HEINDA®

WINDOW OPENER

WINDOW OPENER

What is natural exhaust ventilation control system

The control system can be divided into two parts: Daily ventilation and fire Exhaust System

It has the function of fire Exhaust system and fire linkage

Daily ventilation can be automatically controlled by manual switch and wind-rain sensor

A variety of models, capacity of the control box, for more suitable configuration

The control box has the function of automatic detection

The fire smoke exhaust part can be connected with one or more alarm lines, which can be controlled by external alarm equipment sucias emergency button and smoke detector

In case of emergency, the backup battery of the control box can work continuously for 72 hours

Importance and necessity of natural exhaust ventilation control system

When a building fire occurs, more casualties are caused by smoke and heat. Through the operation of the natural smoke exhaust system the smoke and heat inside the building can be exhausted to the maximum extent, and the escape and survival rate of indoor personnel under fire conditions can be improved.

The natural exhaust and heat exhaust system is connected with the fire control system of buildings automatically. When a fire occurs, all smoke exhaust windows will be opened automatically. and the smoke heat will be discharged quickly. so as to reduce the accumulatior of smoke heat in the building, effectively protect the safety of the internal structure and life and property of the building

Description of natural smoke exhaust and ventilation control system in building

A source of the complete system: in this system, each part of the windowing machine adopts the way of networking to meet the complex control requirements.



Manual emergency switch
In case of fire, open all fire smoke exhaust windows with the highest priority and send out fire alarm



Smoke detector
In case of fire, the window opener will open automatically.



Rain sensor
The wind rain sensor can automatically monitor and control the window opener to open or close automatically



Temperature sensor
Temperature sensor is monitored automatically, and window opener is controlled to open or close automatically



Control box
Receiving, processing and sending signals, standby emergency power supply,self power supply in case of emergency.



Ventilation switch
The ventilation switch is used in the electric window system as a daily ventilation window switch.

ELECTRIC WINDOW OPENER SERIES

As the latest development of modern windows, intelligent electric window opener is widely used in many fields

High level window: the installation of the window is too high or far away, which cannot be reached by manpower alone

The window is too heavy, it is difficult to open or close, and the manual switch is inconvenient to use

Fire smoke exhaust windows with fire linkage ventilation requirements on floors

If there are weather requirements for opening /closing windows, the windows should be closed automatically in case of rain in the warehouse

The room temperature requirements, such as:vegetables or flowers greenhouse windows

If the temperature is too high, the window will be opened automatically, such as the window of communication room

Strict requirements for indoor air index, timely ventilation

Indoor needs more appropriate brightness, need to adjust the shutter angle to achieve

Windows need more strict sealing force, such as skylight rainproof need to be closed more tightly

Other special occasions, such as chemical, dust and other factory workshops, need timely ventilation

Green, intelligent, energy-saving two generations of high-rise buildings, such as curtain walls and windows

Characteristics of window opener

It can automatically open or close single or multiple windows by means of remote control (the distance between remote control and indoor can be more than 50 meters), manual button, centralized control of computer host or remote control of mobile phone (telephone)vhich brings great convenience to users' life. It improves people's quality of life.

It can be linked with the alarm center of public security fire department to realize the fire safety control of smoke exhaust window

Through the expansion and assembly of body sensors, wind and rain sensors, Smoke alarm and temperature controller, timer and other intelligent devices the anti-theft is realized.

Selection of window opener

>> Selection of window opener

Power supply for window opener: AC220V, ac110V, DC24V and other common daily ventilation power supply AC220V must be used when there are fire requirements

>> Selection of push and pull force for window opener

Generally between 200n-1200n, simple thrust calculation F-1 / 2 (self weight of window sash) * (maximum opening stroke / window height) the force of the smallest window opener is 200N, which can basically meet the use of general windows.

>> Select the travel or angle of the window opener

Opening stroke: the required opening angle is converted into the straight-line distance of window opening (according to cosine heorem), and the daily ventilation opening angle is generally not more than 30 and the stroke is 300-400mm; however, for fire protection requirements, the opening angle of window is generally 50° when the fire signal linkage, and the specific design requirements shall prevail.

>>Choose the type of window opener

1. Push pull force of chain window opener: 200N, 400N,600n-800n stroke: 200, 300, 400-1200mm

2. Screw type window opener push pull force: 200n-1000n, 1500, 2000N, stroke: 50, 300, 400-1500mm

The chain type electric window opener is suitable for closing the window in a straight line, and the window sash has good sealing.

Up / down / hanging window: chain type. crew type can also be used, but the screw type has the largest thrust, and the chain type is more beautiful.

3.The designed window is wide or overweight: the window is large (more than 1.5m wide) or needs a large push / pul force (more than50N) when opening/ closing the window. It will be considered to use double electric window opener. There are double screw type and double chain type, that is, two screw type window opener or two chain type window opener.

4.Electric push-pull window opener: customized according to the width of the window, synchronous belt drive.

5.Electric sliding skylight: the single opening area of electric sliding window can be 5m and it can be opened in large area when combined. Unique structural design, waterproof and rainproof design, in order to achieve better waterproof requirements. the window adopts advanced four corner welding technology.

FOLDING ARM WINDOW OPENER

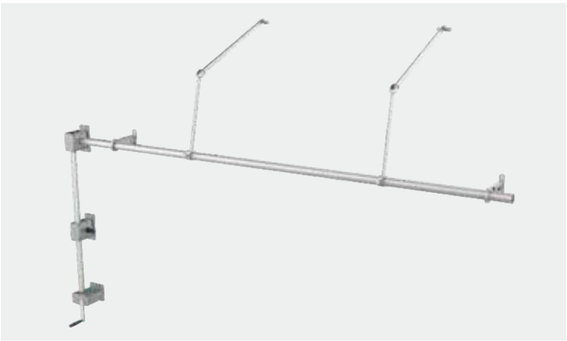
Functional features

Exquisite appearance design, all aluminum alloy shell

Overall mechanical transmission, Support height adjustable , easy installation and durable

According to the size of the window, 1-10 windows can be linked

The angle can be adjusted according to the different installation position

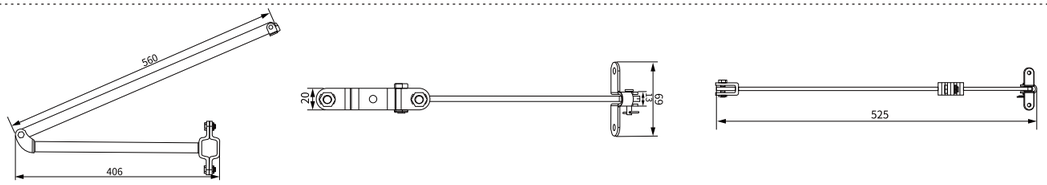


Technical parameter

Folding arm	380480 Folding arm suit
model	KC-QB-500
Material	Steel electroplating
Mech anical life	1,00,000 times
Weight	300N
Arm length	380
Strut length	480
Installation Type	Side and front

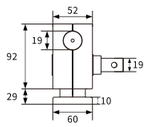
Other specifications can be customized

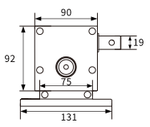
Dimensions and specifications



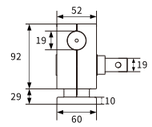
Dimensions of upper and lower middle aircraft

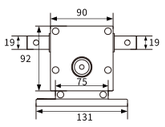
Uppermachine



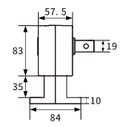


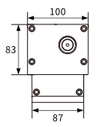
Center machine





Below machine





Applicable window installation diagram



High power electric window opener



Small power electric window opener



Manual upper hanging window, opening down and out



Manual down hanging window, opening down and out



Swing arm horizontal axis middle suspended window

SINGLE CHAIN WINDOW OPENER

Functional features

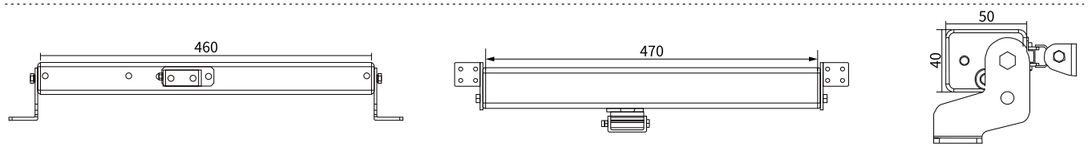
Exquisite appearance design, all aluminum alloy shell
Overload protection to prevent motor overload
The chain is made of carbon steel (or stainless steel) with anti-corrosion treatment, suitable for long-term humid environment.
Itinerary and push-pull force can be customized according to customers' needs
Test more than 30,000 cycles



Technical parameter

Push and pull(N)	400	Mechanical locking function	✓
Locking force(N)	2000	running speed	10~15
Stroke length (mm)	100-1000(Customized)	Multi point lock linkage	✓(Optional)
Output mode	Single chain	Maximum window width	1.5
DC motor:	✓	Minimum window width	0.5
Single control switch function	✓(Optional)	Rated voltage	Dc24
Electric push control function	✓	Rated current	1.2
Overload protection function	✓	Rated power	28.8
Builtin synchronization function	✓(Optional)	Protection level:	IP30
Fire linkage / daily ventilation two-level contro			✓

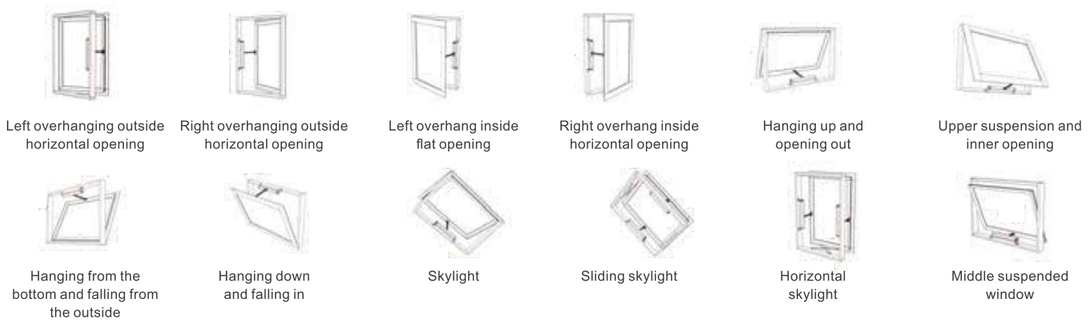
Dimensions and specifications



Comparison table of opening stroke and fuselage length

Product model	KC-LT-300	KC-LT-400	KC-LT-500	KC-LT-600	KC-LT-800	KC-LT-1000
Opening stroke (mm)	300	400	500	600	800	1000
Machine size (mm)	410	460	510	560	660	760

Applicable window installation diagram



DOUBLE CHAIN WINDOW OPENER

Functional features

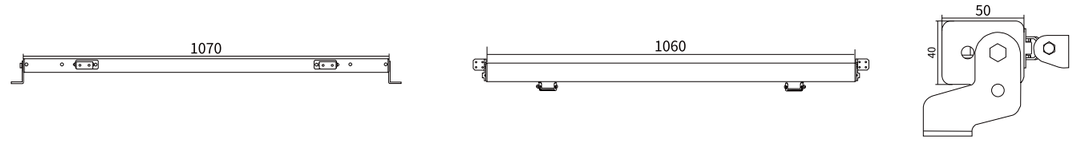
Exquisite appearance design, all aluminum alloy shell
Overload protection to prevent motor overload
The chain is made of carbon steel (or stainless steel) with surface anti-corrosion treatment, which is suitable for long-term humid environment.
The stroke and push-pull force can be specially determined according to the needs of customers
Intelligent app, WiFi, Bluetooth 2.4GHz, infrared and other connection modes are supported
Super quiet
Test more than 100,000 cycles



Technical parameter

Push and pull(N)	800	Mechanical locking function	✓
Locking force(N)	2000	running speed	10~15
Stroke length (mm)	100-1000(Customized)	Multi point lock linkage	✓(Optional)
Output mode	Double chain	Maximum window width	2.5
DC motor:	✓	Minimum window width	0.5
Single control switch function	✓(Optional)	Rated voltage	Dc24
Electric push control function	✓	Rated current	2.4
Overload protection function	✓	Rated power	57.6
Builtin synchronization function	✓(Optional)	Protection level	IP30
Fire linkage / daily ventilation two-level contro			✓

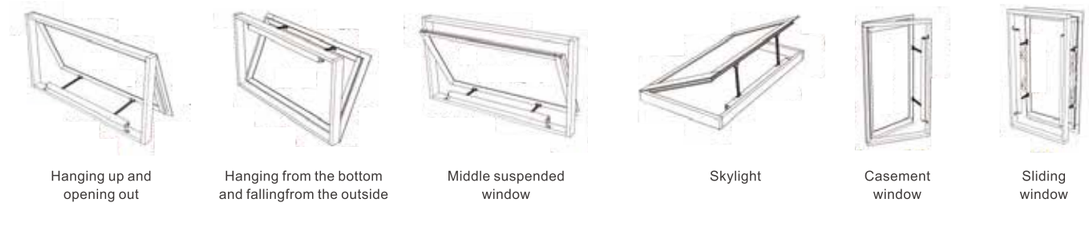
Dimensions and specifications



Comparison table of opening stroke and fuselage length

Product model	KC-LT-300	KC-LT-400	KC-LT-500	KC-LT-600	KC-LT-800	KC-LT-1000
Opening stroke (mm)	300	400	500	600	800	1000
Machine size (mm)	860	960	1060	1160	1360	1560

Applicable window installation diagram



SCREW WINDOW OPENER

Functional features

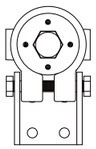
Exquisite appearance design, all aluminum alloy shell
Overload protection to prevent motor overload
It has a complete closed internal thread structure with bettersealing performance, especially suitable for dust, sand, dampand rain environment.
The stroke and push-pull force can be specially determinedaccording to the needs of customers
After closing, the locking force reaches 3000N
Test more than 30,000 cycles

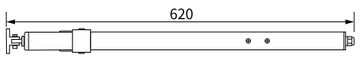


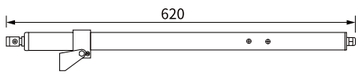
Technical parameter

Thrust and pull (N)	1200	Mechanical locking function	✓
Locking force (N)	3000	Running speed	5
Stroke length (mm)	100-800(Customized)	Multi point lock linkage	✓(Optional)
Output mode	Screw	Maximum window width	2.5
DC motor	✓	Minimum window width	0.5
Sing le control switch function	✓(Optional)	Rated voltage	Dc24
Electric push control function	✓	Rated current	1.7
Overload protection function	✓	Rated power	40W
Built in synchronization function	✓(Optional)	Protection level	Ip54
Two level control of fire fighting linkage and daily ventilation			✓

Dimensions and specifications







Comparison table of opening stroke and fuselage length

Product model	KC-LG-300	KC-LG-400	KC-LG-500	KC-LG-600	KC-LG-800	KC-LG-1000
Opening stroke (mm)	300	400	500	600	800	1000
Machine size (mm)	620	720	820	920	1120	1320

Applicable window installation diagram



Overhanging single pole



Single rod of upper suspended skylight



Double lever of horizontal sliding skylight



Double rod with lower suspension and outer opening



Double pole with upper suspensjon andouteropening

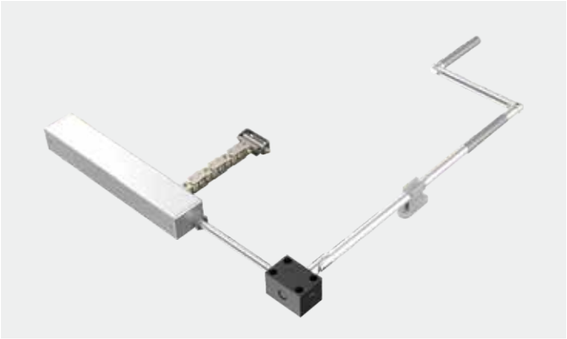


Double pole of upper suspended skylight

MANUAL CHAIN WINDOW OPENER

Functional features

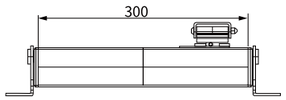
Exquisite appearance design, all aluminum alloy shell
Overall mechanical transmission, support height adjustable, easy installation and durable.
The chain is made of carbon steel (or stainless steel) with anti-corrosion treatment, suitable for long-term humid environment.
According to the size of the window, optional
With self-locking function

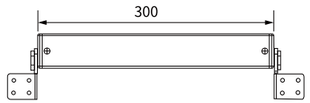


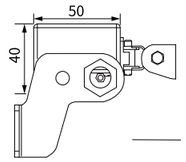
Technical parameter

Push and pull (N)	500	Multi window linkage function	✓(Optional)
Locking force (N)	3000	Linkage quantity	Optional
Stroke length (mm)	100-1000(Customized)	Maximum window width (m)	1.5
Hand push pull function	✓	Minimum window width (m)	0.5
Rocker release function	×	Speed	1.5
Mechanical locking function	✓	Applicable height	1.5-4(Optional)

Dimensions and specifications







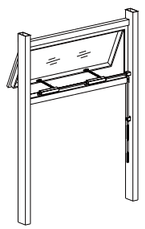
Comparison table of opening stroke and fuselage length

Product model	KC-SY-300	KC-SY-400	KC-SY-500	KC-SY-600	KC-SY-800	KC-SY-1000
Opening stroke (mm)	300	400	500	600	800	1000
Machine size (mm)	300	350	400	450	550	650

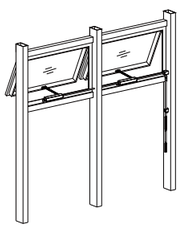
Applicable window installation diagram



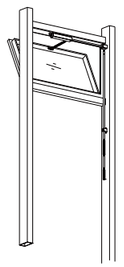
Hand chain
Hanging open window



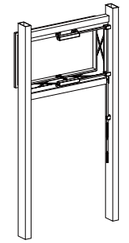
Double chain handshake
Hanging open window



Horizontal pull second hand chain
Hanging open window



Hand chain
Overhanging outside inverted window



Hand chain
Open the window horizontally



Vertical pull second hand chain
Hanging open window

SLIDING ARM WINDOW OPENER

Functional features

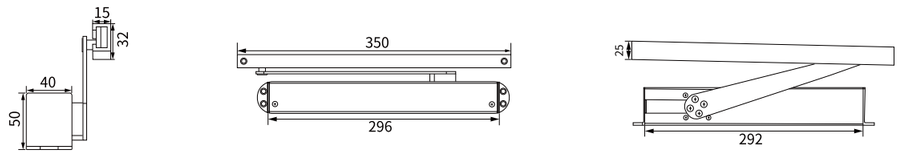
Exquisite appearance design, all aluminum alloy shell
Overload protection to prevent motor averload
The stroke and push-pull force can be specially determined according to the needs of customers
After closing, the locking force reaches 3000N
Test more than 30000 cycles



Technical parameter

Push and pull(N)	400	Mechanical locking function	✓
Locking force (N)	3000	Running speed	5
Stroke length (mm)	360	Multi point lock linkage	✓(Optional)
Output mode	Sliding arm	Maximum window width	2.5
DC motor	✓	Minimum window width	0.5
Sing le control switch function	✓(Optional)	Rated voltage	Dc24
Electric push control function	✓	Rated current	1.7
Overload protection function	✓	Rated power	40W
Built in synchronization function	✓(Optional)	Protection level	Ip54
Two level control of fire fighting linkage and daily ventilation			✓

Dimensions and specifications



Product model

Product model	KC-HB-L	KC-HB-R

Applicable window installation diagram



Left inside top | Left outside top | Left inner opening lower | Left exterior lower | Right inside top | Right outside top | Lower right inner opening | Right outside lower garment

SLIDING WINDOW OPENER

Functional features

Exquisite appearance design, all aluminum alloy shell
Overload protection to prevent motor overload
The timing belt Is made of imported rubber material, suitable for all kinds of harsh natural environment
The stroke and push-pull force can be specially determined according to the needs of customers
After closing, the locking force reaches 3000N
Test more than 30,000 cycles



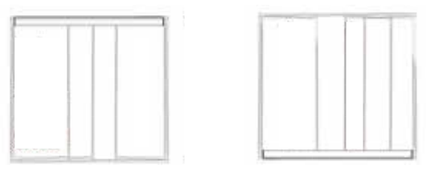
Technical parameter

Push and pull(N)	250	Mechanical locking function	✓
Locking force (N)	3000	Running speed	60
Stroke length (mm)	450-3000 (Customized)	Multi point lock linkage	✓(Optional)
Output mode	Belt	Maximum window width	2. 8
DC motor	✓	Minimum window width	4. 5
Sing le control switch function	✓(Optional)	Rated voltage	Dc24
Electric push control function	✓	Rated current	1.2
Overload protection function	✓	Rated power	28.8
Built in synchronization function	✓(Optional)	Protection level	Ip30
Two level control of fire fighting linkage and daily ventilation			✓

Dimensions and specifications



Applicable window installation diagram

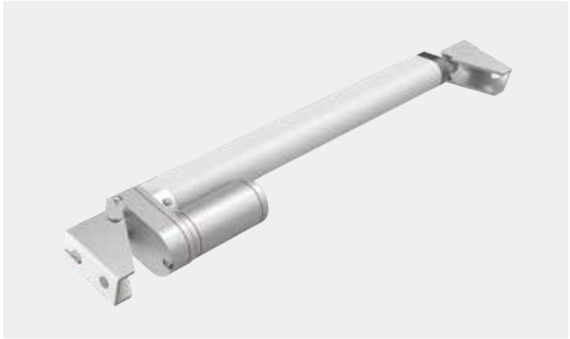


Top mount | Bottom mount

ELECTRIC PUSH ROD SMALL POWER WINDOW OEPNER

Functional features

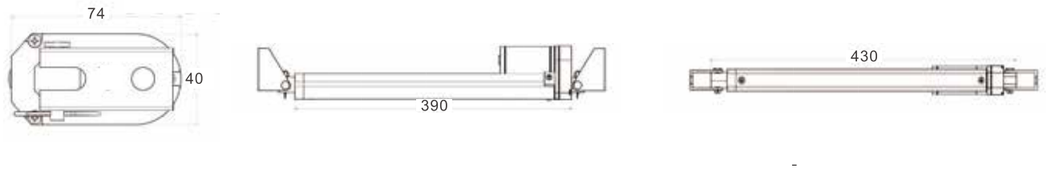
Exquisite appearance design, all aluminum alloy shell
Overall mechanical transmission, adjustable support height, easy installation, durable
According to the size of the window, 1-5 windows can be linked
With self-locking function



Technical parameter

Push and pull(N)	800-1500	Mechanical locking function	✓
Locking force (N)	3000	Running speed	5
Stroke length (mm)	100-800 (Customized)	Multi point lock linkage	✓(Optional)
Output mode	putter	Maximum window width	1.5
DC motor	✓	Minimum window width	0.5
Sing le control switch function	✓(Optional)	Rated voltage	Dc24
Electric push control function	✓	Rated current	1.2
Overload protection function	✓	Rated power	28.8
Built in synchronization function	✓(Optional)	Protection level	Ip54
Two level control of fire fighting linkage and daily ventilation			✓

Dimensions and specifications



Comparison table of opening stroke and fuselage length

Product model	KC-TG-300	KC-TG-400	KC-TG-500	KC-TG-600	KC-TG-800	KC-TG-1000
Opening stroke (mm)	300	400	500	600	800	1000
Machine size (mm)	405	505	605	705	905	1105

Applicable window installation diagram



Hanging from the top and opening from the bottom

Lower hanging upper opening

Horizontal suspension window

ELECTRIC PUSH ROD HIGH POWER WINDOW OPENER

Functional features

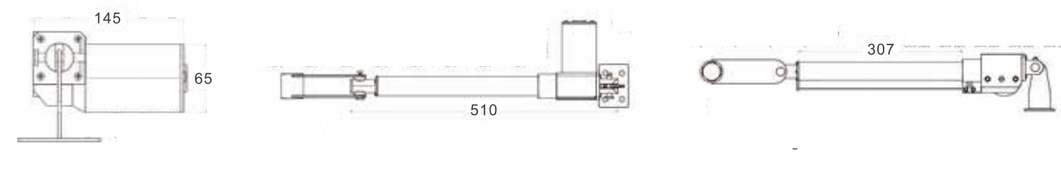
Exquisite appearance design, all aluminum alloy shell
Overall mechanical transmission, adjustable support height,easy installation, durable
According to the size of the window, 1-10 windows can be linked
With self-locking function



Technical parameter

Push and pull(N)	1500-6000	Mechanical locking function	✓
Locking force (N)	8000	Running speed	4-12
Stroke length (mm)	100-400 (Customized)	Multi point lock linkage	✓(Optional)
Output mode	putter	Maximum window width	2.5
DC motor	✓	Minimum window width	1
Sing le control switch function	✓(Optional)	Rated voltage	Dc24
Electric push control function	✓	Rated current	3.5
Overload protection function	✓	Rated power	80
Built in synchronization function	✓(Optional)	Protection level	Ip44
Two level control of fire fighting linkage and daily ventilation			✓

Dimensions and specifications



Comparison table of opening stroke and fuselage length

Product model	KC-DTG-100	KC-DTG-200	KC-DTG-300	KC-DTG-400
Opening stroke (mm)	100	200	300	400
Machine size (mm)	275	375	475	575

Applicable window installation diagram



Hanging from the top and opening from the bottom

Lower hanging upper opening

Horizontal suspension window

CONCEALED WINDOW OPENER

Functional features

Withstanding tens of thousands of push and pull strength and fatigue test verification, reliable performance; thin and light motor design, applicable range of shopping; mechanical clutch, manual, automatic mode seamless switching.
DC output, anti-electrocution, intelligent anti-pinch sensor, safe and reliable; mute motor, more comfortable.
Can be connected to the wind and rain, smoke sensor, APP remote control, matching Tmall Genie, millet audio, intelligent life, enjoy the convenience.

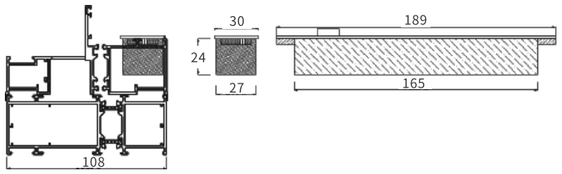


Technical parameter

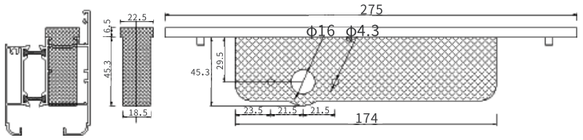
Product Model	KC-YCS	Operating Temperature	-40°C~65°C
Product Size	dimensional drawings	Receiving frequency	868Hz
Input Voltage	AC220V	Operating Noise	<40dB
Output Voltage	DC24V	Protection class	>Ip23
Input Frequency	50-60Hz	Output torque	180N*m
Load power	≤36W×2	Window opening speed	12°/s

Dimensions and specifications

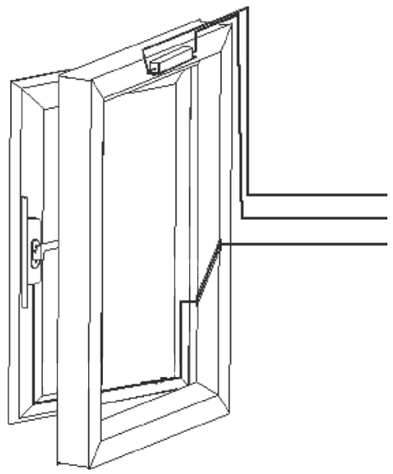
Flush motor size:



Handle motor size：



Applicable window installation diagram



FIRE LINKAGE CONTROL BOX



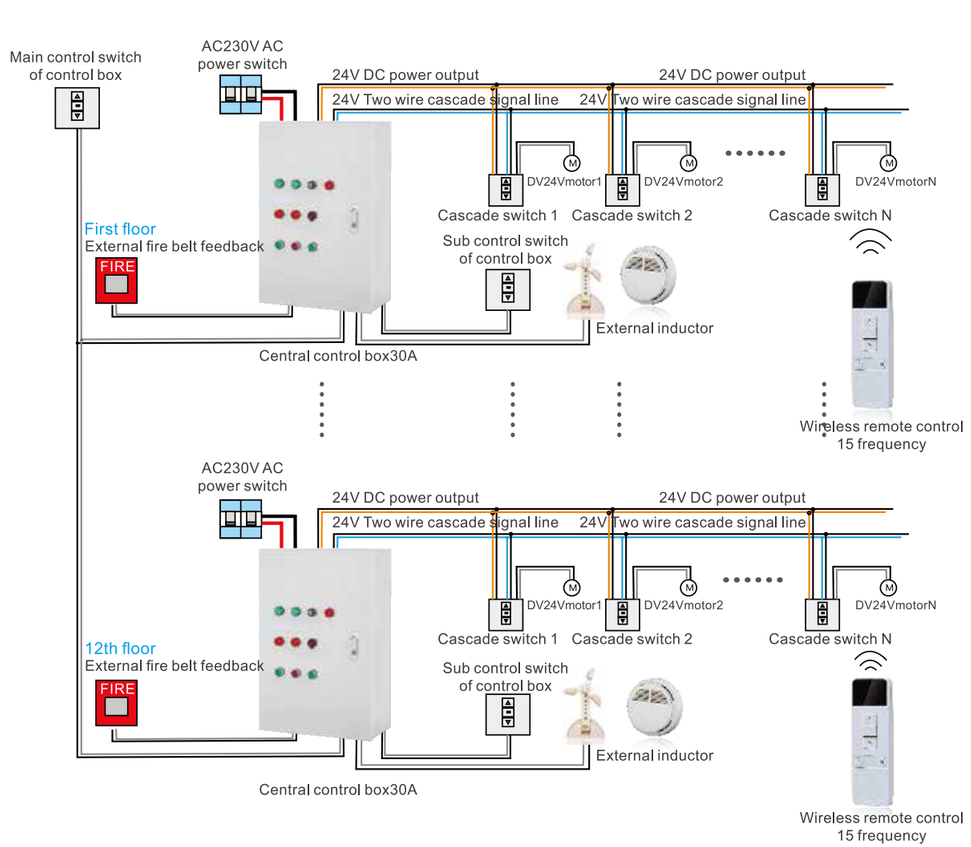
600x400x200mm

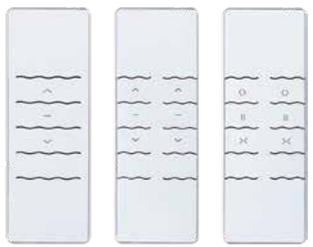
Product features: Intelligent control system through the equipment connected to the building's fire control centre. In the event of fire and fire centre linkage to achieve automatic control of the windows open to complete the smoke run, to avoid the maximum damage of the fire.

Main applications: widely used in airports, hotels, exhibition centres, conference centres, stadiums, opera houses, science and technology museums, shopping centres, greenhouses and gardens, industrial plants, warehouses and other public places with the use of electric window opener.

Use of environmental conditions: indoor

Control scheme reference





Hand held transmitter
Door and window control system



Intelligent wireless controller
Door and window control system



Paste wireless transmitter
Door and window control system



Hand held transmitter
Remote control series of clothes dryer



Paste smart wireless transmitter
Remote control series of clothes dryer



Smart socket
Smart home series



Smart power converter
Smart home series



Intelligent infrared remote controller
Smart home series



Intelligent switch
Smart home series



Wired wind sensor



Window opener synchronizer



Gas alarm sensor



Fire control sub control box



Key transformer switch

Inputvoltage: 220V AC
Output voltage: 24V DC
Installation method: Installation with 86 box



Thin wall touch screen switch

Input voltage: 24V DC
Output voltage: 24V DC
Installation method: Installation of column with 20 holes



Touch screen switch (built in remote control module)

Input voltage: 220VAC
Outputvoltage: 24V DC
Installation method: Installation with 86 box



Touch screen switch (mobile app intelligent control

Input voltage: 220V AC
Output voltage: 24V DC
Installation method: Installation with 86 box



Touch screen wireless switch

Voltage: 5V DC
Installation method: Wall mounting



Single screen remote control (touch)



Single screen remote control (key)



Six screen remote control



Dual channel handheld transmitter



Wireless wind sensor



Fire alarm



Smoke photoelectric alarm sensor



Fire linkage main control box