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Kaierda

Hangzhou Kaierda Welding Robot Co., LTD

Address: #778 Changming Road, Xiaoshan Economic&Technology Development Zone, Hangzhou, China

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Robotic Arc Welding

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Kaierda

About us

Hangzhou Kaierda Welding Robot Co., Ltd. and its wholly-owned subsidiaries (hereinafter referred to as "Kaierda") specialize in the fields of industrial robots and industrial welding equipment, and is a science and technology innovation board listed company (stock code: 688255) integrating independent research and development, design, production, sales, system integration, and technical services. The company's products are widely used in the automotive, shipbuilding, rail transit, engineering machinery, petrochemical, metal furniture, hardware products, medical equipment, fitness equipment and other industries.

Kaierda has outstanding technological innovation capabilities in the fields of industrial robots and industrial welding, and is developing rapidly. It has established provincial research institutions such as "Kaierda Robot Key Enterprise Research Institute" and "Kaierda Digital Intelligent Welding Technology Provincial High-tech Enterprise Research and Development Center", and has led and participated in many provincial and municipal key research and development projects such as "arc welding robot research and industrialization", "key technology and process research on laser three-dimensional welding cutting system of robot", and "development of fully digital control gas shield welding machine with droplet flexible transition". After years of technical accumulation, Kaierda has formed a set of technologies for welding robots and industrial welding equipment based on industrial robot technology and industrial welding technology, with more than 100 patents obtained.

In the future, Kaierda will continue to deepen its research in industrial robot and industrial welding technology, solidly develop research and development, seek innovation, promote manufacturing automation and intelligence, and provide the world with advanced products and technologies of "Made in China".

Contents

Honors

Zhejiang Provincial Government's Key Enterprise Research Institute Award

High-tech Enterprise Certificate

Provincial High-tech Enterprise Research and Development Center

China Robot Industry Alliance Vice President Unit

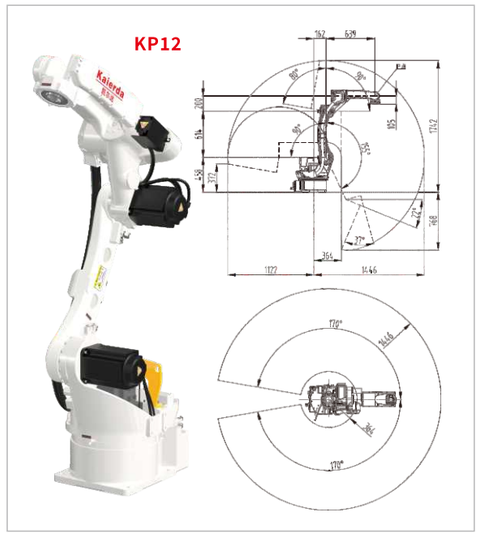
More than 100 patents obtained

As the first drafter, six national standards have been formulated:

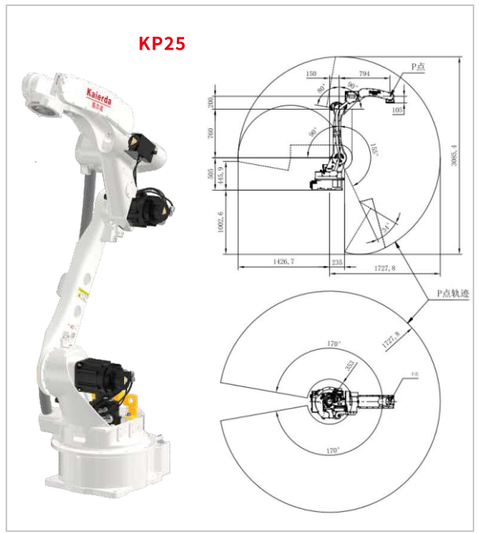
1. GB/T 8118: Arc Welding Machine General Technical Conditions
2. GB/T 10249: Welding Machine Model Preparation Method
3. GB 15579.1: Arc Welding Equipment Part 1: Welding Power Source
4. GB 15579.2: Arc Welding Equipment Part 2: Liquid Cooling System
5. GB 15579.9: Arc Welding Equipment Part 9: Installation and Use
6. GB/T 25301: Resistance Welding Equipment Transformer Applicable to General Technical Conditions for All Transformers

Motion Range Diagram

KP12



KP25



Product features

Various application requirements
Used for grasping, handling, stacking, assembly, grinding and other applications.

Higher level of productivity
Can achieve high-speed operation in the 12kg level, with strong handling ability, helping customers improve productivity.

Compact design
Slender joint parts and curved arm shapes, reducing interference with surrounding equipment. The robot's wrist has a hollow design, built-in cables, reducing movement restrictions caused by cable interference, more convenient for teaching, and improved accessibility.

Simple import, easy maintenance
Adopt single power supply cable design, greatly reducing the time required for regular cable replacement; reduced the number of cables between the robot and the controller, the equipment setting is simple, and the maintainability is improved.

Advanced ingress protection
The robot's wrist structure has an IP65 protection grade, effectively ensuring that the robot can continue to operate in a severe environment.

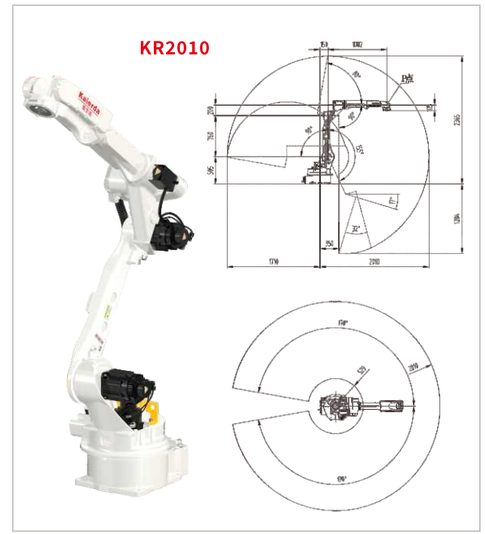
Technical Parameters

Model		KP12	KP25
Structure		Vertical multi-joint type	Vertical multi-joint type
Axis		6 axis	6 axis
Reach (mm)		1446mm	1730mm
Payload (kg)		12kg	25kg
Repeat positioning accuracy (mm)		±0.08mm	±0.08mm
Movable range (°)	A1 axis	-170°~+170°	-170°~+170°
	A2 axis	-90°~+155°	-90°~+155°
	A3 axis	-90°~+80°	-90°~+80°
	A4 axis	-150°~+150°	-150°~+150°
	A5 axis	-45°~+180°	-45°~+180°
	A6 axis	-210°~+210°	-210°~+210°
Maximum speed (rad/s (°/s))	A1 axis	4.4 rad/s(252°/s)	4.4 rad/s(252°/s)
	A2 axis	4.4 rad/s(252°/s)	3.0 rad/s(175°/s)
	A3 axis	4.4 rad/s(252°/s)	4.5 rad/s(255°/s)
	A4 axis	8.4 rad/s(480°/s)	8.0 rad/s(460°/s)
	A5 axis	8.4 rad/s(480°/s)	7.0 rad/s(400°/s)
	A6 axis	12.2 rad/s(700°/s)	12.2 rad/s(700°/s)
Vibration		Below 4.9	Below 4.9
Braking		Full axis braking	Full axis braking
Ambient temperature and humidity		0°C~45°C;20%RH~80%RH; No condensation	0°C~45°C;20%RH~80%RH; No condensation
Power capacity		2kVA	2kVA
Weight		180kg	230kg

Motion Range Diagram

KR1440

KR2010



Product features

High-speed control
With high-speed control technology of the open EtherCAT,the system cycle period is only 1ms, greatly improving the system motion control performance, accuracy and excellent scalability.

Specific instructions for robot linkage
Improving the flexibility of master-slave coordinated motion control, using a simple program structure to achieve complex multi-robot coordinated actions.

Power-off protection function
The power module CPS has power-off protection and signal output function, and all data can be effectively protected.

Vibration suppression
Focused on solving the problem of robot control in welding applications.

High-speed performance
A1 and A3 axis motor rotate at 5100rpm, A2 axis motor rotate at 3600rpm.

Compact design
Strong joint components and curved arm shape, reducing interference with surrounding equipment. By embedding the welding torch cable in the hollow arm structure, the interference caused by the cable is reduced, which is more convenient for teaching and improves accessibility.

Technical Parameters

Model		KR1440	KR2010
Structure		Vertical multi-joint type	Vertical multi-joint type
Axis		6 axis	6 axis
Reach (mm)		1446mm	2010mm
payload (kg)		6kg	6kg
Repeat positioning accuracy (mm)		±0.08mm	±0.08mm
Movable range (°)	A1 axis	-170°~+170°	-170°~+170°
	A2 axis	-90°~+155°	-90°~+155°
	A3 axis	-90°~+80°	-90°~+80°
	A4 axis	-150°~+150°	-150°~+150°
	A5 axis	-45°~+180°	-45°~+180°
	A6 axis	-210°~+210°	-210°~+210°
Maximum speed (rad/s (°/s))	A1 axis	4.4 rad/s(252°/s)	4.4 rad/s(252°/s)
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	A5 axis	7.0rad/s(400°/s)	7.0rad/s(400°/s)
	A6 axis	12.2rad/s(700°/s)	12.2rad/s(700°/s)
Vibration		Below 4.9	Below 4.9
Braking		Full axis braking	Full axis braking
Ambient temperature and humidity		0°C~45°C;20%RH~80%RH; No condensation	0°C~45°C;20%RH~80%RH; No condensation
Power capacity		2kVA	2kVA
Weight		180kg	240kg

Teaching Pendant

■ **Small characters are easy to read**
Using durable and transparent touch screen.

■ **The keypad can reduce teaching time when blind typing**
The surface of the main function keys are added convex design .

■ **Simple panel, easy to operation**

■ **Light weight, easy to hold, reduce operation fatigue**
Light weight, effectively reducing wrist fatigue.

Robot teaching pendant

Item	Specification
Operating machine	Selection key, axis operation key, numerical/application key, Switch mode key with key (teaching mode, online mode), emergency stop key, function key, USB port (1pc USB2.0)
Dimension	152mm*53mm*305mm
Material	Reinforced plastic
Display screen	5.7-inch color LCD touch screen (640*480 pixels)
Protection class	IP54
Weight	0.81Kg

Robotic Controller

- High servo drive capacity
- Small Size
- Light Weight
- Widely used
- Simple installation

Adopt new motion control algorithm

- High Speed
- Effectively inhibit jitter
- Soft movement
- Control Parameters can be adjusted freely
- High adaptation and reliability, perfect motion performance

Hardware

- Rectifier units replace transformers
- Optimizing power module
- Independent design of board-level CPU unit, transmitter unit, security unit and IO unit, integrating four modules into one module through direct connection between boards
- Can increase the rated current of the Servo driver, then to drive the motor with higher power and faster speed,and realize faster acceleration and deceleration

Function

- Support Modbus TCP commuication module
- Which KCCOM, support SDK secondary development, it can achieve data send and receive between robotic controller and computer
- Support some Yaskawa MOTOCOMES protocol

KC30 controller

Model	KC30
Capacity	2.0kVA
Dimension	555mm*580mm*500mm
Communication interface	EtherCAT, EtherNet
The maximum number of controllable linkage axis	Up to 32 can be expanded, allowing for multi-robot collaboration
Operating interface	English/Chinese
Input voltage	380V (- 10%~+10%) ,50/60Hz
Weight	about 55kg

CO_2/MAG/MIG welding

carbon steel | stainless steel | galvanized plate

The Applications

Automotive parts, motorcycle parts, sports equipment, medical equipment, electric vehicle parts, daily hardware, metal furniture and school supplies industries.

Ultra-low spatter welding system

Welding Power Source Technical Parameters

Model	D350S
Rated input voltage	Three-phase AC 400V (±10%)
Rated input power	18kVA
Output current range	30A-350A
Output voltage range	12V-36V
Rated frequency	50/60Hz
Duty cycle	350A (60%@40°C)
Welding methods	CO2/MAG/MIG short-circuit welding, MAG/MIG pulse welding
Applicable materials	carbon steel, stainless steel, galvanized steel plate
Dimension	693mm*368mm*610mm
Weight	70Kg

Product features

- **Ultra-low spatter**

  Precise control of the entire cycle from arc ignition to liquid bridge breaking to achieve short-circuit transition with ultra-low spatter, which is one tenth of regular digital welding power source.
- **Contact retraction arc starting**

  New contact retraction arc starting reduces arc starting spatter and improves the success rate of arc starting.
- **Suitable for multiple materials**

  With a rich built-in database of welding experts, it can achieve pulse and short-circuit welding of materials such as carbon steel, stainless steel, galvanized sheet, aluminum alloy, etc., especially suitable for the fields of furniture, fitness equipment, electric vehicles, and other thin plates.
- **Simple and convenient operation**

  The use of synergic regulation, simple operation, and free adjustment of arc shape adapt to different welding requirements.
- **Arc length constant control**

  Full digital high-speed inverter control, quickly adjusts the arc and voltage to achieve stable welding in a wide range of arc voltages.
- **Digital communication**

  Digital communication with robots using Ethernet digital communication.

Standard Configuration for Robot Arc Welding System

Robot	KR1440/KR2010
Welding torch with anti-collision	TC1440H/TC2010H(Built-in anti-collision feature)
Welding power source	D350S (Ultra-low spatter)
Wire feeder	WR-FE120Z-1440/WR-FE120Z-2010 (Encoder-based, dual-drive printing motor)
Accessories	Control cable, wire feeding tube, and wire feeding rack

CO_2/MAG/MIG welding

carbon steel | stainless steel | galvanized plate

The Applications

Engineering machinery, transportation, agricultural machinery, mining machinery and other industries

Thick plate robot welding system

Welding Power Source Technical Parameters

Model	D500S
Rated input voltage	Three-phase 400VAC (±10%)
Rated input power	26kVA
Output current range	30A-500A
Output voltage range	12V-45V
Duty cycle	500A (80%@40°C)
Rated frequency	50/60Hz
Welding methods	CO2/MAG/MIG short-circuit welding, pulse welding
Applicable materials	carbon steel, stainless steel, galvanized plate
Dimension	693mm*368mm*610mm
Weight	70Kg

Product features

- **Built-in rich welding expert database**

  Pulse and short circuit welding of carbon steel, stainless steel, galvanized plate, aluminum alloy and other materials
- **Adapt to the characteristics of the thick plate industry**

  Arc stiffness is high and the follow-up is good, suitable for various posi tions welding
- **Easy operation**

  Using synergic regulation, the operation is simple and the arc shape can be freely adjusted to accommodate different welding requirements.
- **Multiple sensors**

  Optionally with contact sensor, arc tracking, laser tracking and other sensor technology.

Standard Configuration for Robot Arc Welding System

Robot	KR1440/KR2010
Air-cooled/water-cooled welding torch	Robot-specific welding torch 300R
Welding power source	D500S (Ultra-low spatter)
Wire feeder	Customized (With encoder, dual-drive, feader roller)
Accessories	Control cable, wire feeding tube and wire feeding rack
Water Tank	Optional
Contact sensor	Optional
Arc tracking	Optional

carbon steel | stainless steel | galvanized plate

The Applications

Automotive parts, motorcycle parts, sports equipment, medical equipment, electric vehicle parts, daily hardware, metal furniture and school supplies industries.

Thin Plate Welding System

Welding Power Source Technical Parameters

Model	D400L
Rated input voltage	Three-phase 380VAC (±15%)
Rated frequency	50/60Hz
Rated no-load voltage	85V
Output current range	30A-500A
Output voltage range	12-45V
Duty cycle	400A (60%@40°C); 350A (100%@40°C)
Applicable materials	carbon steel,stainless steel,aluminum alloy
Welding methods	Short circuit/pulse (single/double)
Wire diameter	0.8/0.9/1.0/1.2/1.4/1.6mm
Robot communication	UDP/Modbus Ethernet/IP DeviceNet
JOB	Digital communication: up to 16 channels; Simulation communication: up to 4 channels
Dimension	653mm*295mm*572mm
weight	51.5Kg

Product features

- **Ultra-low spatter**

  Arc Softness, molten pool calm, no wetting of workpiece, excellent welding bridge capability, suitable for thin plate welding.
- **With robot simulation and digital communication interface**

  Match with different robot brand such as Yaskawa, Fanuc, KUKA, ABB, Kawasaki, etc.
- **Large expert welding machine database**

  Synergic regulation, automatic match important parameters, easy to use and convenient.
- **Ultra-high speed control**

  Up to 100kHz inverter frequency, full digital control each molten drop transition.
- **Low heat input**

  Better control of welding seam formation to minimize workpiece deformation.

Standard Configuration for Robot Welding System

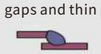
Robot	KR1440/KR2010
Air-cooled/water-cooled welding torch	Robot-specific welding torch 300R
Welding power source	D400L(Ultra-low spatter)
Wire feeder	Customized(With encoder, double drive and feeder roller)
Accessories	Control cable, wire feeding tube and wire feeding rack

Ultra-low Spatter Welding Process

The arc spatter generated is controlled to the minimum for short circuit welding, achieving a low arc splatter function beyond the usual perception in easy-to-use low arc spatter welding.

Traditional welding

Short circuit welding is easy to use, but it may cause spatter.

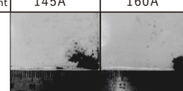
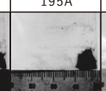
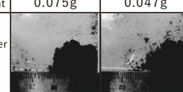
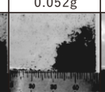
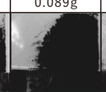
Short circuit welding	Advantage	Disadvantage
	Easy to use on gaps and thin plates 	There will be spatter 

D Series

New Short-Circuit Welding Control

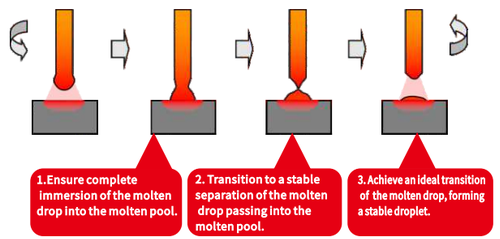
Reduces the amount of spatter during short-circuit welding to 1/4 of the previous power source.

Comparison Table of Short-Circuit Welding Spatter

Welding Speed	70cm/min	90cm/min	70cm/min	90cm/min	70cm/min
Welding Current	145A	160A	160A	195A	200A
D Series					
Spatter Weight	0.075g	0.047g	0.052g	0.089g	0.050g
Ordinary Power Source					
Spatter Weight	0.316g	0.251g	0.355g	0.659g	1.503g

Note: The total amount of spatter during welding 20cm long seams on a flat plate in five times.

Short-Circuit Welding Control



The ideal welding wire head for short-circuit welding, the moving environment of the molten drop.

CO_2/MAG/MIG welding

carbon steel | stainless steel | aluminum alloy | galvanized plate

Robot servo arc welding system

The Applications

Automotive parts, motorcycle parts, sports equipment, medical equipment, electric vehicles and tricycles parts, household hardware,metal furniture, and tools and manufacturing industries.

Product features

Almost zero spatter
Compared with traditional short-circuit transition, the amount of spatter can be reduced by 99%.

Fast arc starting and crater
Pull-back arc starting without spatter, speed increased twice.

Low heat input
The servo arc welding process has a low heat input when welding aluminum alloy, which is 90% lower than TIG welding.

Arc length adaptive control
The arc length is not affected by the condition of the workpiece surface and the welding speed, and the arc adaptability is super strong with changes in the extension.

Low dilution rate of surfacing layer
The iron percentage at the 2.5mm thickness of the surfacing layer after processing is controlled below 5%,which can ensure the corrosion performance of the surfacing layer.

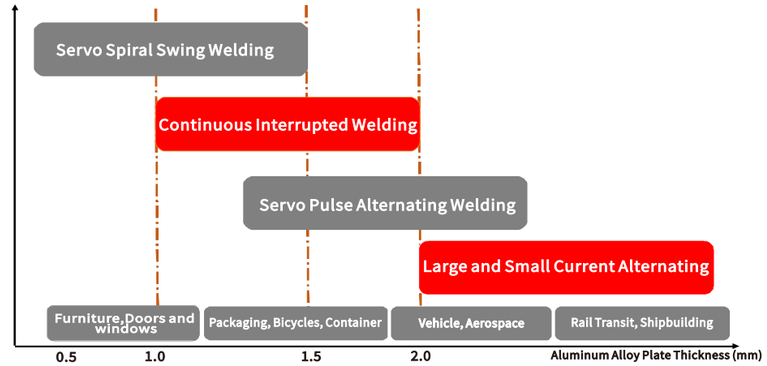
Smaller deformation
The lower heat input can reduce deformation of thin plates in a greater extent.

Strong gap bridging ability
2mm board with 2mm gap can be easily welded.

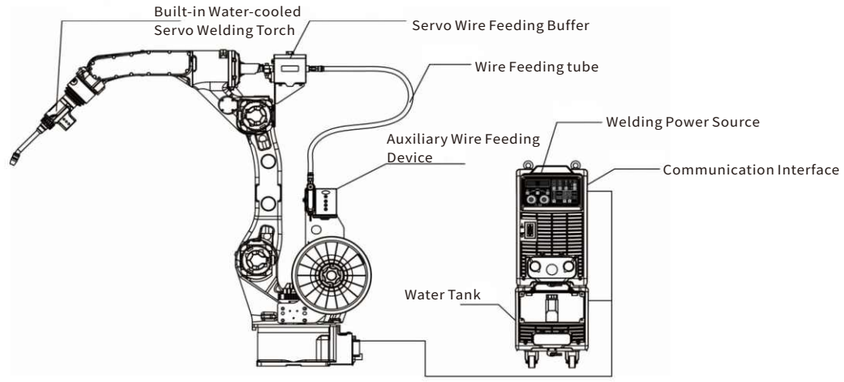
Faster welding speed
The welding short-circuit frequency can reach between 125Hz and 150Hz depending on the welding application, with a welding speed of 1 m /min for 2mm thick workpiece, or a welding speed of 2 m /min for 0.8mm thick workpiece.

Adapt to various materials
Used for carbon steel, stainless steel, aluminum alloy, and dissimilar material welding.

Related Plate Thickness and Application Industry



Configuration of Robot Servo Arc Welding System (adapt to various robotics brand)



Built-in Servo Welding Torch
Servo welding torch integrated water-cooling and air-cooling, it only needs specific accessories to quickly install with almost all robots on the market. Adopting high dynamic response servo motor,realizing high-precision control of wire feeding, achieving a welding effect that is completely different from the same speed of wire Magnetic force collision protector can greatly reducethe impact force that the welding gun bears, avoid damage to the gun body and driving unit,and achieve high-precision reset at the same time, quickly restore production.

Servo wire feeder buffer
Servo wire feeder buffer is a regulating device of the wire feeder system in servo arc welding system, aiming to solve the problem of wire feeder system's unstable feeding due to the difference of feeding speed in front and back, and improve the stability of servo wire feeding.

Auxiliary Wire Feeding Device
The auxiliary wire feeding device provides auxiliary power for the servo wire feeding system, reduces the influence of wire inner tube resistance and wire reel damping force on the wire feeding, and improves the stability of wire feeding. It can be used for both spool-mounted wire and drum-mounted wire, making it convenient to use.

Servo wire feeder tube
Servo wire feeder sleeve is a wire feeder sleeve designed for servo wire feeding system,which plays a guiding role in the wire feeding system and provides buffer space for the servo wire feeder buffer.

X350SW Servo Welding Power Source
X350SW servo welding power source have a built-in servo driver, successfully reducing its size and enhancing its reliability.

Communication interface
Adapt to different brand robot communication interface, can achieve Modbus/TCP, DeviceNet, Ethernet/IP and other protocols with X350SW digital communication.

Water tank
Adopt closed high-temperature resistant plastic water storage tank, solve the problem of water corrosion of the circulating water tank body, easy to operate, semi-transparent water level visible window facilitates timely graspof circulating water capacity.

Robot welding standard configuration

Robot	Multi-brand(Hollow shaft)
Servo welding torch	KSTC-1440/KSTC-2010, can be customized (Adopt servo motor and magnetic force collision protector)
Welding power source	X350SW(Special servo welding power source)
Wire feeder	WAT-300(V2)
Welding accessories	Control cable, wire feeder sleeve, wire feeder rack, Cooling water tank, control cable, wire feeder sleeve, Wire feeder rack, welding cable, gas tube.

Robot-Specific Welding Power Source Technical Parameters

Model	X350SW
Rated voltage, frequency	Three-phase，380VAC 50Hz
Allowable working range	Voltage：320V~450V；Frequency：40~60Hz
Rated no-load voltage	80V
Output current, voltage	350A/31.5V
Duty cycle	350A (100%@40℃)
Output voltage range	12~45V
Output current range	30A~350A
Dimension	647mm*296mm*572mm
Weight	70kg

Welding process extension

Servo Spiral Swing Fish Scale Welding

Servo spiral swing fish scale welding uses a robot spiral swing torch to achieve a visually appealing fish scale-like welding pattern. It is mainly suitable for applications such as radiators, compressors, and new energy vehicle cover plate. The welding setting is simple, in addition to basic parameters such as current, voltage, and speed, only the swing frequency and amplitude need to be adjusted according to the actual workpiece.

Alternating Large and Small Current Welding (Double Pulse)

Double pulse control is based on single pulse control with a change in wire feed speed. One high-frequency pulse is superimposed on one low-frequency pulse. One high-energy pulse is used to melt the droplet, while the other pulse is used to melt the droplet and stir the molten pool. By setting corresponding parameters, a low-frequency pulse with a frequency of 0.5-10Hz can be added on top of the normal pulse frequency. This achieves a coordinated energy balance without the need for swing to achieve a beautiful fish scale pattern effect.

Continuous Interrupted Welding

The cycle of continuous interrupted welding process includes the welding period and cooling period. During the welding period, the welding material is transferred to the base material by droplet transfer to form a molten pool. During the cooling period, the molten pool is cooled and solidified. The alternating welding and cooling periods achieve the formation of fish-scale welds. The periodic switching between the welding pulse stage and cooling short-circuit stage results in uneven force on the molten pool, leading to cyclic oscillation, which achieves the purpose of stirring the molten pool and releasing dissolved gases in the molten pool, which is beneficial to improve the comprehensive mechanical properties of the welding joint.

Pulse Servo Alternating Welding

Adjustable heat input of servo short-circuit welding is limited and is not suitable for welding aluminum alloys with a thickness greater than 3mm. Pulse servo alternating welding process was derived based on traditional servo welding technology. The high pulse current during the pulse phase provides higher heat input for welding and enhances the impact and stirring action of the molten drop on the molten pool, effectively reducing the porosity of the weld and refining the grain size of the welding joint, which is beneficial to improve the mechanical properties of the welding joint and increase the depth of the weld pool, further expanding the application range of servo welding technology in aluminum alloy welding.

Robot X series arc welding system

Standard configuration for robot welding

Robot	KR1440/KR2010
Air-cooled/water-cooled welding torch	Robot-specific welding torch (Built-in, anti-collision)
Welding power source	X500(Ultra-low Spatter)
Wire feeder	Customize(With encoder, dual-drive 1.0/1 .2feeder roller)
Accessories	Control cable, wire feeding sleeve, wire feeding frame
Water tank	Optional
Contact sensor	Optional
Arc tracking	Optional

CO_2/MAG/MIG welding

Product features

One machine with multi-purpose

Carbon steel, stainless steel, aluminum alloy, short circuit, pulse, low spatter and double pulse,can all be used

High speed digital control

Monitoring every stage of molten droplet transition, pulse welding accurately achieves " one pulse one drop"

A rich expert database

Synergic regulation, automatic parameter correlation, simple and convenient operation

Welding parameters are open and adjustable

To meet the different needs of customers, customize process software can be achieved for efficient welding of various metals

Technical parameters of X series welding power source

Model	X350L	X350LS	X500	X500S
Rated input voltage	Three-phase 380VAC (15%), 323-437V			
Input frequency	45-65Hz			
Rated no-load voltage	80V			
Rated output current	350A		500A	
Output current range	30-350A		30-500A	
Output voltage range	12-45V		12-45V	
Rated duty cycle	100%/350A/40°C		100%/500A/40°C	
Welding methods	Short circuit/low spatter/single pulse	Short circuit/low spatter/ single pulse/double pulse	Short circuit/ single pulse	Short circuit/single pulse/ double pulse
Applicable materials and wire diameter	Carbon steel/ stainless steel ϕ0.8~1.2mm	Carbon steel/stainless steel ϕ0.8~1.2mm Aluminum alloyϕ1.0/1.2mm	Carbon steel/ stainless steel ϕ0.8~1.6mm	Carbon steel/stainless steel ϕ0.8~1.6mm Aluminum alloyϕ1.0/1.2/1.6mm
Robot communication	UDP/Modbus Ethernet/IP DeviceNet			
Dimension	647mm*296mm*572mm			
Weight	50.5kg			

Short-circuit transition Carbon steel Stainless steel

Process features:

1. Digital waveform control technology, with small welding spatter and beautiful appearance.
2. Alternation of short-circuit and arc-burning processes, adjusting the arc-burning time can control the material fusion depth.
3. High welding productivity, good anti-cracking performance, and small welding deformation, suitable for a large range of deformation.

Application range:

Used for welding low-carbon steel, low-alloy high-strength steel, various steel structure projects, and can achieve thin-plate full-position welding, and can be used for medium-thickness plate welding.

Single pulse Carbon steel Stainless steel

Process features:

1. Precise control of pulse waveform, achieving one pulse one drop transition.
2. Good welding fusion, reducing welding defects such as pores and undercut.
3. Short arc length, high stiffness, low welding heat input, extremely low spatter.

Application range:

Used for pulse welding of carbon steel, stainless steel, galvanized sheet, high-strength steel and other materials.

Ultra-low Spatter Carbon steel Stainless steel Aluminum alloy

Process features:

1. Accurate control of molten droplet flexible transition, achieving ultra-low spatter welding.
2. Strong bridge ability of weld seam, achieving wide gap welding.
3. Ultra-low heat input, reducing deformation.

Application range:

Used for thin plate welding of carbon steel, stainless steel, galvanized sheet and other materials; especially suitable for undercoating welding and full-position welding.

Double pulse Carbon steel Stainless steel Aluminum alloy

Process features:

1. The wire feeder speed and output energy are controlled in coordination to produce a clear fish scale pattern.
2. A special aluminum welding program design solves the problems of difficulty in arc starting and easy formation of welding defects during arc-off.

Application range:

Widely applicable to welding of aluminum-silicon, aluminum-magnesium, aluminum-magnesium-silicon and other materials.

Selection table

Digital multi-function inverter power source	Carbon steel	Stainless steel	Aluminum alloy	Silicon bronze	Short-circuit	Ultra-low spatter	Single pulse	Double pulse
X350L	○	○			○	○	○	
X350LS	○	○	○	○	○	○	○	○
X500	○	○			○		○	
X500S	○	○	○	○	○		○	○

Product features

Kaierda CK10 Cobot

Technical Parameters

Reach：1300mm
Maximum Payload：10KG
Repeat positioning accuracy：±0.05mm

Applications

Fulfill requirement of 3C electronics, metal processing, home application, power, retail trade, handling, vision detect, assemble, palletizing, welding, polish

High speed and high positioning SCARA Robot

Technical Parameters

Reach：650mm
Maximum Payload：6KG
Repeat positioning accuracy：±0.02mm (1~2axis)
±0.01mm (3axis)
±0.01°(4axis)

Applications

Assemble, packaging, handling and another light load applications

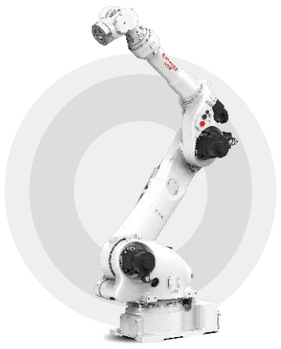
Kaierda Robot KP8

Technical Parameters

Reach：741mm
Maximum Payload：8KG
Repeat positioning accuracy：±0.02mm

Applications

Glue, assemble, polish, process, PCB loading and unloading field



Kaierda Robot KP225

Technical Parameters

Reach：2702mm
Maximum Payload：225KG
Repeat positioning accuracy：±0.05mm

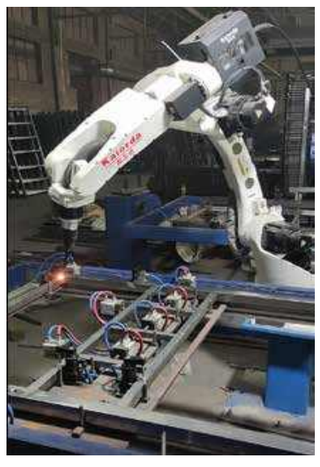
Applications

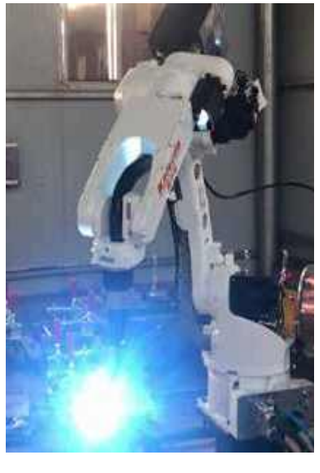
Lithium battery, PV, home application, ceramics, building materials and furniture, automotive parts, logistics and other industries

Applications









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A truly noble person is different from others and is unique