

Certification List

Zu&Pro&MiniCobo CAB&MiniCab

Region	Certificate Type		Zu					Pro			CAB				MiniCab	MiniCobo			
			Zu 3	Zu 5	Zu 7	Zu 12	Zu 18	Pro 5	Pro 12	Pro 16	CAB 3	CAB 7	CAB 12	CAB 16	MiniCab	MiniCobo			
Europe	CE-MD		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑			
	CE-EMC		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑			
	CE-RED		☐									☑	☑	☑	☑	☑	☐		
	CE-LVD		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑		
China	CR		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑			
Korean	KCs		☑	☑	☑	☑	☑	☐	☐	☐	☑	☑	☑	☐	☑	☑			
	KCC	Wifi Module	☐									☑	☑	☑	☑	☐	☐		
US	FCC	Wifi Module	☐									☑	☑	☑	☑	☐	☐		
Japan	TELEC	Wifi Module	☐									☑	☑	☑	☑	☐	☐		
Global	SEMI S2		☑	☑	☑	☑	☑	☐			☑	☑	☑	☐					
	Clean Room	ISO Class 5	☑	☑	☑	☑	☑	☐			☐		☑	☑	☐				
	IP	IP40		☐									☐				☑	☐	
		IP44		☐									☑	☑	☑	☑	☐		
		IP54		☐				☑	☐				☐				☐		
		IP68		☐					☑	☑	☑	☐							
MTBF	8W	☐		☑	☐				☐			☐							



The control cabinet is certified with corresponding robot body. (No separate certificate for control cabinet)



The control cabinet is certified with MiniCobo.



Non-mandatory certification, unnecessary

CE-LVD:

Except MiniCab, which has a separate certificate, all are covered by CE-MD certificate.

Force Sensor&Vision

Region	Certificate Type	Force Sensor			Vision	
		JK-SE-VI-200N	JK-SE-VI-400N	JK-SE-VI-800N	Lens 2D	Lens VPS
Europe	CE-EMC				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	CE-GPSD				<input checked="" type="checkbox"/>	<input type="checkbox"/>
	RoHS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	REACH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Non-mandatory certification,
unnecessary



Zu&Pro&MiniCobo CAB&MiniCab

Declaration		Zu					Pro			CAB				MiniCab	MiniCobo
		Zu 3	Zu 5	Zu 7	Zu 12	Zu 18	Pro 5	Pro 12	Pro 16	CAB 3	CAB 7	CAB 12	CAB 16	MiniCab	MiniCobo
EU Declaration of Conformity	Radio equipment directive + Safety of machinery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EU Declaration of Incorporation	Machine directive	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Declaration of RoHS Conformity		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Declaration of china RoHS II Conformity		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Declaration of REACH Conformity		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



The control cabinet is declared with corresponding robot body.
(No separate declaration for control cabinet)



The control cabinet is declared with MiniCobo.



European region - CE certification

The CE marking (French acronym for "Conformité Européenne", which translates as "European Conformity Assessment") certifies that a product has met EU health, safety, and environmental requirements, which ensure consumer safety. Manufacturers in the European Union (EU) and abroad must meet CE marking requirements where applicable in order to market their products in Europe. The CE mark is the "passport" for products to enter the European market.



CE-MD: Machinery Directive 2006/42/CE

Comply with relevant standards:

EN ISO 10218-1:2011, EN ISO 12100: 2010, EN ISO 13849-1:2015

EN 60204-1:2018 (LVD Harmonised Standard)

Machinery Directive 2006/42/EC:

-The Machinery Directive is a European Union directive concerning machinery and certain parts of machinery: mandatory specifications in health and safety are combined with voluntary harmonized standards.

-The Machinery Directive applies to machinery as well as interchangeable equipment, safety components, lifting accessories, chains/ropes/webbing, removable mechanical transmission devices, and partly completed machinery.

-Directive 2006/42/EC is all about safety. Safety of machinery, but also the safety of related products are regulated. It provides the requirements that products must comply with. The potential for the machinery to create hazardous situations must be minimized, or even better eliminated.

CE-EMC: Electromagnetic compatibility Directive 2014/30/EU

Comply with relevant standards: EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019

EMC DIRECTIVE 2014/30/EU:

-The purpose of the Electromagnetic Compatibility (EMC) Directive is to regulate the EMC compatibility of equipment. The EMC Directive firstly limits the electromagnetic emissions from equipment to ensure that such equipment, when used as intended, does not interfere with radio and telecommunications and other equipment. The directive also regulates the immunity of such equipment and seeks to ensure that the equipment is not subject to interference from radio emissions when used as intended.

-The directive applies to manufacturers of equipment that may cause electromagnetic interference or whose performance may be affected by such interference and who wish to sell their products in Europe.

*For control cabinets without WIFI module.

CE-LVD: Low Voltage Directive 2014/35/EU

Comply with relevant standards: EN 60204-1:2018

Low Voltage Directive 2014/35/EU:

- The objective of the Low Voltage Directive is to ensure that electrical products sold and manufactured within the European Union are safe for consumers, both in normal operation and in the event of a malfunction.
 - The Low Voltage Directive applies to all electrical equipment and components designed for use with alternating voltages between 50 and 1000 V and direct voltages between 75 and 1500 V.
 - The Low Voltage Directive defines which products fall within its scope, specifies the essential (safety) requirements that must be met by the electrical equipment and components it covers, and outlines the conformity assessment procedures that manufacturers must use to ensure compliance with the essential requirements.
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CE-RED: Radio Equipment Directive 2014/53/EU

Comply with relevant standards: EN 300 328 V2.2.2, EN 301 489-1 V2.2.3, EN 301 489-17 V3.2.4, EN IEC 62311:2020, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, EN 60204-1:2018

Radio Equipment Directive 2014/53/EU

-The purpose of the Radio Equipment Directive is to establish manufacturing standards for health and safety, electromagnetic compatibility (EMC), and efficient use of the radio spectrum associated with radio products.

-The Radio Equipment Directive applies to electrical or electronic products that emit and/or receive radio waves, including televisions, mobile phones, Bluetooth and Wi-Fi products, and Internet of Things (IoT) devices.

CE-RoHS: Restriction of Hazardous Substances directive 2011/65/EU and its amendment directive (EU) 2015/863

Comply with relevant standards: Depends on material

Restriction of the use of certain hazardous substances directive 2011/65/EU:

-The EU RoHS Directive aims to protect human health and the environment by restricting the use of hazardous substances in electrical and electronic equipment. The directive applies to equipment with a maximum input voltage of 1000V AC and 1500V DC. Hazardous substances restricted: lead, cadmium, mercury, hexavalent chromium, brominated flame retardants and o-benzene.

-The RoHS Directive requires manufacturers to replace the above hazardous chemicals with alternatives containing less hazardous substances.

REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No 1907/2006

REACH is the EU regulation for the registration, evaluation, authorisation and restriction of chemicals. This is the European Union regulation for the preventive management of all chemicals entering its market.

Comply with relevant standards :

- Substances of Very High Concern (SVHC) report
- Annex XVII list of restrictions report

Object:

- Substance (individual pigments, solvents, etc)
- Preparation (mixture-paint, glue)
- Article (product with main functions decided by shape and design instead of chemical composition)

CR: China Robot Certification

China Robot Certification is not mandatory, and its significance is to ensure that the safety and performance of the robot meet the China national standards.

Comply with relevant standards: GB 11291.1-2011, GB/T 5226.1-2019, GB/T 15706-2012, GB/T 36008-2018, GB/T 16855-2018, GB/T 38326-2019, GB/T 38366-2019

GB 11291.1-2011: Robots for industrial environments--Safety requirements- Part 1: Robot

GB/T 5226.1-2019: Electrical safety of machinery—Electrical equipment of machines—Part 1:General requirements

GB/T 15706-2012: Safety of machinery--General principles for design Risk assessment and risk reduction

GB/T 36008-2018: Robots and robotic devices—collaborative robots

GB/T 16855-2018: Safety of machinery-Safety-related parts of control systems-Part 1: General principles for design

GB/T 38326-2019: Industrial scientific and medical robots-Electromagnetic compatibility-Immunity tests

GB/T 38366-2019: Machinery for forestry—Noise test code

Comply with relevant standards: 《Occupational Safety And Health Act》 Article 89

KCs certification:

The Korea Occupational Safety and Health Agency (KOSHA) unified safety certification systems under the Occupational Safety and Health Act in Korea. Only products that have been tested by an internationally accredited testing center, certified and labelled with the Korea Certification (KCs) mark may enter the Korean market. The KCs mark demonstrates that industrial equipment and machinery are safe and consistent quality in manufacturing process is ensured.

KCC: Korea Communication Commission

Comply with relevant standards: Clause 3, Article 58-2 of Radio Waves Act

KCC certification:

KCC is a mandatory certification for IT information, telecommunications and RF wireless products in the Korean market, including electromagnetic compatibility testing, telecommunications testing and wireless radio frequency testing. The Korea Communications Commission authorizes the Korea National Radio Research Agency as the KCC licensing agency.

KCC certification is a certification system developed by the Korean government to protect the radio wave environment, mainly to reduce personal injuries and property losses caused by unnecessary radio waves, as well as communication failures and equipment misoperation caused by other equipment or external radio waves.

FCC Certification



FCC: Federal Communications Commission

Comply with relevant standards: FCC Rule Part 15C and Part 15B

FCC certification:

FCC means the Federal Communications Commission of the United States, in accordance with the relevant part of the United States Federal Regulations (CFR 47), all electronic products imported into the United States must be FCC certified (except for a very small number of products that are specifically exempted from the provisions of the relevant provisions of the FCC Regulations). The requirements of the FCC regulations include technical specifications, administrative requirements and other market access conditions for transmitters, wireless devices, electromagnetic compatibility requirements, telephone terminal equipment, test methods and other products.

There are four main categories of products: inadvertent transmitters, unintentional transmitters, intentional transmitters, and transmitters requiring a licence. Most wireless devices (Bluetooth, Wi-Fi, 2/3/4/5G, etc.) are intentional transmitters.

Comply with relevant standards: MIC Notices NO.88, Annex 1, 43&44

TELEC/MIC certification:

-Japan for radio frequency equipment certification called Radio Equipment Type Approval, the official control organization is MIC (Ministry of Internal Affairs and Communications), the main certification body is TELEC(Telecom Engineering Center), designated by the MIC, usually known as TELEC certification, also known as MIC certification, GITEKI certification.

-TELEC certification follows Japan's Radio Law, and specific test specifications follow MIC Notice No. 88. According to the requirements of Japan's "Radio Law", the manufacture, sale and operation of radio equipment in Japan must comply with the technical regulations approved by the MIC, and mandatory application for radio equipment to carry out the type approval certificate (i.e., TELEC certification).

SEMI : Semiconductor Equipment and Materials International

Comply with relevant standards: SEMI S2-0821

SEMI S2 certification:

The S series standards formulated by SEMI have an important impact on the safety and sustainable development of the semiconductor manufacturing industry, and compliance with the requirements of SEMI standards has become the main electrical criterion for mainstream chip manufacturers to introduce machine equipment.

SEMI S2 is the environmental, health and safety guide for semiconductor manufacturing equipment created by SEMI. Large chip manufacturing companies need SEMI S2 report before purchasing equipment to ensure the safety and design of equipment. The mechanical design safety, electrical safety, ergonomics, emergency stop and hazard warning of the equipment are considered in the certification. At the same time, collision protection, radiation safety and other safety measures are also considered for cooperative robots.

Comply with relevant standards: ISO 14644-1:2015, ISO 14644-14:2016

Cleanroom certification:

Robotic products have complex mechanical structures and moving parts, which are easy to emit tiny particles into the air during the working process, polluting the clean environment.

Therefore, its own cleanliness must reach the specified level before it can be put into practical production and application. The cleanliness level is the key technical index for the robot to enter the clean environment, and is also the technical parameter that users should first consider when purchasing.

IP: Ingress Protection

Comply with relevant standards: IEC 60529: 2013

IP Level:

The IP rating is the degree of protection of an electrical equipment enclosure against the ingress of foreign matter and is derived from the International Electrotechnical Commission standard IEC 60529, which defines the protection of an interface against liquid and solid particles.

The IP is followed by 2 digits, the first is a solid protection rating ranging from 0-6, indicating protection from large foreign particles to dust, and the second is a liquid protection rating ranging from 0-8, indicating protection from vertical water droplets to underwater pressure; the higher the number, the greater the capability.

MTBF

MTBF: Mean Time Between Failures

Comply with relevant standards: GB/T39590.1 -2020, GB/T 12642-2013, T/CEEIA 558-2021

MTBF:

MTBF is the mean time between failures, which is a reliability index to measure a product (especially electrical products). The unit is "hour". It reflects the time quality of the product and reflects the ability of the product to maintain its function within the specified time.

Specifically, it refers to the average working time between two adjacent failures, also known as the mean time between failures.

Advantages



1. JAKA has a complete certification system and compulsory certification for export.
2. JAKA has a mandatory declaration required by regulations, such as RoHS, REACH environmental protection declaration. These environmental controls provide customers with green quality products and sustainable solutions that conform to rigorous environmental regulations.
3. JAKA holds the MTBF 8W hour certification, which is a comprehensive reflection of JAKA robot management, R&D, and production capabilities and can provide customers with more reliable, long-term and stable solutions.
4. JAKA has industry access certifications, such as semiconductor and cleanroom, which can meet a wider range of industry applications.