

Charging and Discharging Connectors Compatible with the CCS2 EV Charging Standard

CONNECTOR

MB-0398-1

Oct.2024

KW21A Connector Harness

RoHS Compliant



Powerlance branded EV charging connectors combine durability and high-quality performance to provide the industry's most dependable solutions.

The KW21A is an Electric Vehicle (EV) charging connector compatible with the CCS (Combined Charging System) 2 electric vehicle charging standard and supports a rated charging current of 40A or 80A. The product has been tested and meets the associated rigorous product safety standards, achieving CE Certification.

As the movement to electric vehicles grows exponentially, the demand on electric vehicle charging grows and infrastructure supporting them expands. The KW21A is produced in Europe and supports the requirements in the local EV charging market. The handle has been designed for an ergonomic grip, contributing to the light-weight, flexible and compact design.

Furthermore, the design achieves a high weather resistance and offers a double insulation design, ensuring additional protection in the case where the outer body is damaged or breached in any way by unexpected accidents.

Application

- Direct current charger for Electric Vehicles
(CCS2 charging standard compatible, charging mode: Mode 4)
- Bi-directional or Vehicle to Grid Compatible DC Chargers

Features

- Weather resistant plastic body with durable design
- Ergonomic handle design
- Light-weight connector with flexible cable
- Compatible for Bi-directional Charging
- Compliant with the CCS2 Charging Standard

General Specifications

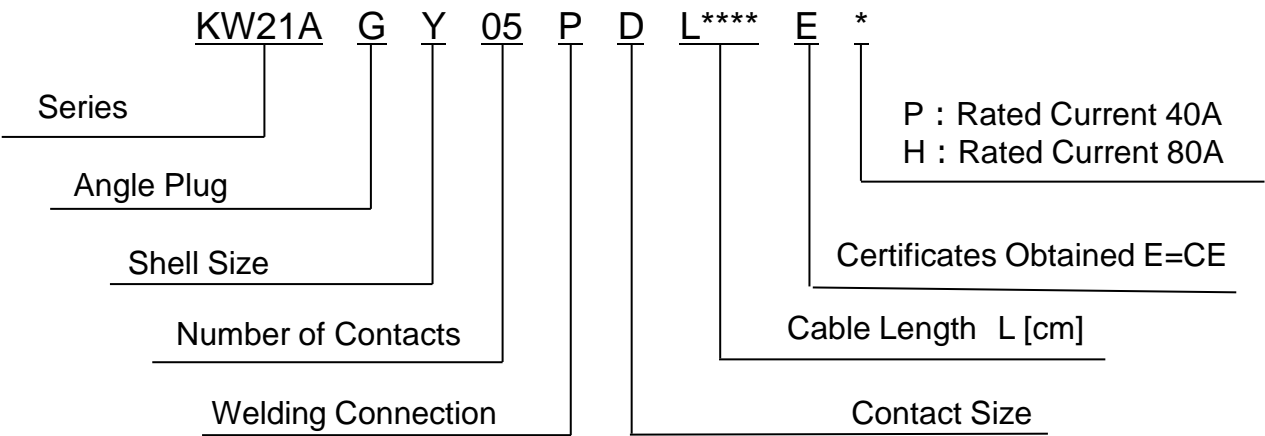
Number of Contacts	Power: 2 pos. Protective Earth : 1 pos. Signal: 2 pos.
Rated Current	Power: 40A / 80A, Signal: 2A
Rated Voltage	Power: DC1000V, Signal: AC30V
Insulation Resistance	5 MΩ min. (Apply DC1000V between adjacent contacts)
Dielectric Withstanding Voltage	AC 3,000V (per minute)
Durability	10,000 cycles
Insertion Force	100N max.
Operating Temperature Range	-35 deg.C to +50 deg.C

Materials and Finishes

Component	Material
Connector Interface	Environment Resistant Resin
Body	Environment Resistant Resin



Ordering Information



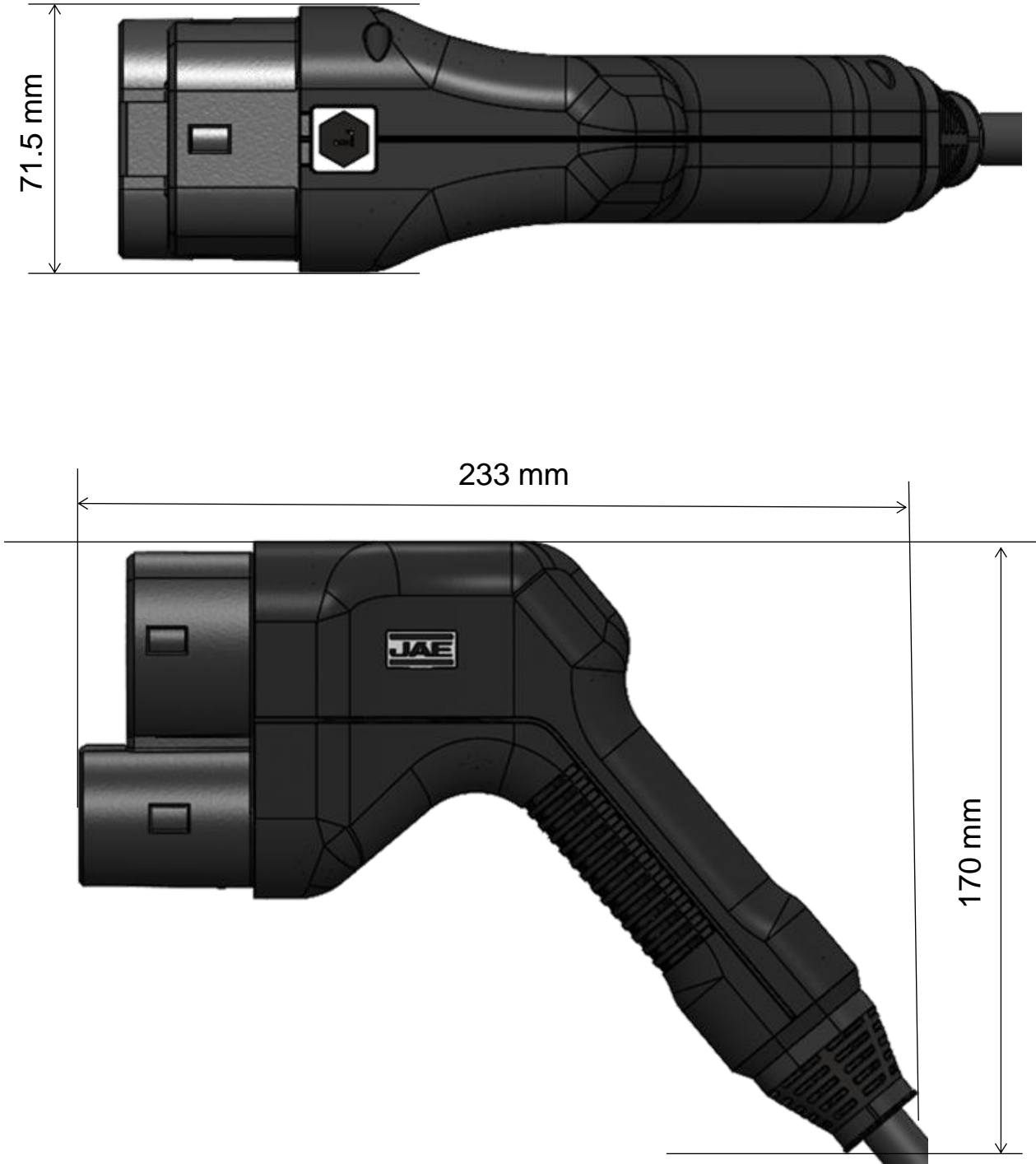
Part Number List

Part Number	Cable Length	Drawing No.	Specifications	Handling Instructions
KW21AGY05PDL0400EP	4.0m	SJ130270	JACS-11514	JAHL-11514
KW21AGY05PDL0450EP	4.5m			
KW21AGY05PDL0500EP	5.0m			
KW21AGY05PDL0550EP	5.5m			
KW21AGY05PDL0600EP	6.0m			
KW21AGY05PDL0650EP	6.5m			
KW21AGY05PDL0700EP	7.0m			
KW21AGY05PDL0750EP	7.5m			
KW21AGY05PDL0850EP	8.5m			

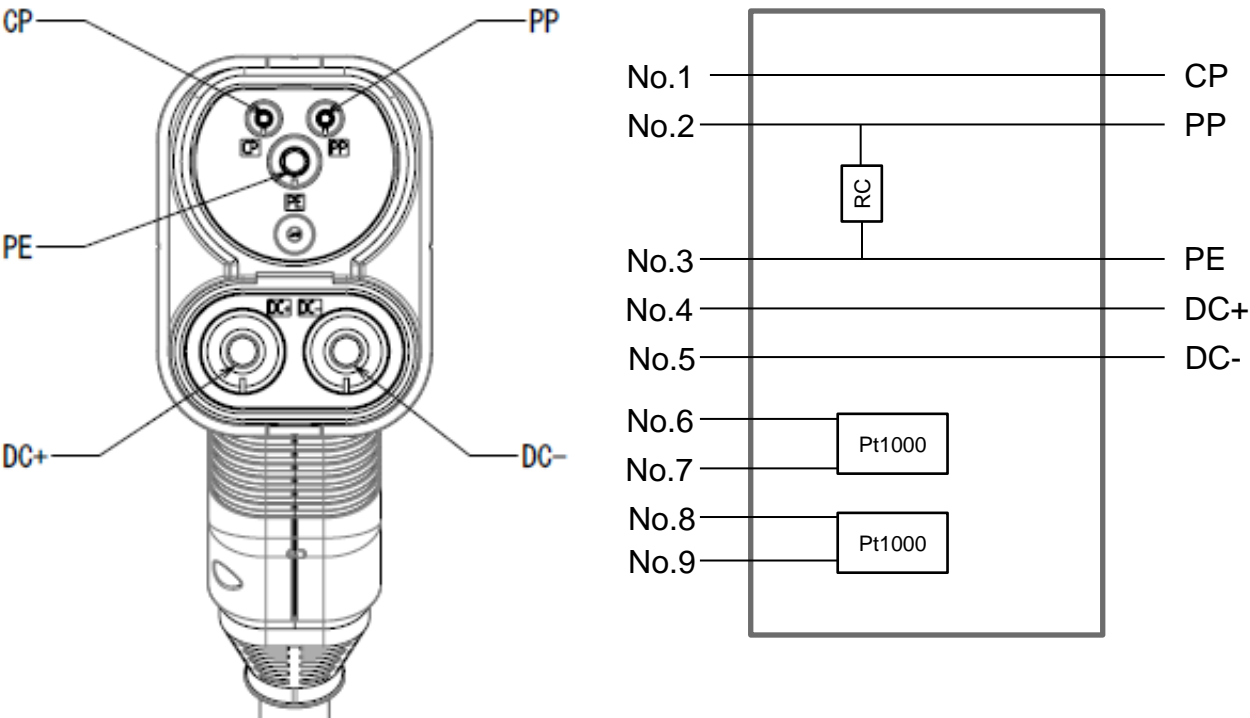
Part Number List

Part Number	Cable Length	Drawing No.	Specifications	Handling Instructions
KW21AGY05PDL0400EH	4.0m	SJ130271	JACS-11515	JAHL-11514
KW21AGY05PDL0450EH	4.5m			
KW21AGY05PDL0500EH	5.0m			
KW21AGY05PDL0550EH	5.5m			
KW21AGY05PDL0600EH	6.0m			
KW21AGY05PDL0650EH	6.5m			
KW21AGY05PDL0700EH	7.0m			
KW21AGY05PDL0750EH	7.5m			

Outer Dimensions



Contact Arrangement



Arrangements	Terminal Number	Wire Outer Color	Wire Size
CP	1	Brown	0.75mm ²
PP	2	Grey	0.75mm ²
PE	3	Green & Yellow	6.00mm ² (KW21AGY05PDLxxxxEP)
			16.00mm ² (KW21AGY05PDLxxxxEH)
DC-	4	Red	6.00mm ² (KW21AGY05PDLxxxxEP)
			16.00mm ² (KW21AGY05PDLxxxxEH)
DC+	5	Black	6.00mm ² (KW21AGY05PDLxxxxEP)
			16.00mm ² (KW21AGY05PDLxxxxEH)
Pt1000 (DC+)	6	Orange	0.75mm ²
	7	Blue	0.75mm ²
Pt1000 (DC-)	8	Purple	0.75mm ²
	9	White	0.75mm ²

Temperature Sensor Specifications

Sensor Type	Pt1000
Standards	DIN EN 60751
Measured Current	0.3mA
Temperature Range	-50 deg.C to +200 deg.C
Temperature Coefficient	3850ppm/K
Shutdown Temperature	+90 deg.C (Equivalent to a Pt1000 value of 1350Ω)

Notice:

1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.
2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
3. The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.
- (1) Applications that require consultation:
- (i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:
Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.
- (ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as :
Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.
- (2) Recommended applications include:
Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

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