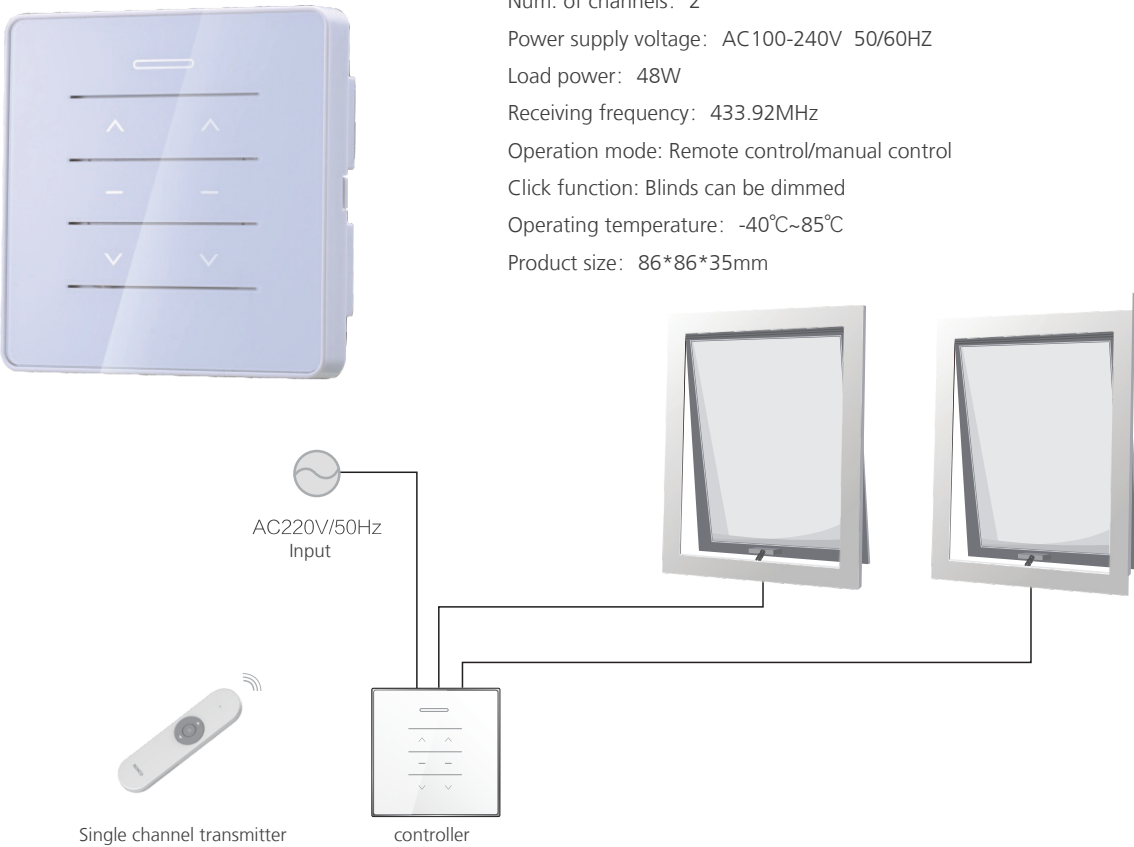
# ZC34-03-1.5A/3A

Num. of channels: 1  
 Power supply voltage: AC100-240V 50/60HZ  
 Load power: 36W/72W  
 Receiving frequency: 433.92MHz  
 Operation mode: : Remote control/manual control/scenery rain  
 Click function: blinds can be set dimming  
 Operating temperature: -40°C~85°C  
 Product size: 86\*86\*35mm



# ZC34-04-2A

Num. of channels: 2  
 Power supply voltage: AC100-240V 50/60HZ  
 Load power: 48W  
 Receiving frequency: 433.92MHz  
 Operation mode: Remote control/manual control  
 Click function: Blinds can be dimmed  
 Operating temperature: -40°C~85°C  
 Product size: 86\*86\*35mm







## ZN103

Intelligent voice transmitter  
 Size: 80mm\*28mm  
 Weight: 85g  
 Transmitting distance:  $\leq 50\text{m}$   
 Emission frequency: 433.92MHz  
 Light source power:  $9 \times 0.25\text{W}$   
 Control mode: Manual/Voice control  
 Supply voltage: AC100-240V 50/60Hz



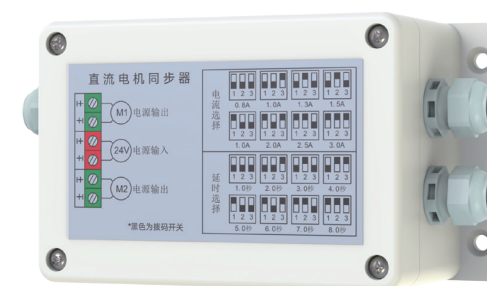
## RE601

Single-channel handheld transmitter  
 Emission frequency: 433.92MHz  
 Power supply: 1.5V\*2 battery  
 Transmission frequency:  $\leq 10\text{mW}$



## ZG102

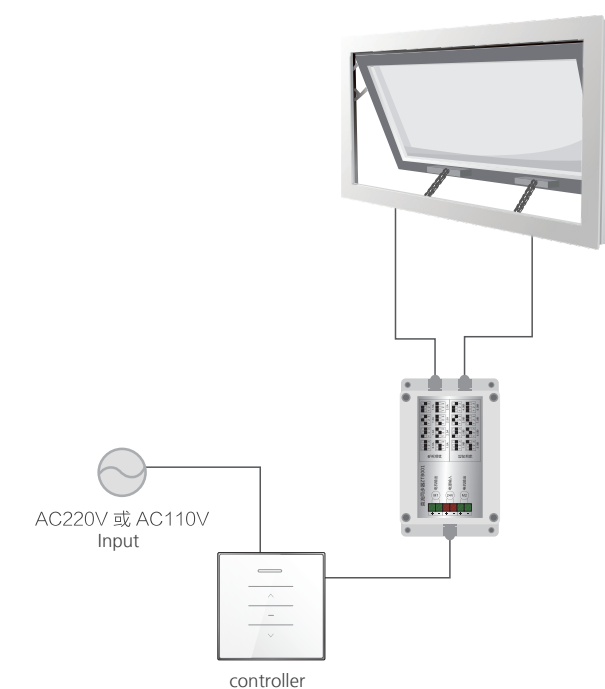
Wired weather sensor  
 With wind sense, rain sense intelligent sensing function  
 It can be controlled with multiple accepting switches  
 Different intensity induction values can be set according to shading requirements  
 Surface moisture-proof treatment  
 Suitable for electric window opener, electric shutter, electric awning, etc



## ZTB0001

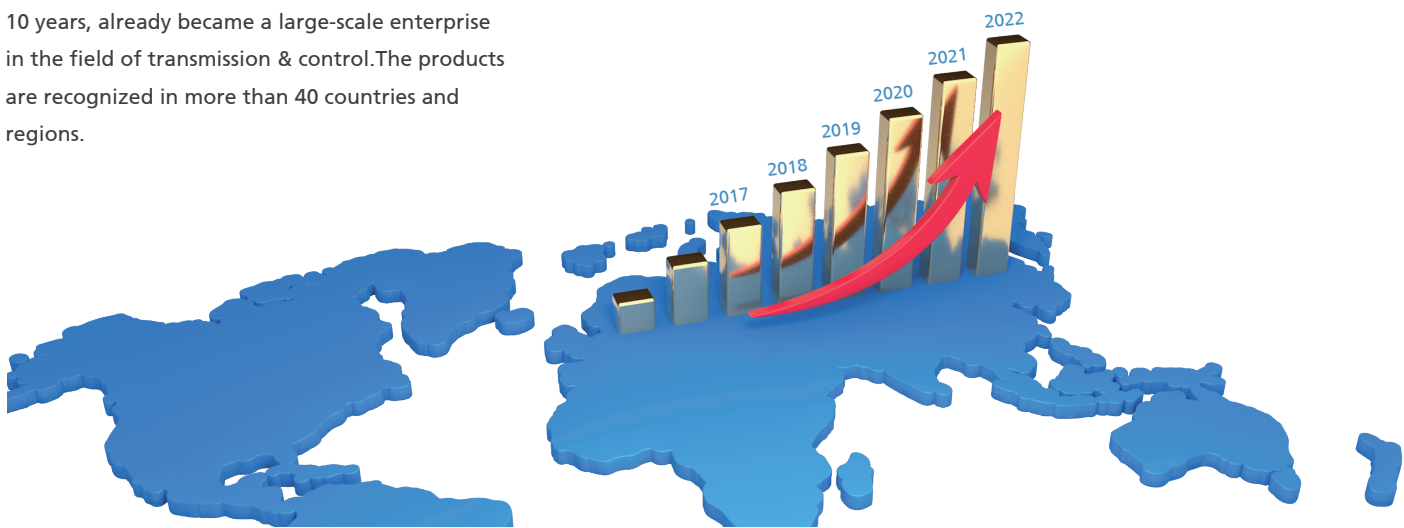
Dc synchronizer  
 Supply voltage: 24V (both positive and negative)  
 Output voltage: 24V  
 Protection current: 0.8A~3A  
 Standby power consumption: 10mA  
 Application: dual motor synchronization  
 Product size: 100\*68\*50MM

## Dc synchronization solution



RICHMAT's global influence

RICHMAT has been making profits for more than 10 years, already became a large-scale enterprise in the field of transmission & control. The products are recognized in more than 40 countries and regions.



Integration of industry chain



RICHMAT has sophisticated industrial chain .By 2022, RICHMAT has achieved complete self-sufficiency in moulding, injection , electrics development, and assembling. Until now, there are 4 production bases, covering a total area of 100,000 m² and nearly 1,200 employee.

Every 6 seconds

There's a RICHMAT actuator installed

RICHMAT's industrial manufacturing capacity enable it to produce and sell 5 million motors a year.

<b>5,000,000</b> production capacity per year	<b>10,000</b> production capacity per day
<b>7 - 15 day</b> Short Lead Time	<b>3 years</b> Warranty



Mould development      Injection moulding      Electronic R&D      Assembling production

Certificates System

Quality system / intellectual property / trademark patent / certificate



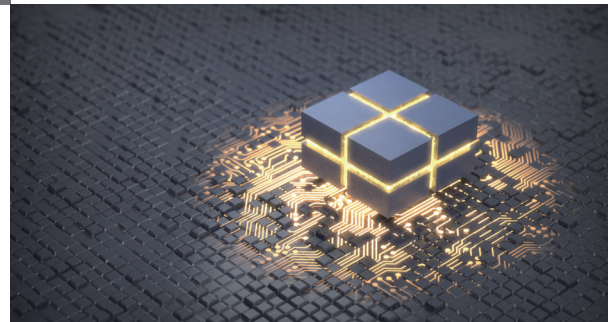


## Richmat High-Tech Industrial Park

Richmat basement locates in Jimo semiconductor high-tech Industrial Park. Billions investment and carries main production task of Richmat.

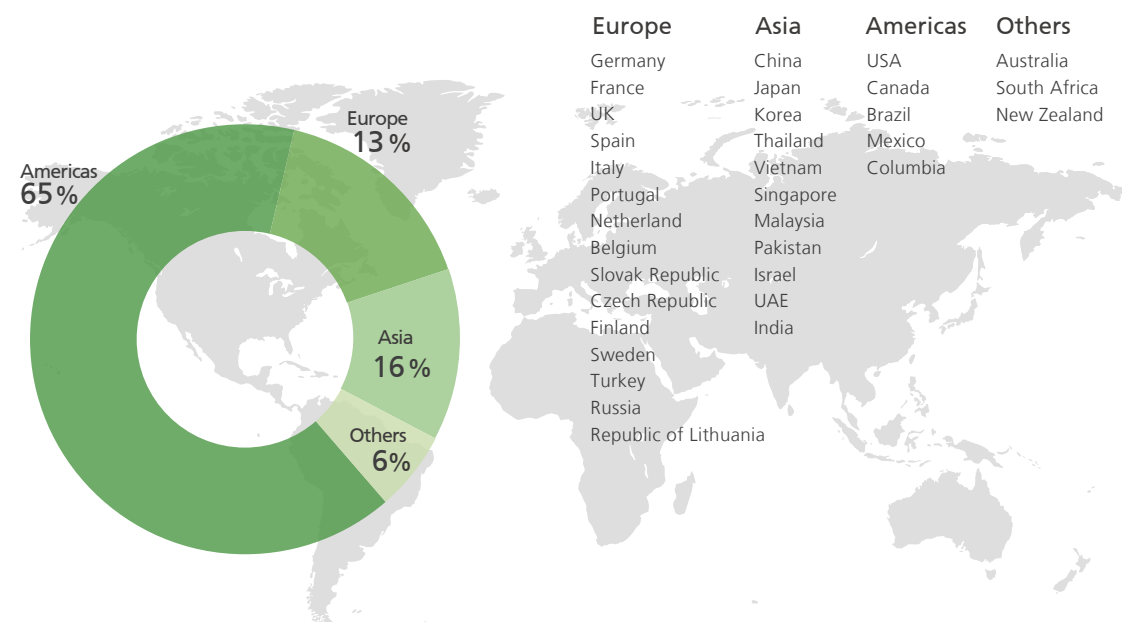
## RICHMAT Electronic technology R&D center

RICHMAT electronic technology R&D center is mainly for electronic component development, involved a series of products like electronic control, inductor, transducer and PCB. This is the top level electronic technology R&D center in Shandong Province.



# RICHMAT

## International sales network



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