

AC Charging Connector for Electric Vehicle









**eDM** 

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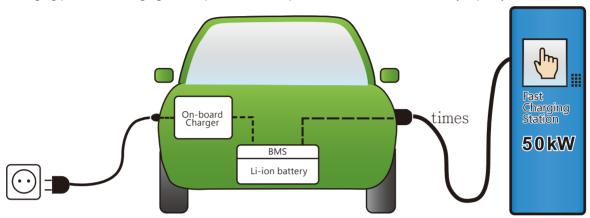




## **General Charging Mode of IEC 61851**

Туре	Charging Mode	Power Supply	Breaker	Charging Power	Device	Charging Time (24KWh Battery)
	Mode 1	230VAC, 1Ø	16A	3.3KW	Home Outlet	8h
Normal	Mode 2	230VAC, 1Ø	32A	6.6KW	ICCB	4h
	Mode 3	230VAC, 3Ø	32A	12KW	AC EVSE	2h
Fast	Mode 4	500VDC	125A	50KW	DC EVSE	30min

\*\* Practical charging power and charging time depend on the adopted surface standard and battery capacity.



Normal Charging Mode (AC)

Fast Charging Mode (DC)

Socket Outlet

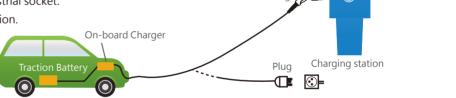
## **General Connection Type of IEC 61851**

#### Case A: Permanent On-board Cable

Use the supply cable and plug permanently attached to EV.

A1: Plug the supply cable into domestic or industrial socket.

A2: Plug the supply cable into the charging station.

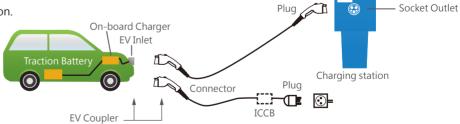


#### Case B: Portable Bilateral Plugs or Cord Set with ICCB

Use the detachable cable assembled with AC plug and EV connector.

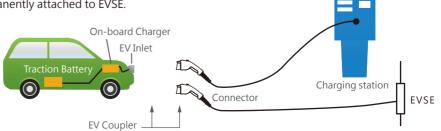
B1: Plug the supply cable into domestic or industrial socket.

B2: Plug the supply cable into the charging station.



#### Case C: Permanent Cable attached to EVSE

Use the supply cable and vehicle connector permanently attached to EVSE.





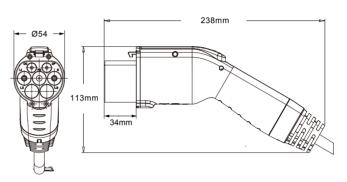


No.: CQC15029130897

AC Charging Connector for Electric Vehicle: GB / T 20234 Standard

## VCCG2A032D0 / VCCG2A016D0 VCCG2A010D0

















#### **Features**

- Conformity in surface design with GB / T 20234-2015.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High protection level to resist severe environment.
- Products passed 5000N driveover test.
- Applicable to connection B and Connection C of IEC 61851.

#### **Application**

BEV, PHEV, charging pile, cord set and domestic wall-mounted charger, etc. Charging mode: mode2 / mode3; Types of connection: Case B / Case C

#### **Product Perimeter** Vehicle Connector Color Black 32A / 16A / 10A **Rated Current** Rated Voltage 250V AC $\leq 100N$ Force Lifespan $\geq$ 10000 times Flammability Rating UL 94V-0 **Protection Level** With Cap IP54, Body IP67 Operating temperature -30°C ~ +50°C PBT / PC / PA66 / Copper alloy Main Material 16A: QA16EE1EB0812 / QA16EF1EB0812 TATC Application No. 32A: QA16EE1EB0822 / QA16EF1EB0822 AC Charging Cable Spec. Color 32A Cable $3 \times 6.0 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$ Black GB/T33594 $3 \times 2.5 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$ 16A Cable Black GB/T33594 10A Cable $3 \times 1.5 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$ Black GB/T33594





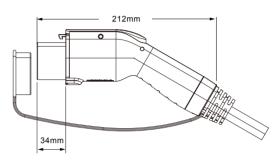
No.: CQC16029149670

AC Charging Connector for Electric Vehicle: GB / T 20234 Standard

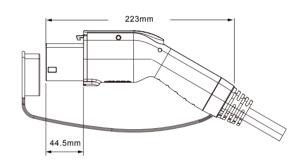
## VCCG2A032D0-G0 / VCCG2A016D0-G0













- Conformity in surface design with GB / T 20234-2015.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High protection level to resist severe environment.
- Products passed 5000N driveover test.
- Applicable to connection B and Connection C of IEC 61851.













#### **Application**

BEV, PHEV, Charging pile, cord set, domestic wall-mounted charger, etc.

Charging mode : mode2/mode3 ; Type of connection : Case B.

## Product Perimeter



#### Project

Vehicle Connector Color Rated Current Rated Voltage Force Lifespan Flammability Rating Protection Level Operating temperature Main Material TATC Application No.

#### Specification

Black
32A / 16A
250V AC
≤ 100N
≥ 10000 times
UL 94V-0
With Cap IP54 . Body IP67
-30°C ~ +50°C

PBT/PC/PA66/Copper alloy

AC Charging Cable Spec.	Specification	Color	Standard
32A Cable	3×6.0mm²+1×0.75mm²	Black	GB / T 33594
16A Cable	3×2.5mm²+1×0.75mm²	Black	GB / T 33594



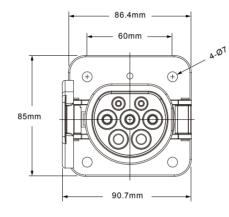


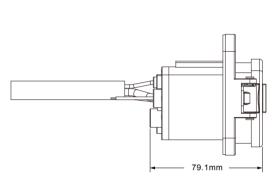
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AC Charging Connector for Electric Vehicle: GB / T 20234 Standard

## VCIG2A032B0 VCIG2A016B0







Vehicle inlet

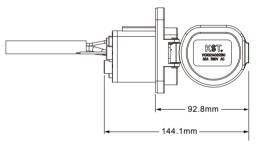












#### **Features**

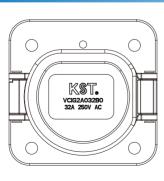
- Conformity in surface design with GB / T 20234-2015.
- Temperature detecting function.
- High protection level to resist severe environment.
- Applicable to Connection B and Connection C of IEC 61851.

#### **Application**

BEV, PHEV, etc.

Types of connection: Case B / Case C

#### Product Perimeter



#### Proiect

Vehicle inlet Color
Rated Current
Rated Voltage
Lifespan
Flammability Rating
Protection Level
Operating temperature
Main Material
Temperature detecting range
TATC Application No.

#### Specification

Black

16A / 32A

250V AC

≥ 10000 times

UL 94V-0

IP54

-30°C ~ +50°C

PBT / PC / Brass

-30°C ~ +150°C

AC Charging Cable Spec.	Specification	Color	Standard
16A Cable	3×2.5mm²+2×0.75mm²	Black	CQC 1104 &
32A Cable	3×6.0mm²+2×0.75mm²	Black	KEMA-KEUR DEKRA K175-2



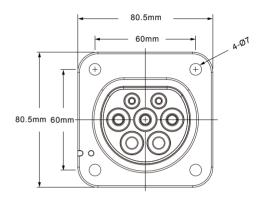


No.: CQC16029148023

AC Charging Connector for Electric Vehicle: GB / T 20234 Standard

## VCSG2A032B0 VCSG2A016B0





Socket



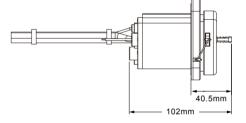












22.3mm

83.8mm

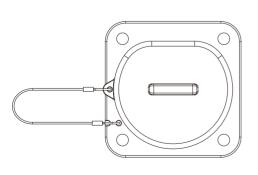
#### **Features**

- Conformity in surface design with GB / T 20234-2015.
- Temperature detecting function.
- High protection level to resist severe environment.
- Applicable to Connection A and Connection B of IEC 61851.

#### **Application**

EVSE, charging pile and domestic wall-mounted charger, etc. Charging mode: mode3; Types of connection: Case A / Case B

## **Product Perimeter**



Socket Color **Rated Current** Rated Voltage Lifespan Flammability Rating **Protection Level** Operating temperature Main Material Temperature detecting range TATC Application No.

Black 16A / 32A 250V AC  $\geq$  10000 times UL 94V-0 IP54 -30°C ~ +50°C PBT / PC / Brass -30°C ~ +150°C

AC Charging Wire Spec.	Specification	Equal Standard
16A Wire	2×2.5mm²+1×4.0mm²+2×0.75mm²	CQC 1104 &
32A Wire	2×6.0mm²+1×10mm²+2×0.75mm²	KEMA-KEUR DEKRA K175-2





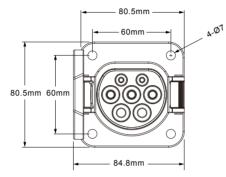


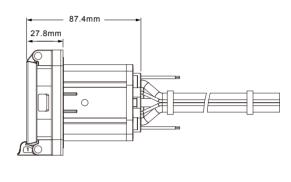
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AC Charging Connector for Electric Vehicle: GB / T 20234 Standard

## VCSG2A032C0 VCSG2A016C0







Socket

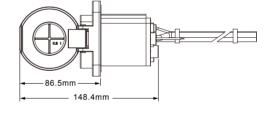












#### **Features**

- Conformity in surface design with GB / T 20234-2015.
- Temperature detecting function.
- High protection level to resist severe environment.
- Applicable to Connection A and Connection B of IEC 61851.

#### **Application**

EVSE, charging pile and domestic wall-mounted charger, etc. Charging mode: mode3; Types of connection: Case A / Case B

**Product Perimeter** 

KST.

Socket Color **Rated Current** Rated Voltage Lifespan Flammability Rating **Protection Level** Operating temperature Main Material Temperature detecting range TATC Application No.

Black 16A / 32A 250V AC  $\geq$  10000 times UL 94V-0 IP54 -30°C ~ +50°C PBT / PC / Brass -30°C ~ +150°C

16A: QA16EE1EB0812 / QA16EF1EB0812 32A: QA16EE1EB0822 / QA16EF1EB0822

#### **AC Charging Wire Spec.** 16A Wire $2 \times 2.5 \text{mm}^2 + 1 \times 4.0 \text{mm}^2 + 2 \times 0.75 \text{mm}^2$ CQC 1104 & 32A Wire $2 \times 6.0 \text{mm}^2 + 1 \times 10 \text{mm}^2 + 2 \times 0.75 \text{mm}^2$ KEMA-KEUR DEKRA K175-2

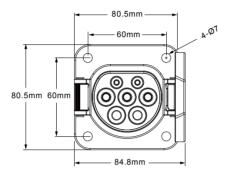


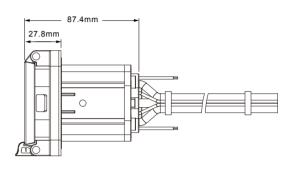


AC Charging Connector for Electric Vehicle: GB / T 20234 Standard

## VCSG2A032D0 VCSG2A016D0







Socket

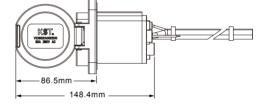












#### **Features**

- Conformity in surface design with GB / T 20234-2015.
- Temperature detecting function.
- High protection level to resist severe environment.
- Applicable to Connection A and Connection B of IEC 61851.

#### **Application**

EVSE, charging pile and domestic wall-mounted charger, etc. Charging mode: mode3; Types of connection: Case A / Case B

**Product Perimeter** 

# KST.

Socket Color **Rated Current** Rated Voltage Lifespan Flammability Rating **Protection Level** Operating temperature Main Material Temperature detecting range TATC Application No.

Black 16A / 32A 250V AC  $\geq$  10000 times UL 94V-0 IP54 -30°C ~ +50°C PBT / PC / Brass -30°C ~ +150°C

AC Charging Wire Spec.	Specification	Equal Standard
16A Wire	2×2.5mm²+1×4.0mm²+2×0.75mm²	CQC 1104 &
32A Wire	2×6.0mm²+1×10mm²+2×0.75mm²	KEMA-KEUR DEKRA K175-2





Electronic Locking Solenoid For Vehicle Inlet

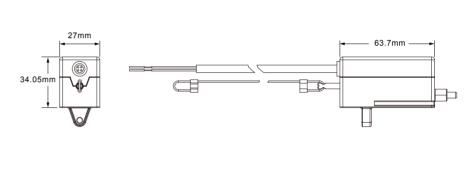
## VCELG-H12SA0-00



**Application** 



Project	Specification
Rated Current	3A DC 12V
Rated Voltage Estimated Life	≥ 10000 times
Operating temperature	-30°C ~ +50°C



## GB/T20234

Electronic Locking Solenoid For Socket

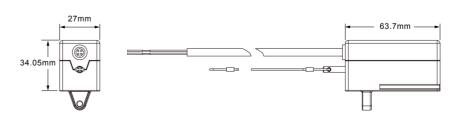
## VCELG-V12SA0-00



**Application** 



Project	Specification
Rated Current	3A
Rated Voltage	DC 12V
Estimated Life	≥ 10000 times
Operating temperature	-30°C ~ +50°C







## IEC 62196 -2

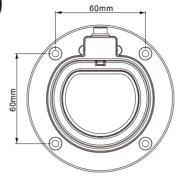
Electronic Locking Solenoid For Socket

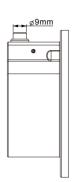
## VCSIHA1 / VCSIHA0



**Application** 







#### Proiect

Housing color Standards/regulations Charging standard Possible mounting positions Mounting hole diameter Application

#### Specification

Black
IEC 62196-2
Type 2
Front mounting
4.5 mm (ø)
for vehicle charging connect

for vehicle charging connectors on charging stations (EVSE)

## **SAE J1772**

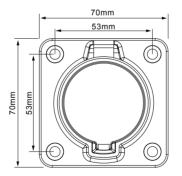
Electronic Locking Solenoid For Socket

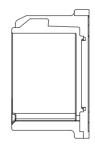
## VCSSHA1



**Application** 







#### Project

Housing color Standards/regulations Charging standard Possible mounting positions Mounting hole diameter Application

#### Specification

Black
SAE J1772
Type 1
Front mounting
5.6 mm (Ø)
for vehicle charging connectors on charging stations (EVSE)





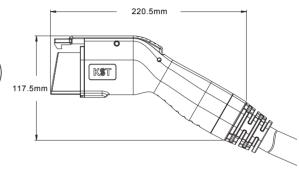
## **UL 2251**

AC Charging Connector for Electric Vehicle: SAE J1772 Standard

# VCPU2A080D0 / VCPU2A040D0 / VCPU2A032D0 VCPU2A016D0 / VCPU1A016D0

















#### **Features**

- Conformity in surface design with SAE J1772, as well as product test accordance with UL 2251.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High level of protection against severe environment.
- Products passed 5000N driveover test.
- Applicable to Connection B and Connection C of IEC 61851.

#### **Application**

BEV, PHEV, charging pile, cord set and domestic wall-mounted charger, etc.

Charging mode: mode2/mode3; Type of connection: Case B/Case C.

#### Specification **Product Perimeter** Plug Color Black Rated Current 80A / 40A / 32A / 16A Rated Voltage 240V AC Lifespan ≥ 10000 times Flammability Rating UL 94V-0 **Protection Level** NEMA 4 (Body IP67) Operating temperature -30°C ~ +50°C PBT / PC / PA66 / Copper Alloy Main Material

AC Charging Cable Spec.	Specification	Color	Standard
80A Cable	2x5AWG+1x6AWG+1x16AWG	Black	UL62 EVE
40A Cable	2x8AWG+1x10AWG+1x18AWG	Black	UL62 EVE
32A Cable	3x10AWG + 1x18AWG	Black	UL62 EVE
16A Cable	3x14AWG + 1x18AWG	Black	UL62 EVE
16A Cable	3x14AWG + 1x18AWG	Black	UL62 EVJE



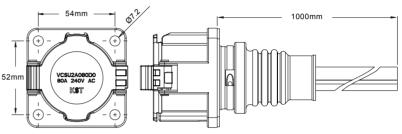


## **UL 2251**

AC Charging Connector for Electric Vehicle: SAE J1772 Standard

# VCSU2A080D0 / VCSU2A080E0 VCSU2A040D0 / VCSU2A040E0















#### **Features**

- Conformity in surface design with SAE J1772, as well as product test accordance with UL 2251.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High level of protection against severe environment.
- Products passed 5000N driveover test.
- Applicable to Connection B and Connection C of IEC 61851.

#### **Application**

**Product Perimeter** 

BEV, PHEV, charging pile, cord set and domestic wall-mounted charger, etc.

Plug Color

Rated Current

Rated Voltage

Lifespan

Flammability Rating

Protection Level

Congresting temporature

Plug Color

Black

80A / 40A

240V AC

≥ 10000 times

UL 94V-0

NEMA 4 (With Plug)

Operating temperature  $-30^{\circ}\text{C} \sim +50^{\circ}\text{C}$ Main Material PBT / PC / PA66 / Copper Alloy

AC Charging Cable Spec.

Specification

Color

Standard

80A Wire

2x5AWG+1x6AWG+2x18AWG

40A Wire

2x8AWG+1x10AWG+1x18AWG

UL62

UL62



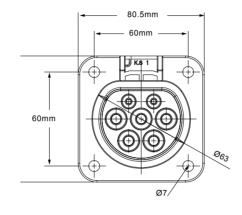


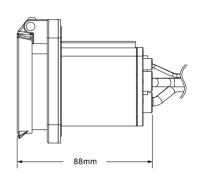


AC Charging Connector for Electric Vehicle: IEC 62196-2 Type2 Standard

## VCSI2A032B0 / VCSICA032B0

















#### **Features**

- Conformity in surface design with IEC 62196-2 Type 2 as well as product test accordance with IEC 62196-1 & IEC 62196-2.
- Applicable in both single-phase and three-phrase electric system.
- Exclusive magnetic lock with high speed connection for an extended lifespan.
- Applicable to Connection A and Connection B of IEC 61851.
- Certificated by TUV.

#### **Application**

Charging pile

Product Perimeter	Project	Specification
	Plug Color Rated Current Rated Voltage  Force Lifespan Flammability Rating Protection Level Operating temperature Main Material TUV Certificate NO.	Black 32A 250V AC (Single-Phase) 250V / 480V AC (Three-Phase) ≤ 100N ≥ 10000 times UL 94V-0 IP44 -30°C ~ +50°C PBT / PC / Copper / Copper Alloy R 50302730
AC Charging Wire Spec.	Specification	Standard
32A Wire	5×6.0mm²+2×0.75mm²	EN50620





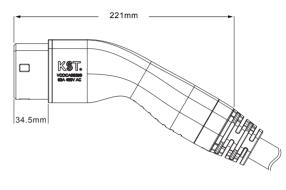


AC Charging Connector for Electric Vehicle: IEC 62196 TYPE2

## VCCICA063B0 / VCCICA032B0 / VCCI2A032B0 VCCI2A020B0 / VCCI2A013B0

















#### **Features**

- Conformity in surface design with IEC62196-2 TYPE2, as well as product test accordance with IEC 62196-2.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High protection level to resist severe environment.
- Products passed 5000N driveover test.
- Applicable to connection B and Connection C of IEC 61851.

#### **Application**

BEV, PHEV, charging pile, cord set and domestic wall-mounted charger, etc. Charging mode: mode2 / mode3; Types of connection: Case B / Case C

Drod	LICT	Dori	ma	tor

#### Project

Plug Color Rated Current Rated Voltage Lifespan Flammability Rating Protection Level Operating temperature Main Material

#### Specification

63A / 32A / 20A / 13A 250V AC / 480V AC ≥ 10000 times UL 94V-0 With Cap IP54 (Body IP67) -30°C ~ +50°C PBT / PC / PA66 / Brass

AC Charging Cable Spec.	Specification	Color	Standard
Three-phase 63A Cable	$5 \times 16 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$	Black	EN50620
Three-phase 32A Cable	$5 \times 6.0 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$	Black	EN50620
Single-phase 32A Cable	$3 \times 6.0 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$	Black	EN50620
Single-phase 20A Cable	$3 \times 2.5 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$	Black	EN50620
Single-phase 13A Cable	$3\times1.5$ mm²+ $1\times0.75$ mm²	Black	EN50620





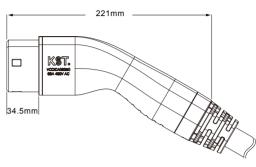


AC Charging Connector **for Electric Vehicle**: IEC 62196 TYPE2 TO TYPE2 EV Plug-to-Plug Charging Cable Set

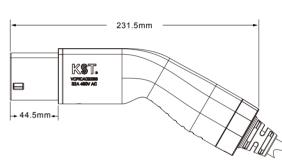
## VCCICA032B0-I0











#### **Features**

- Conformity in surface design with GB / T 20234-2015.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High protection level to resist severe environment.
- Products passed 5000N driveover test.
- Applicable to Connection B of IEC 61851.















## Application

For connecting BEV, PHEV and charging pile.

Types of connection: Case B

#### **Product Perimeter**

# RST.

#### D.......

Vehicle Connector + Plug Color

Rated Current Rated Voltage

Force

Lifespan

Flammability Rating Protection Level

Operating temperature Main Material

### White

32A(Single Phase & three Phase)

480V AC

≤ 100N > 10000

≥ 10000 times UL 94V-0

IP54

-30°C ~ +50°C

PBT / PC / PA66 / Brass

AC Charging Cable Spec.	Specification	Color	Standard
32A Cable	5×6.0mm²+1×0.75mm²	Black	EN50620





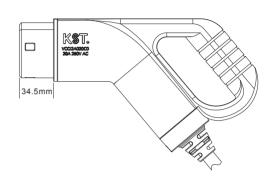


AC Charging Connector for Electric Vehicle: IEC 62196 TYPE2

## VCCICA063C0 / VCCICA032C0 / VCCI2A032C0 VCCI2A020C0

















#### **Features**

- Conformity in surface design with IEC62196-2 TYPE2, as well as product test accordance with IEC 62196-2.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High protection level to resist severe environment.
- Products passed 5000N driveover test.
- Applicable to connection B and Connection C of IEC 61851.

#### **Application**

BEV, PHEV, charging pile, cord set and domestic wall-mounted charger, etc. Charging mode: mode2 / mode3; Types of connection: Case B / Case C

#### **Product Perimeter**

#### Project

Plug Color Rated Current Rated Voltage Lifespan Flammability Rating Protection Level Operating temperature Main Material

#### Specification

63A / 32A / 20A / 13A 250V AC / 480V AC ≥ 10000 times UL 94V-0 With Cap IP54 (Body IP67) -30°C ~ +50°C PBT / PC / PA66 / Brass

AC Charging Cable Spec.	Specification	Color	Standard
Three-phase 63A Cable	5×16mm <sup>2</sup> +1×0.75mm <sup>2</sup>	Black	EN50620
Three-phase 32A Cable	$5 \times 6.0 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$	Black	EN50620
Single-phase 32A Cable	$3 \times 6.0 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$	Black	EN50620
Single-phase 20A Cable	$3 \times 2.5 \text{mm}^2 + 1 \times 0.75 \text{mm}^2$	Black	EN50620





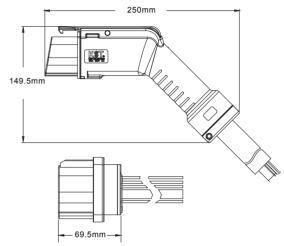
## **Taiwan E-Scooter**

DC Charging Connector for Electric Scooter: TES-0D-01-01

## ESPCBD080A0 / ESSCBD080A0

















#### **Features**

- Conformity in surface design with TES-0D-01-01, as well as product test accordance with TES-0D-01-01.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High protection level to resist severe environment.
- Products passed 800N driveover test.

#### **Application**

E-Scooter, Charging pile, cord set, domestic wall-mounted charger, etc.

#### Specification **Product Perimeter** Plug Color Gray **Rated Current** 80A 72mm -56mm Rated Voltage 120V DC Lifespan $\geq$ 10000 times Flammability Rating UL 94V-0 72mm 56mm Protection Level IP55 (Body IP67) -30°C ~ +50°C Operating temperature Main Material PBT / PC / PA66 / Copper Alloy Specification Color Standard AC Charging Cable Spec. 80A Cable $2\times25$ mm<sup>2</sup>+ $7\times0.75$ mm<sup>2</sup> Black +2×0.75mm<sup>2</sup>





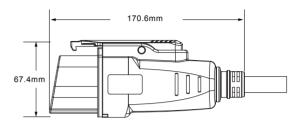
## Taiwan E-Scooter

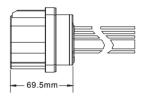
DC Charging Connector for Electric Scooter: TES-0D-01-01 (Interface)

## ESPCBD025B0 / ESSCBD080A0



















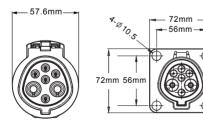
#### **Features**

- Conformity in surface design with TES-0D-01-01, as well as product test accordance with TES-0D-01-01.
- Ergonomic and streamlined designs allow for user-friendly interaction.
- High protection level to resist severe environment.
- Products passed 800N driveover test.

#### **Application**

E-Scooter, Charging pile, cord set, domestic wall-mounted charger, etc.

### Product Perimeter



#### **Project**

Plug Color
Rated Current
Rated Voltage
Lifespan
Flammability Rating
Protection Level
Operating temperature
Main Material

#### Specification

Black
25A
120V DC
≥ 10000 times
UL 94V-0
IP55 (Body IP67)
-30°C ~ +50°C
PBT / PC / PA66 / Copper Alloy

AC Charging Cable Spec.	Specification	Color	Standard
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25A Cable 2×3.5mm²+5×0.5mm² Black





## TES-0D-01-01

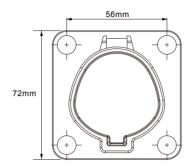
Electronic Locking Solenoid For Socket

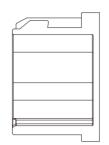
## **ESSCBHA0**



**Application** 







#### Project

Housing color Standards/regulations Main Material Possible mounting positions Mounting hole diameter Application

#### **Specification**

Black
TES-0D-01-01
PA66
Front mounting
10.5 mm (Ø)
E-Scooter, Charging pile, cord set, domestic wall-mounted charger, etc.





## **Application in EV Charging System**

Supply Cable with Bilateral Plugs



Cord Set



Charging Pile



Domestic wall-mounted charger



On-Board Inlet



Charging Stations/Parking











Website: www.ksterminals.com Catalog: edm.ksterminals.com



#### **K.S. TERMINALS INC.**

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