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V2.3 V2.3





# EV CHARGING SOLUTIONS AG ELECTRICAL







Hangzhou Jiayuan Industrial Co.,Ltd was established in 1993 and has 30 years of professional EV Charging production experience and core technology. With R&D team of 50 people, focusing on Electric Vehicle Charging Interface, Engineering Design and Supply Chain Integration.

All of our products were passed certificates of CE, TUV, UL. JIAYUAN handles independent R&D, Cable Production and its Assembling. Our vision is to serve in the gobal EV industry through untilizing the most advanced technologies, scientifically analyzing our products performance and by working with the pioneers, innovators, and key point

We deliver by fostering a work environment that values and rewards integrity, respect, and performance while contributing positively to the







GB standard AC and DC charging connector	04-14
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SAE standard AC charging connector	18-18
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Electromagnetic lock	28-29
Plug fixed socket	30-30

### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Lmpact of external force: can afford 1m drop and 2t vehicle
- run over pressure.
- Insertion and extraction force: <100N

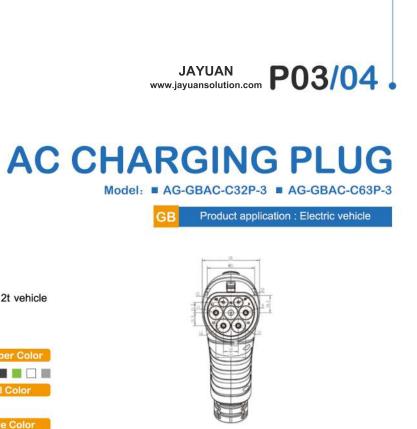
#### Rubber Cold **Applied Materials** Shell material: thermoplastics,flame Shell Color retardant grade UL94-V0 • Pin: Copper alloy, silver + top of the Cable Color thermoplastic Environmental performance • Operating temperature:-30°C~+50°C

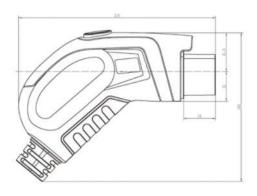
#### **Electrical Performance**

- The rated current: 32A、63A
- Operating voltage: 440V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015. 2) Have one or two PTC (PT1000) thermistor (can match with NTC or Temperature control switch). 3) The head of pins using safety insulation design to prevent direct contact with the hand . 4) Excellent protection performance, prodection grade achieved IP55( working condition). 5) Applied double color coating technology ,personalized custom a variety of colors . 6) Reliable material, flame-retardant, pressure proof, wear-resisting, impact resistance, advanced oil proof.

Product Specification and Cable Standard		
Product Type	Rated Current/ Voltage	Cable Specifications
AG-GBAC-C32P-3	32A/440V	5x6+4x0.75(P2)
AG-GBAC-C63P-3	63A/440V	5x16+4x0.75(P2)





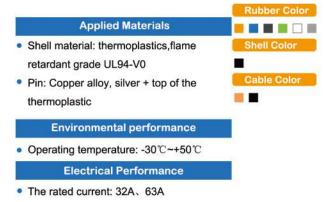
# **AC CHARGING PLUG**

Model: AG-GBAC-Z32P-3 AG-GBAC-Z63P-3

### Product application : Charging pile

## **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure .



- The rated voltage: 440V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax





1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/T 20234.2-2015.

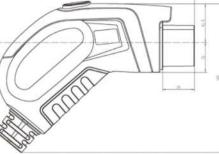
2) Have one or two PTC (PT1000) thermistor (can match with NTC or Temperature control switch).

- 3) The head of pins using safety insulation design to prevent direct contact with the hand .
- 4) Excellent protection performance, prodection grade achieved IP55( working condition).
- 5) Applied double color coating technology ,personalized custom a variety of colors .

6) Reliable material, flame - retardant, pressure proof, wear - resisting, impact resistance, advanced oil proof.

Product Specification and Cable Standard			
Product Type Rated Current/ Voltage Cable Specifications			
AG-GBAC-Z32P-3	32A/440V	F5x6+4x0.75(P2)	
AG-GBAC-Z63P-3	63A/440V	F5x16+4x0.75(P2)	





### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure .
- Insertion force: <100N</p>

#### Rubber Color **Applied Materials** • Shell material: thermoplastics, flame Shell Color retardant grade UL94-V0 Cable Color Pin: Copper alloy, silver plate and use thermoplastic at the top

## Environmental performance

• Operating temperature: -30°C~+50°C

### Electrical Performance

- The rated current: 10A、16A、32A
- The rated voltage: 250V/440V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: < 50K</p>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015. 2) Using riveting pressure process with none screw, have a beautiful apprearance .Hand - held design conform to the ergonomic

principle, easy plug.

3) The head of pins using safety insulation design to prevent direct contact with the hand . 4) Excellent protection performance, protection grade achieved IP55( working condition). 5) Applied double color coating technology, customize color.

Product Type	Rated Current/ Voltage	Cable Specifications
AG-GBAC-C10P	10A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-C16P	16A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-C16P-3	16A/440V	5X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-C32P	32A/250V	3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>



GB

Product application : Electric vehicle



#### Features

# **AC CHARGING PLUG**

Model: AG-GBAC-Z10P AG-GBAC-Z16P AG-GBAC-Z16P-3 AG-GBAC-Z32P

Product application : Charging pile

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

	Rubber Color
Applied Materials	
Shell material: thermoplastics, flame	Shell Color
retardant grade UL94-V0	-
Pin:Copper alloy, silver + top of the	Cable Color
thermoplastic	
Environmental performance	

#### **Electrical Performance**

- The rated current: 10A、16A、32A、63A
- The rated voltage: 250V/440V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: < 50K</li>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

#### Features

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015.

2) Using riveting pressure process with none screw and beautiful apprearance .Hand - held design conform to the ergonomic principle, easy plug.

3) The head of pins using safety insulation design to prevent direct contact with the hand

4) Excellent protection performance, protection grade achieved IP55( working condition).

5) Applied double color coating technology with customization color.

### Product Specification and Cable Standard

Product Type	Rated Current/ Voltage	Cable Specifications
AG-GBAC-Z10P	10A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-Z16P	16A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-Z16P-3	16A/440V	5X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-Z32P	32A/250V	3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

#### Rubber Color **Applied Materials** Shell material: thermoplastics, flame Shell Color retardant grade UL94-V0 Pin: Copper alloy, silver + top of the Cable Color

## thermoplastic

## Environmental performance

Operating temperature: -30℃~+50℃

#### **Electrical Performance**

- The rated current: 10A、16A、32A、63A
- The rated voltage: 250V/440V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K</li>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015. 2) Using riveting pressure process with none screw, have a beautiful apprearance. Hand - held design conform to the ergonomic principle

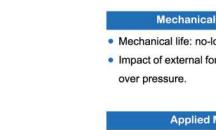
, plug conveniently.

3) The head of pins using safety insulation design to prevent direct contact with the hand.

5) Applied double color coating technology ,personalized custom a variety of colors .

### Product Specification and Cable Standard

Product Type	Rated Current/ Voltage	Cable Specifications
AG-GBAC-C10P	10A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-C16P	16A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-C16P-3	16A/440V	5X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-C32P	32A/250V	3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>







Product application : Electric vehicle



- 4) Excellent protection performance, prodection grade achieved IP55( working condition).

# **AC CHARGING PLUG**

Model: AG-GBAC-Z10P AG-GBAC-Z16P AG-GBAC-Z16P-3 AG-GBAC-Z32P

Product application : Charging pile

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

Applied Materials	Rubber Color
<ul> <li>Shell material: thermoplastics, flame</li> </ul>	
retardant grade UL94-V0	Shell Color
<ul> <li>Pin: Copper alloy, silver + top of the</li> </ul>	
thermoplastic	Cable Color
Environmental performance	

• Operating temperature: -30°C~+50°C

#### Electrical Performance

- The rated current: 10A、16A、32A
- The rated voltage: 250V/440V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax



#### Features

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015.

2) Using riveting pressure process with none screw, have a beautiful apprearance. Hand-held design conform to the ergonomic principle, easy plug.

3) The head of pins using safety insulation design to prevent direct contact with the hand .

4) Excellent protection performance, prodection grade achieved IP55( working condition).

5) Applied double color coating technology ,personalized custom a variety of colors.

### Product Specification and Cable Standard

Product Type	Rated Current/ Voltage	Cable Specifications
AG-GBAC-Z10P	10A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-Z16P	16A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-Z16P-3	16A/440V	5X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-Z32P	32A/250V	3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>

## **AC CHARGING SOCKET**

Model: AG-GBAC-C10S AG-GBAC-C16S AG-GBAC-C16S-3 ■ AG-GBAC-C32S ■ AG-GBAC-C32S-3 ■ AG-GBAC-C63S-3

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Insertion force: <100N</p>

#### **Applied Materials**

- Shell material: thermoplastics, flame retardant grade UL94-V0
- · Contact tube: Copper alloy, silver-plated

#### Environmental performance

• Operating temperature: -30°C~+50°C

### Electrical Performance

- The rated current: 10A, 16A, 32A, 63A
- The rated voltage: 250V/440V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

2) Have a electromagnetic locking device (can match with hela lock) ,have functions of signal feedback. 3) Have one or two PTC (PT1000) thermistor (can match with hela lock) ,have functions of signal feedback. 4) Beautiful appearance, prevention cap can be installed on the left side, the right side or the front of it. 5) Reliable material ,flame retardant, presssure proof , wear - resisting , impact resistance, high oil proof . 6) Excellent protection performance, prodection grade achieved IP55( working condition).

Product Type	Rated Current/ Voltage	Cable Specifications	Note
AG-GBAC-C10S	10A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>	
AG-GBAC-C16S	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>	The wire length a end of
AG-GBAC-C16S-3	16A/440V	H07BZ5-F5X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>	treatment are according to the
AG-GBAC-C32S	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>	customer requirement.
AG-GBAC-C32S-3	32A/440V	H07BZ5-F5X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>	
AG-GBAC-C63S-3	63A/440V	H07BZ5-F5X16mm <sup>2</sup> +2x0.75mm <sup>2</sup>	



Product application : Electric vehicle



#### Features

- 1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015.

## **AC CHARGING SOCKET**

Model: AG-GBAC-Z10S AG-GBAC-Z16S AG-GBAC-Z16S-3 ■ AG-GBAC-Z32S ■ AG-GBAC-Z32S-3 ■ AG-GBAC-Z63S-3

Product application : Charging pile

#### Mechanical properties

- Mechanical life: no-load plug>10000times
- Insertion force: <100N</p>

#### **Applied Materials**

- Shell material: thermoplastics, flame retardant grade UL94-0
- · Contact tube: Copper alloy, silver plated

#### Environmental performance

● Operating temperature: -30°C~+50°C

#### Electrical Performance

- The rated current: 10A、16A、32A、63A
- The rated voltage: 250V/440V
- Insulation resistance: > 1000MΩ(DC500V)
- Pins temperature rise: <50K
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

#### Features

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015. 2) Have a electromagnetic locking device (can match with hela lock) have functions of signal feedback.

- 3) Have one or two PTC (PT1000) thermistor (can match with hela lock) ,have functions of signal feedback.
- 4) Beautiful appearance, prevention cap can be installed on the left side, the right side or the front of it.
- 5) Reliable material ,flame retardant, presssure proof , wear resisting , impact resistance, high oil proof .
- 6) Excellent protection performance, prodection grade achieved IP55 (working condition).

### **Product Specification and Cable Standard**

Product Type	Rated Current/ Voltage	Cable Specifications	Note
AG-GBAC-Z10S	10A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>	
AG-GBAC-Z16S	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>	The wire length a end of
AG-GBAC-Z16S-3	16A/440V	H07BZ5-F5X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>	treatment are according to the
AG-GBAC-Z32S	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>	customer requirement.
AG-GBAC-Z32S-3	32A/440V	H07BZ5-F5X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>	
AG-GBAC-Z63S-3	63A/440V	H07BZ5-F5X16mm <sup>2</sup> +2x0.75mm <sup>2</sup>	



## **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

Rubber Color
Shell Color Cable Color

#### **Electrical Performance**

- The rated current: 80A、125A、200A、250A
- The rated voltage: 750V/1000V
- Insulation resistance: >2000MΩ(DC1000V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 4500V(DC+/DC-/PE)
- Contact impedance: 0.5mΩMax

2) Have a electromagnetic locking device , have functions of signal feedback . 3) Have one or two PTC (PT1000) thermistor (can match with NTC or Temperature control switch). 4) The head of pins using safety insulation design to prevent direct contact with the hand 5) Excellent protection performance, prodection grade achieved IP55( working condition). 6) Applied double color coating technology ,personalized custom a variety of colors .

Product Specification and Cable Standard		
Product Type	Rated Current	Cable Specifications
AG-GBDC-C80P	80A	2x20+1x25+2x4+2x(2x0.75)(P2)+8x0.75
AG-GBDC-C125P	125A	2x35+1x25+2x4+2x(2x0.75)(P2)+8x0.75
AG-GBDC-C200P	200A	2x70+1x25+2x4+2x(2x0.75)(P2)+8x0.75
AG-GBDC-C250P	250A	2x80+1x25+2x4+2x(2x0.75)(P2)+8x0.75





- 1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.2-2015.

# **DC CHARGING PLUG**

Model: AG-GBDC-C80P (32A/40A)



### Mechanical properties

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

#### **Applied Materials**

- Shell material: thermoplastics,flame retardant grade UL94-V0
- Pin: Copper alloy , silver + top of the thermoplastic

#### Environmental performance

Operating temperature: -30℃~+50℃

#### Electrical Performance

- The rated current: 32A、40A
- The rated voltage: 750V
- Insulation resistance: >2000MΩ(DC1000V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 4500V (DC+/DC-/PE)
- Contact impedance: 0.5mΩMax

#### Features

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.3-2015. 2) Have a electromagnetic locking device , have functions of signal feedback .

3) Have one or two PTC (PT1000) thermistor (can match with NTC or Temperature control switch) .

4) The head of pins using safety insulation design to prevent direct contact with the hand .

5) Excellent protection performance, prodection grade achieved IP55 (working condition).

6) Developed for portable DC charging pile , beautiful appearance with hand - held design and small in volume make installation easily, insertion and withdrawal conveniently .

#### **Product Specification and Cable Standard**

Product Type	Rated Current	Cable Specifications
AG-GBDC-C32P	32A	3x6+2x4+4x0.75(P2)+6x0.75
AG-GBDC-C40P	40A	3x10+2x4+4x0.75(P2)+6x0.75

# **Applied Materials**

- Shell material: thermoplastics, flame retardant grade UL94-0
- Contact-tube: Copper alloy, silver-plated

Mechanical properties

Mechanical life: no-load plug>10000times

Insertion force: <140N</p>

#### Environmental performance

Operating temperature: -30℃~+50℃

#### **Electrical Performance**

- The rated current:80A、125A、200A、250A
- The rated voltage: 750V/1000V
- Insulation resistance: >2000MΩ(DC1000V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 4500V (DC+/DC-/PE)
- Contact impedance: 0.5mΩMax

1) Conform to the provisions and requirements of <Connection set for conductive charging of electric vehicles> GB/ T 20234.3-2015. 2) Have one or two PTC (PT1000) thermistor (can match with hela lock) ,have functions of signal feedback. 3) Beautiful appearance, prevention cap can be installed on the left side, the right side or the front of it. 4) Reliable material ,flame retardant, presssure proof , wear - resisting , impact resistance, high oil proof . 5) Excellent protection performance, prodection grade achieved IP55 (working condition).

# Product Specification and Cable Standard

Product Type	Rated Current	Cable Specifications	Note
AG-GBDC-C80S	80A	H07BZ5-F2X20mm <sup>2</sup> +1x25mm <sup>2</sup> +2x4mm <sup>2</sup> +8x0.75mm <sup>2</sup>	
AG-GBDC-C125S	125A	H07BZ5-F2X35mm <sup>2</sup> +1x25mm <sup>2</sup> +2x4mm <sup>2</sup> +8x0.75mm <sup>2</sup>	Wire length and tail end
AG-GBDC-C200S	200A	H07BZ5-F2X70mm <sup>2</sup> +1x25mm <sup>2</sup> +2x4mm <sup>2</sup> +8x0.75mm <sup>2</sup>	treatment according to customer configuration.
AG-GBDC-C250S	250A	H07BZ5-F2X80mm <sup>2</sup> +1x25mm <sup>2</sup> +2x4mm <sup>2</sup> +8x0.75mm <sup>2</sup>	-





Product application : Electric vehicle



# **AC CHARGING PLUG**

Model: AG-IEC 2-IIe-16P AG-IEC 2-IIe-16P-3 AG-IEC 2-IIe-20P AG-IEC 2-IIe-32P



#### Mechanical properties

- Mechanical life: no-load plug >10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.
- Insertion force: <100N</p>

	Rubber Color
Applied Materials	
Shell material: thermoplastic, flame	Shell Color
retardant grade UL94-V0	
Contact- tube: Copper alloy, silver-plated	Cable Color
Environmental performance	
● Operating temperature:-30°C~+50°C	

#### **Electrical Performance**

- The rated current: 16A、20A、32A
- The rated voltage: 250V/480V
- Insulation resistance: >1000MΩ (DC500V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

#### Features

1) Conform to the provisions and requirements of IEC 62196-2-2016 2-lle.

2) Using riveting pressure process with none screw, have a beautiful apprearance. Hand - held design conform to the ergonomic principle , plug conveniently.

3) XLPO for cable insulation prolonging the aging resistance life - span , TPU shenth improved the bending life and wear resistance of cable.

4) Excellent protection performance, prodection grade achieved IP55( working condition).

5) Applied double color coating technology ,personalized custom a variety of colors.

#### **Product Specification and Cable Standard**

Product Type	Rated Current/ Voltage	Cable Specifications
AG-IEC 2-lle-16P	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC 2-lle-16P-3	16A/480V	H07BZ5-F5X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC 2-Ile-32P	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC 2-lle-32P-3	32A/480V	H07BZ5-F5X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>

•	Impact of external force: can afford 1m drop
	and 2t vehicle run over pressure.
	Insertion force : <100N

#### Rubber Colo **Applied Materials** Shell Color Shell material: thermoplastic, flame retardant grade UL94-V0 Cable Color Pin: Copper alloy, silver + top of the thermoplastic Environmental performance Operating temperature: -30°C~+50°C **Electrical Performance**

- The rated current: 16A、20A、32A
- The rated voltage: 250V/480V
- Insulation resistance: >1000MΩ(DC500V)

**Mechanical properties** 

Mechanical life: no-load plug >10000times

- Pins temperature rise: <50K</p>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

1) Conform to the provisions and requirements of IEC 62196-2-2016 2-IIb. 2) Using riveting pressure process with none screw , have a beautiful apprearance .Hand - held design conform to the ergonomic principle , plug conveniently.

3) XLPO for cable insulation prolonging the aging resistance life - span, TPU shenth improved the bending life and wear resistance of cable.

4) Excellent protection performance, prodection grade achieved IP55( working condition). 5) Applied double color coating technology ,personalized custom a variety of colors .

Product Type	Rated Current/ Voltage	Cable Specifications
AG-IEC 2-IIb-16P	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC 2-IIb-16P-3	16A/480V	H07BZ5-F5X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC 2-IIb-32P	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC 2-IIb-32P-3	32A/480V	H07BZ5-F5X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>





## **AC CHARGING SOCKET**

Model: AG-IEC2-IIa-16S AG-IEC2-IIa-32S AG-IEC2-IIa-16S-3 AG-IEC2-IIa-32S-3

Product application : Charging pile

#### Mechanical properties

- Mechanical life: no-load plug >10000times
- Insertion force: <100N</p>

#### **Applied Materials**

- Shell material: thermoplastics,flame retardant grade UL94V-0
- · Contact-tube: Copper alloy, silver plated
- Seal: Rubber, Silicone

### **Environmental performance**

- Operating temperature: -30°C~+50°C
- Waterproof rate: IP55

#### **Electrical Performance**

- The rated current: 16A, 32A, 40A
- The rated voltage: 250V/440V
- Insulation resistance: >1000MΩ (DC500V)
- Pins temperature rise: <50K
- Withstand voltage: 2000V
- Contact impedance: 0.5mΩMax

#### Features

1) Conform to the provisions and requirements of IEC62196-2 2016.

2) Match with Hela locking device.

- 3) Have one or two PTC(PT1000) thermistor (can match with NTC or Temperature control switch).
- 4) Beautiful appearance, prevention cap can be installed on the left side, the right side or the front of it.

5) Reliable material ,flame retardant, pressure proof, wear-resisting, impact resistance, high oil proof.

6) Excellent protection performance, protection grade achieved IP55 (working condition).

### **Product Specification and Cable Standard**

Product Type	Rated Current/ Voltage	Cable Specifications	Colour
AG-IEC2-IIa-16S	16A/250V	3X2.5mm <sup>2</sup> +2x0.5m <sup>2</sup>	
AG-IEC2-IIa-32S	32A/250V	3X6mm <sup>2</sup> +2x0.5m <sup>2</sup>	The wire length a end of
AG-IEC2-IIa-16S-3	16A/480V	5X2.5mm <sup>2</sup> +2x0.5m <sup>2</sup>	treatment are according to the customer requirement
AG-IEC2-IIa-32S-3	32A/480V	5X6mm <sup>2</sup> +2x0.5m <sup>2</sup>	

### **Mechanical properties** Mechanical life: no-load plug >10000times

- · Impact of external force: can afford 1m drop
- and 2t vehicle run over pressure.
- Insertion force: <100N</p>

#### **Applied Materials**

- Shell material: thermoplastic , flame retardant grade UL94-V0
- · Contact-tube: Copper alloy , silver plated Environmental performance
- Operating temperature: -30°C~+50°C
- Waterproof rate: IP55

#### **Electrical Performance**

- The rated current: 16A, 20A, 32A
- The rated voltage: 120V/250V
- Insulation resistance: >1000MΩ (DC500V)
- Pins temperature rise: <50K
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

1) Conform to the provisions and requirements of SAE J1772-2012, IEC 621962-2016 2-I.

2) Using riveting pressure process with none screw, have a beautiful apprearance .Hand - held design conform to the ergonomic princi-

ple, plug conveniently.

3) XLPO for cable insulation prolonging the aging resistance life - span , TPU shenth improved the bending life and wear resistance of cable.

4) Excellent protection performance, prodection grade achieved IP55 (working condition). 5) Applied double color coating technology ,personalized custom a variety of colors

Product Specification and Cable Standard		
Product Type	Rated Current/ Voltage	Cable Specifications
AG-SAEAC-I-16P	16A/120V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-SAEAC-I-16P	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-SAEAC-I-20P	20A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-SAEAC-I-32P	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>



Rubber Color

Shell Color

Cable Color



# **AC CHARGING PLUG**

Model: AG-SAEAC-I-16P AG-SAEAC-I-20P AG-SAEAC-I-32P

Product application : Electric vehicle



# **CHARGING MODE 2**

Model: AG-IEC2-IIe-16P-IC-CPD





- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

Electrical Performance	

- The rated current: 16A
- The rated voltage: 110V/250V AC
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 2500V
- Duty cycle: 21.67%



Operating temperature: -30℃~+50℃

#### **Applied Materials**

· Shell Material: thermoplastics , flame retardant grade UL94-V0

#### The Function of IC-CPD

- · Over-voltage , under-voltage protection
- Over-current protection
- Earth leakage protection
- Ground protection: continuous monitoring grounding protection
- · Over-temperature protection: break the circuit when the temperature is over 85°C with continuous 3S



#### Features

1) Conform to the provisions and requirements of IEC 62196-2.

2) Using riveting pressure process with none screw , have a beautiful appearance.Hand-held design conform to the ergonomic principle , plug conveniently. 3) The control box panel adopts display function , the current and voltage , the charging state and the temperature of the circuit board in real time.

4) Excellent protection performance, protection grade of IC-CPD achieved IP66 and achieved IP55 of plug (working condition) High security.

5) Applied double color coating technology, custom color.

6) Switchable currents, Customers can choose an appropriate charging current according to the demand.

7) Containing the intelligent chip. It can automatically repair minor charging problems while charging.

#### **Product Specification and Cable Standard**

Product Type	Rated Current/ voltage	Cable Specifications
AG-IEC2-lle-16p-IC-CPD	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- · Lmpact of external force: can afford 1m drop and 2t vehicle run over pressure.
- Insertion force: <100N</p>

The rated voltage: 220V

#### Rubber Color **Electrical Performance** Shell Color The rated current: 13A、16A Cable Color

- Insulation resistance: >1000MΩ(DC500V)
- Withstand voltage: 2500V
- duty cycle: 21.67%

#### Environmental performance

Operating temperature: -30℃~+50℃

#### **Applied Materials**

· Shell material: thermoplastics , flame retardant grade UL94-V0

#### the function of IC-CPD

- Over-voltage , under-voltage protection
- Over-current protection
- Earth leakage protection
- Ground protection: continuous monitoring grounding protection
- Lightning protection
- · Over-temperature protection: break the cir-
- cuit when temperature is over 85°C and continuous

Product Type	Rated Current/ voltage	Cable Specifications
Floduct Type	Rated Current/ Voltage	Cable Specifications
AG -IC-CPD-13A	13A/220V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG -IC-CPD-16A	16A/220V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>



# **CHARGING MODE 2**

Model: AG -IC-CPD-13A AG -IC-CPD-16A

Product application : Electric vehicle



Features

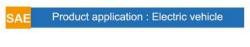
1) Conform to the provisions and requirements of GB/T20234.2-2015 , GB/T 18487.1-2015.

2) Using riveting pressure process with none screw with beautiful appearance.Hand-held design conform to ergonomic principle, plug conveniently. 3) The control box layout USES the display screen function to display the current voltage, charging status and circuit board temperature in real time. 4) Special internal waterproof protection performance, protection grade of IC -CPD achieved IP66and achieved IP55 of plug(working condition)

### 5)Adopted double color coating technology, custom color accepted.

# **CHARGING MODE 2**

Model: AG-SAEAC-I-16P-IC-CPD



#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Lmpact of external force: can afford 1m drop and 2t vehicle run over pressure.
- Insertion force:<100N</p>
- **Electrical Performance**
- The rated current: 13A, 16A
- The rated voltage: 110V/220V/250V

Shell Color

- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 2500V
- Contact impedance: 0.5mΩMax

#### **Applied Materials**

· Shell material: thermoplastics, flame retardant grade UL94-V0



#### **Environmental performance**

• Operating temperature: -30°C~+50°C

### the function of IC-CPD

- Over-voltage , under-voltage protection
- Over-current protection
- Earth leakage protection
- Ground protection: continuous monitoring grounding protection
- · Over-temperature protection:break the circuit when the temperature is over 85°C with continuous 3S

#### Features

1) Conform to the provisions and requirements of SAE J1772-2012. 2) Using riveting pressure process with none screw with beautiful appearance.Hand-held design conform to ergonomic principle, plug conveniently. 3) The control box can be adjusted to fixed 10A/13A/16A .

4) XLPO for cable insulation prolonging the aging resistance life-span.TPU sheath improves the bending life and wear resistance of cable.

5) Special internal waterproof protection performance, protection grade achieved IP55(working condition).

6) Adopted double color coating technology, custom color accepted.

#### **Product Specification and Cable Standard** Product Type Rated Current/ voltage **Cable Specifications** AG-SAEAC-I-16P-IC-CPD 16A/250V H07BZ5-F3X2.5mm<sup>2</sup>+2x0.5mm<sup>2</sup>

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Lmpact of external force: can afford 1m drop and 2t vehicle run over pressure.

#### **Electrical Performance**

- The rated current: 16A, 32A
- The rated voltage: 250V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K</p>
- Contact impedance: 0.5mΩMax

- · Shell Material: thermoplastics,flame retardant grade UL94-V0
- · Pin: Copper alloy,silver+top of the thermoplastic

#### **Environmental performance**

Operating temperature: -30℃~+50℃

1) Conform to the provisions and requirements of GB/T 20234.2-2015. 2) Product assembly meet GB/T 20234.2-2011 Charging Mode3 connection method B. 3) Using riveting pressure process with none screw , have a beautiful appearance.Hand-held design conform to the ergonomic principle,plug conveniently.

4) Nice appearance, hand design to prevent accidental direct contact with staff. 5) Excellent protection performance, protection grade achieved IP55 of plug(working condition)High security.

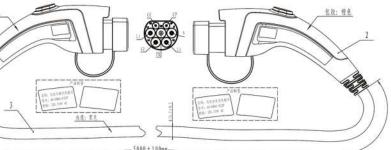
Product Type	Rated Current/ voltage	Cable Specifications
AG-GBAC-CZ16P	16A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-CZ32P	32A/250V	3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>

- 包胶: 橙

Shell Color







#### Features

# **CHARGING MODE 3**

Model: TYPE2-GB



#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

Electrical Performance	Rubber Color
The rated current: 16A, 32A	
	Shell Color
<ul> <li>The rated voltage: 250V</li> </ul>	

- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K
- Withstand voltage: 2000V
- Contact impedance: 0.5mΩMax
  - **Applied Materials**
- Shell Material: thermoplastics,flame retardant grade UL94-V0
- · Pin: Copper alloy, silver+top of the thermoplastic

### **Environmental performance**

Operating temperature: -30℃~+50℃

#### Features

1) Conform to the provisions and requirements of GB/T 20234.2-2015 & 62196-2 IEC 2010 SHEET 2-IIe.

2) Product assembly meet GB/T 20234.2-2011 Charging Mode3 connection method B2.

3) Using riveting pressure process with none screw, have a beautiful appearance.Hand-held design conform to the ergonomic principle,plug conveniently.

4) Nice appearance, hand design to prevent accidental direct contact with hands.

5) Excellent protection performance, protection grade achieved IP55 of plug(working condition)High security.

### **Product Specification and Cable Standard**

Product Type	Rated Current/ voltage	Cable Specifications
AG-GBAC-CZ16P	16A/250V	3X2.5mm <sup>2</sup> +2x0.75mm <sup>2</sup>
AG-GBAC-CZ32P	32A/250V	3X6mm <sup>2</sup> +2x0.75mm <sup>2</sup>

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- · Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

#### **Rubber Colo Electrical Performance** • The rated current: 16A、32A Shell Color The rated voltage: 250V Insulation resistance: >1000MΩ(DC500V) Cable Color

- Pins temperature rise: <50K
- Withstand voltage: 2000V
- Contact impedance: 0.5mΩMax

#### **Applied Materials**

- · Shell Material: thermoplastics , flame retardant grade UL94-V0
- · Pin: Copper alloy , silver-plate

#### **Environmental performance**

Operating temperature: -30°C ~+50°C

1) Conform to the provisions and requirements of 62196-2 IEC 2010 SHEET 2-IIe. 2) Product assembly conforms to IEC 61851-1-2010 charging mode 3 connection mode B2. 3) Adopt no screw riveting pressing process, beautiful appearance. Hand-held design in line with ergonomic principles, convenient plug. 4) Reliable materials, flame retardant, pressure resistance, abrasion resistance, impact resistance and oil resistance. 5) Excellent protection performance, IP55 protection level of the plug (working state) high security.

Product Specification and Cable Standard		
Product Type	Rated Current/ voltage	Cable Specifications
AG-IEC2-IIb/e-16P	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/e-32P	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/e-16P-3	16A/480V	H07BZ5-F5X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/e-32P-3	32A/480V	H07BZ5-F5X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>



# **CHARGING MODE 3**

Product application : Electric vehicle

Model: TYPE2-TYPE2



# **CHARGING MODE 3**

Model: TYPE2-TYPE1

Product application : Electric vehicle



- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

Electrical Performance	Rubber Color
The rated current: 16A、32A	Shell Color
<ul> <li>The rated voltage: 250V</li> </ul>	
<ul> <li>Insulation resistance: &gt;1000MΩ(DC500V)</li> </ul>	Cable Color
<ul> <li>Pins temperature rise: &lt;50K</li> </ul>	

- Withstand voltage: 2000V
- Contact impedance: 0.5mΩMax

#### **Applied Materials**

- · Shell Material: thermoplastics , flame retardant grade UL94-V0
- · Pin: Copper alloy , silver



- Environmental performance
- Operating temperature: -30°C~+50°C

#### Features

- 1) Conform to the provisions and requirements of 62196-2 IEC 2010 SHEET 2-Ile and SAE J1772 2010.
- 2) Product assembly conforms to IEC 61851-1-2010 charging mode 3 connection mode B2.
- 3) Adopt no screw riveting pressing process, beautiful appearance. Hand-held design in line with ergonomic principles, convenient plug.
- 4) Reliable materials, flame retardant, pressure resistance, abrasion resistance, impact resistance and oil resistance.
- 5) Excellent protection performance, IP65 protection level of the plug (working state) high security.

#### **Product Specification and Cable Standard** Desident Terra Deter O Cable Specificati

Product type	Nated Current Voltage	Cable Opecifications
AG-IEC2-IIb/I-16P	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/I-32P	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>

#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Lmpact of external force: can afford 1m drop and 2t vehicle run over pressure.

#### **Electrical Performance**

- The rated current: 16A, 32A
- The rated voltage: 250V/415V
- Insulation resistance: >1000MΩ(DC500V)
- Pins temperature rise: <50K</p>
- Withstand voltage: 2000V
- Contact impedance: 0.5mΩMax

#### **Applied Materials**

- · Shell Material: thermoplastics,flame retardant grade UL94-V0
- Pin: Copper alloy,silver

#### Environmental performance

Operating temperature: -30℃~+50℃

Rubber Color

**I I I I I** 

Shell Color

Cable Color

1) Conform to the provisions and requirements of 62196-2 IEC 2010 SHEET 2-Ile. 2) The product assembly conforms to IEC 61851-1 2010 charging mode 3 connection mode B2. 3) Adopt no screw riveting pressure process, beautiful appearance. Hand - held design conforms to the principle of ergonomics, convenient plug and pull.

4) Reliable materials, flame retardant, pressure resistance, abrasion resistance, impact resistance, high oil resistance. 5) Excellent protection performance, IP55 protection level of the plug (working state) high security.

Product Type	Rated Current/ voltage	Cable Specifications
i loddol i ype	Rated Guneno Voltage	Cable Opecifications
AG-IEC2-IIb/e-16P	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/e-32P	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/e-16P-3	16A/480V	H07BZ5-F5X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/e-32P-3	32A/480V	H07BZ5-F5X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>



# **CHARGING MODE 3**

Model: TYPE2-TYPE2-SPIRAL

Product application : Electric vehicle



# **CHARGING MODE 3**

Model: TYPE2-TYPE1-ADAPTOR



#### **Mechanical properties**

- Mechanical life: no-load plug>10000times
- Impact of external force: can afford 1m drop and 2t vehicle run over pressure.

Electrical Performance	Rubber Color
The rated current: 16A、32A	
The rated voltage: 250V/415V	Shell Color
Insulation resistance: >1000MΩ(DC500V)	Cable Color

- Pins temperature rise: <50K
- Withstand voltage: 2000V
- Contact impedance: 0.5mΩMax



- · Shell Material: thermoplastics,flame retardant grade UL94-V0
- · Pin: Copper alloy, silver

#### Environmental performance

● Operating temperature: -30°C~+50°C

#### Features

- 1) Conform to the provisions and requirements of 62196-2 IEC 2010 SHEET 2-IIe.
- 2) The product assembly conforms to IEC 61851-1 2010 charging mode 3 connection mode B2.

3) Adopt no screw riveting pressure process, beautiful appearance. Hand - held design conforms to the principle of ergonomics, convenient plug and pull.

4) Reliable materials, flame retardant, pressure resistance, abrasion resistance, impact resistance, high oil resistance.

5) Excellent protection performance, IP65 protection level of the plug (working state) high security.

### **Product Specification and Cable Standard**

Product Type	Rated Current/ voltage	Cable Specifications
AG-IEC2-IIb/e-16P	16A/250V	H07BZ5-F3X2.5mm <sup>2</sup> +2x0.5mm <sup>2</sup>
AG-IEC2-IIb/e-32P	32A/250V	H07BZ5-F3X6mm <sup>2</sup> +2x0.5mm <sup>2</sup>

## **Mechanical properties**

- Mechanical life: ≥50000 (DC12V POW-ER-ON 0.05s, power-off 10s)
- Thrust: ≥450g(Energized DC 12V)
- Retentivity: ≥700g

#### **Electrical Performance**

- The rated current: 3A
- The rated voltage: 12V±5%
- Activation time: ≥0.05s
- Power-on sustaining: 0.2s Max
- Insulation resistance: >50MΩ(DC500V)
- Temperature rise:≤50°C (power-on 0.05s,power-off 10s)
- Withstand voltage: DC1000V 50/60Hz 30s

### **Applied Materials**

· Shell material: thermoplastics,flame retardant grade UL94-V0

### Environmental performance

Operating temperature: -30℃~+50℃

1) Conform to the provisions and requirements of GB/T18487.1-2015 . 2) Electromagnetic pulse control is adopted , also can add control board to achieve a long power supply mode. 3) Use ultrasonic welding process, with small size and beautiful appearance. 4) Have signal feedback function and manual emergency unlocking function. 5) Excellent protection performance, prodection grade achieved IP66 (working condition). 6) Reliable material ,flame retardant, pressure proof , wear - resisting , impact resistance, high oil proof.





## **Electronic Lock**

Model: AC-Z-EL

Product application : Prevent charging plug release accidentally





# **Electronic Lock**

Model: AC-C-EL

Product application : Prevent charging plug release accidentally

#### **Mechanical properties**

- Mechanical life: ≥50000 (DC12V POW-ER-ON 0.05s, power-off 10s)
- Thrust: ≥450g(Energized DC 12V)
- Retentivity: ≥700g

#### Electrical Performance

- The rated current: 3A
- The rated voltage: 12V±5%
- Activation time : ≥0.05s
- Power-on sustaining: 0.2s Max
- Insulation resistance: >50MΩ(DC500V)
- Temperature rise: ≤50°C (power-on 0.05s,power-off 10s)
- Withstand voltage: DC1000V 50/60Hz 30s

#### **Applied Materials**

• Shell material: thermoplastics , flame retardant grade UL94-V0

#### Environmental performance

Operating temperature: -30℃~+50℃

#### Features

- 1) Conform to the provisions and requirements of GB/T18487.1-2015 .
- 2) Electromagnetic pulse control is adopted , also can add control board to achieve a long power supply mode.
- 3) Use ultrasonic welding process , with small size and beautiful appearance.
- 4) Have signal feedback function and manual emergency unlocking function.
- 5) Special internal waterproof protection performance, protection grade achieved IP66.
- 6) Reliable material, flame retardant, pressure resistance, abrasion resistance, impact resistance and high oil resistance.





### GB DC Fixed Socket







# **Plug dummy socket**

Product application : Fixed socket for EV charging connector



