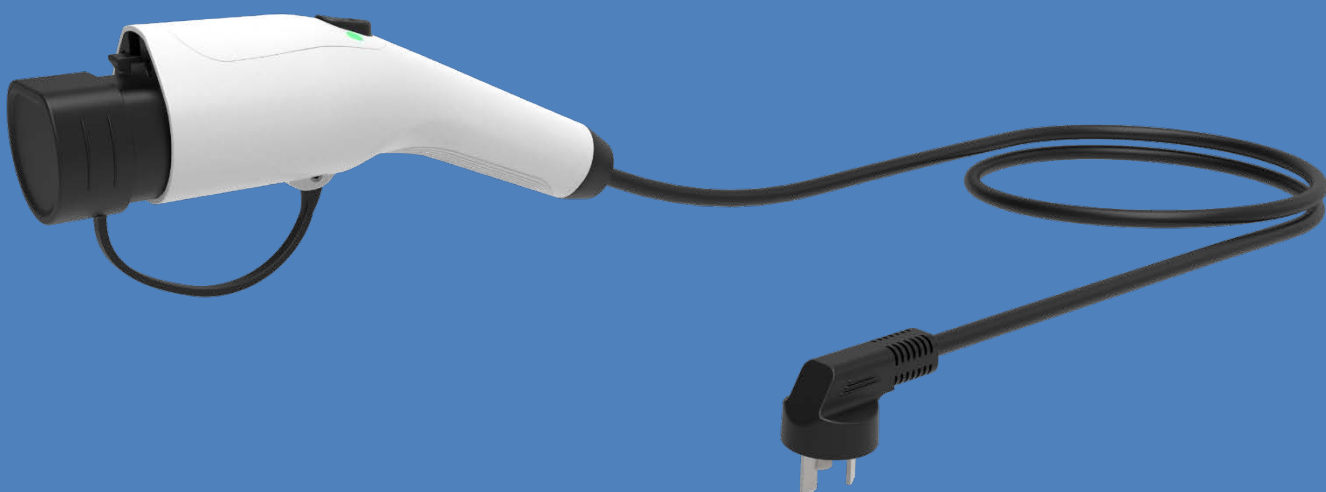




## 国标充电接口系列

### GB Charge Coupler Connector

随着人们的环保意识日益增强，越来越多的人更渴望使用绿色能源来保护和改善周围的环境。同时，政府也鼓励和倡导人们绿色出行，包括使用绿色能源交通工具，以达到政府制定的节能减排目标。同时，随着充电设施的改善，以及新能源汽车大量使用到各类租车市场，新能源汽车的消费理念将日渐深入人心。智绿作为电动汽车传导充电用连接装置标准的制定者之一，其产品设计理念及质量处于同行业的领先地位。

Along with the increasing awareness of environmental protection, more and more people are eager to use green energy to protect and improve the surrounding environment. Meanwhile, the government also encourages and advocates green travel, using the green energy vehicles, to achieve the energy conservation and emission reduction target. with the improvement of charging facilities and the large scale use of electric vehicles in various car rental markets, electric vehicles will gradually become more popular. As one of the standard-settler for conductive charging connection devices of electric vehicles, Chilye' s product design concept and quality take a leading position in the industry.

智慧科技 · 绿色未来

Smart Technology · Green Future

**Chilye**



| 版本    | 描述   | 时间        | 修订人        |
|-------|------|-----------|------------|
| REV_A | 首次发行 | 2021/4/19 | Evan.zhang |
| REV_B | 排版更新 | 2024-8-20 | gerry.zhou |
|       |      |           |            |
|       |      |           |            |
|       |      |           |            |
|       |      |           |            |
|       |      |           |            |

▲ If you want to know more information about this series products, please feel free to contact with us.

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### 应用范围 Applications

电动汽车传导充电  
Conductive charging of Electric Vehicles

### 机械特性 Mechanical

机械寿命:  $\geq 100\,000$ 次  
Durability:  $\geq 100\,000$  mating cycles  
接线方式: 端子焊接  
Connection: Terminal Welding  
插拔力:  $< 100\text{ N}$   
Mating Force  $\leq 100\text{ N}$   
PCB方式: 集成式  
PCB mode: Integrated

### 电气特性 Electrical

额定电压: 250 / 440V ac  
Rated voltage: 250 / 440V ac  
额定电流: 8A/16A  
Rated current: 8A/16A  
绝缘电阻:  $> 100\text{ M}\Omega$   
Insulation Resistance:  $> 100\text{ M}\Omega$   
耐压测试: 2000Vac  
Withstand Voltage: 2000Vac

### 环境特性 Environmental

防护等级: IP54(带防护盖), IP55(耦合插座), IP67(PCBA部分);  
Protection grade: IP54(With dust cap), IP55(With inlet), IP55(Clamshell internal side);  
电气防护: IP2XB (无防护盖)  
Electrical protection: IP2XB (No dust cap)  
工作温度:  $-30^{\circ}\text{C}$  至  $50^{\circ}\text{C}$   
Operating temperature:  $-30^{\circ}\text{C}$  to  $50^{\circ}\text{C}$   
储存温度:  $-40^{\circ}\text{C}$  至  $85^{\circ}\text{C}$   
Storage temperature:  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$

### 参考标准 Standards

GB/T 20234.1-2023 GB 39752-2024  
GB/T 20234.2-2023 GB 44263-2024  
GB/T 18487.1-2023

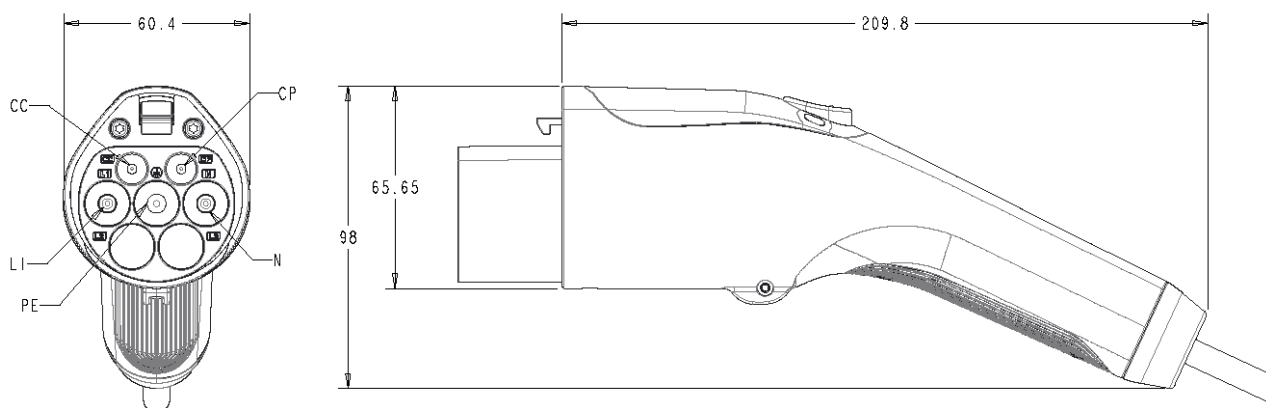
### 产品选型规则

#### Product model instruction

| CL - BX                 | G | B | XX                                                                     |
|-------------------------|---|---|------------------------------------------------------------------------|
| Chilye                  |   |   |                                                                        |
| B1: New Generation      |   |   |                                                                        |
| B2: 2 Generation        |   |   |                                                                        |
| G: GB Series            |   |   |                                                                        |
| I: IEC Series(Type 1&2) |   |   |                                                                        |
| S: SAE Series(Type 1)   |   |   |                                                                        |
| A: 缆上控制与保护装置绕线版         |   |   |                                                                        |
| B: 缆上控制与保护装置            |   |   |                                                                        |
| C: 交流充电桩壁挂              |   |   |                                                                        |
| D: 交流充电桩立式              |   |   |                                                                        |
|                         |   |   | 08: 1.5mm <sup>2</sup> -8A; 16: 2.5mm <sup>2</sup> -16A<br>Cables Size |



## 1. 车辆插头---产品外形尺寸 Vehicle connector --- Product outline dimensions



### 国标充电接口模式2&3连接方式B&C GB Mode 2&3 Case B&C connection

由车辆插头和线缆组成，可提供8A,16A,单相250V电源给电动汽车充电，满足模式2和模式3连接方式B和C的充电应用。

It is composed of vehicle connector, and cable, providing 10A/16A and 250Vac single phase power for charging electric vehicle. meet the charging application of mode 2&3 case B&C connection.



### ◆ 线缆 Cables

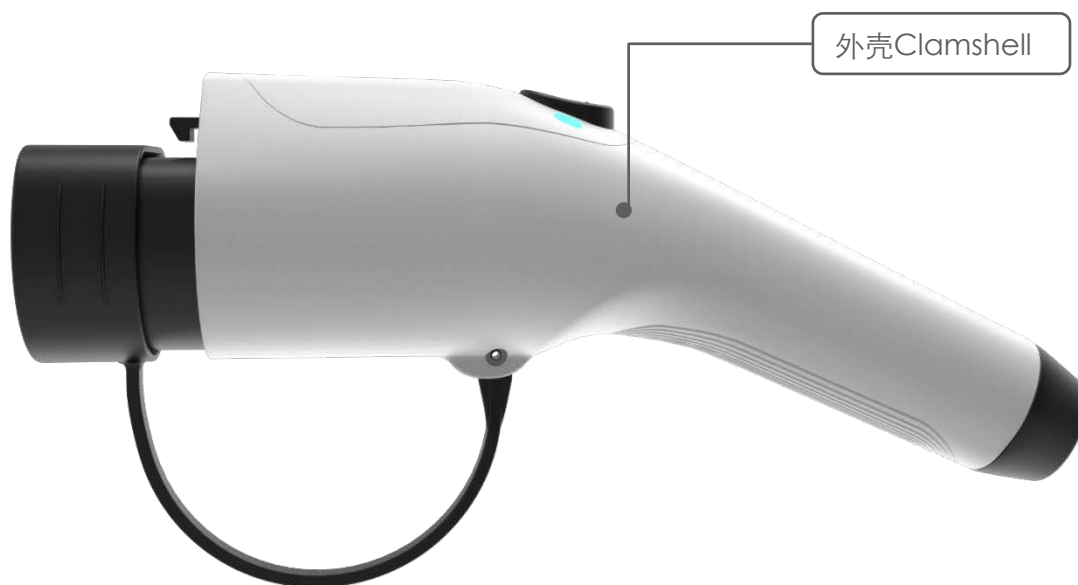
单相线缆 Single phase: 8A: 3\*1.5mm<sup>2</sup>; 16A: 3\*2.5mm<sup>2</sup>  
子缆颜色 Wire color : L---Brown; N---Blue; PE---Yellow green

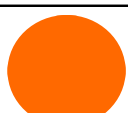
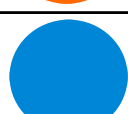
### ◆ 产品选型 Product Selection

| 产品型号<br>Product Model | Rated Current<br>(A) | Cable Size<br>(mm <sup>2</sup> ) | Cable Diameter<br>(mm) | Phase        |
|-----------------------|----------------------|----------------------------------|------------------------|--------------|
| CL-B2GB08             | 08                   | 1.5                              | $\Phi 10.0 \pm 0.3$    | Single-Phase |
| CL-B2GB16             | 16                   | 2.5                              | $\Phi 11.4 \pm 0.3$    | Single-Phase |



4. 充电接口---壳体颜色先择  
Vehicle connector --- Color selection



| 序号<br>Item | 颜色代码<br>Color<br>code | 外体颜色Clamshell color |           |                                                                                       |
|------------|-----------------------|---------------------|-----------|---------------------------------------------------------------------------------------|
|            |                       | Description         | Color No. | Color Card                                                                            |
| 1          | C01                   | Silver              | 7541C     |  |
| 2          | C02                   | Black               | 446C      |  |
| 3          | C03                   | Orange              | 1505C     |  |
| 4          | C04                   | Blue                | 2194C     |  |



## 5. GB集成式模式二---功能

## GB Interated Mode 2--- Function

| 序号<br>Item | 功能<br>Function                                       | 要求<br>Requirements |
|------------|------------------------------------------------------|--------------------|
| 1          | 接地监测保护<br>Ground monitoring<br>protection            | 配置<br>YES          |
| 2          | 连接状态确认<br>Connection status<br>confirmation          | 配置<br>YES          |
| 3          | 供电/断电控制<br>The power<br>supply/power control         | 配置<br>YES          |
| 4          | 过压/欠压保护<br>Over-voltage/under-<br>voltage protection | 配置<br>YES          |
| 5          | 过流保护<br>Over current<br>protection                   | 配置<br>YES          |
| 6          | 漏电流保护<br>Leakage current<br>protection               | 配置<br>YES          |
| 7          | 过温保护<br>Overtemperature<br>protection                | 配置<br>YES          |
| 8          | 集成式设计Integrated<br>design                            | 配置<br>YES          |



## 5. GB集成式模式二---LED灯指示

## GB Interated Mode 2--- LED Indication

| 序号<br>Item | 功能状态     | LED指示             |             |            |
|------------|----------|-------------------|-------------|------------|
|            |          | 蓝灯<br>BLUE        | 绿灯<br>GREEN | 红灯<br>RED  |
| 1          | 初始状态     | 蓝-绿-蓝-红-灭顺序闪烁（1s） |             |            |
| 2          | 待连接      | 常亮                | 灭           | 灭          |
| 3          | 待充电      | 闪烁                | 灭           | 灭          |
| 4          | 正常充电     | 灭                 | 闪烁（呼吸）      | 灭          |
| 5          | 充电结束     | 灭                 | 常亮          | 灭          |
| 6          | 上电自检失败   | 灭                 | 灭           | 亮 1 次停3s循环 |
| 7          | 通讯异常     | 灭                 | 灭           | 亮 2 次停3s循环 |
| 8          | 过压、欠压    | 灭                 | 灭           | 亮 3 次停3s循环 |
| 9          | 未接地或接地不良 | 灭                 | 灭           | 常亮         |
| 10         | 过流       | 灭                 | 灭           | 亮 4 次停3s循环 |
| 11         | 漏电       | 灭                 | 灭           | 亮 5 次停3s循环 |
| 12         | 过温       | 灭                 | 灭           | 亮 6次停3s循环  |