

電子鎖止裝置 Electronic locking actuator DNL101E-D250-01

◆ 特點和用途 Characteristics and usage

- 結構可靠。  
Reliable structure.
- 電子鎖止裝置為汽車充電槍內部的鎖止機構。  
The motor lock is the locking mechanism inside the automobile charging gun.
- 电子锁止装置工作原理 Working principle of motor lock  
通電後，內置電機旋轉，輸出扭矩，並通過內部的行星齒輪結構減速增加扭矩，使旋轉塊旋轉到鎖止位置充電槍鎖止無法拔出，旋轉塊旋轉操作內置的反饋微動開關；當馬達鎖處於解鎖狀態時，反饋微動開關處於導通狀態，處于上鎖狀態時，反饋微動開關處於斷開狀態。  
After electrifying, the built-in motor rotates to output torque, and the internal planetary gear structure decelerates to increase the torque, causing the rotating block rotates to the locking position and the charging gun cannot be pulled out, and the rotating block rotates to operate the built-in feedback micro switch, when the motor lock is in the unlocked state, the feedback micro switch is in the on state. When it is in the locked state, the feedback micro switch is in the off state.



◆ 技術特性 Technical Characteristics

| 項目 Item                       |                                                | 特性值 Value                                              |
|-------------------------------|------------------------------------------------|--------------------------------------------------------|
| 最大电流 Max current              |                                                | 450mA                                                  |
| 额定电压 Rated voltage            |                                                | 12V                                                    |
| 响应时间 Response time            |                                                | ≤300ms                                                 |
| 絕緣電阻<br>Insulation resistance | 线芯与地 (外壳) 之间<br>Between core and ground (case) | ≥100MΩ (500VDC)                                        |
| 旋转角度 Rotation angle           |                                                | 45°±5°                                                 |
| 工頻耐電壓<br>Test voltage         | 线芯与地 (外壳) 之间<br>Between core and ground (case) | AC600V, 50/60Hz, 1min (漏电流0.5mA Leakage current 0.5mA) |
| 溫度等級 Degrees of temperature   |                                                | 30T85                                                  |
| 最大通电时间Max power on time       |                                                | 6S                                                     |
| 壽命 Life                       |                                                | 電氣≥30,000次 Electrical≥30,000 cycles                    |
| 防護等級 Protection degree        |                                                | IEC IP55                                               |

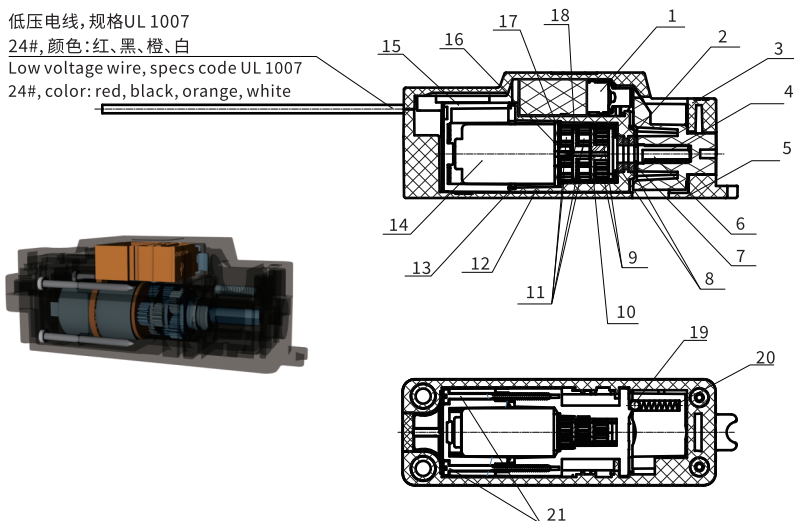
## ◆ 内部构造图 Internal configuration drawing

低压电线, 规格UL 1007

24#, 颜色: 红、黑、橙、白

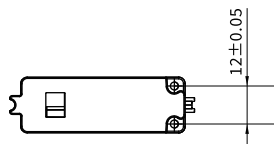
Low voltage wire, specs code UL 1007

24#, color: red, black, orange, white

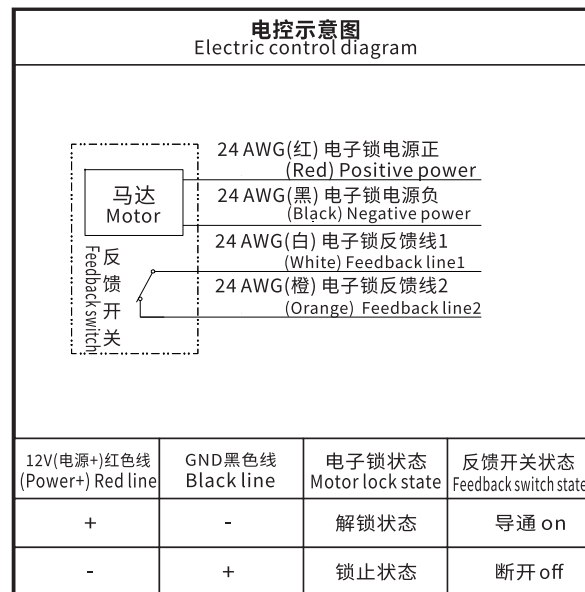
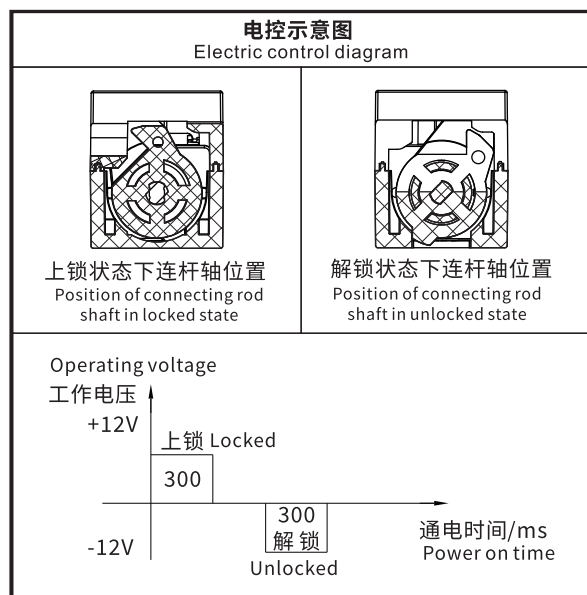


- |           |                    |
|-----------|--------------------|
| 1、开关(常闭)  | Switch(NO)         |
| 2、防水圈     | Waterproof loop    |
| 3、下壳体     | Lower shell        |
| 4、旋转块     | Rotating block     |
| 5、上壳体     | Upper shell        |
| 6、输出齿轮架   | Output gear frame  |
| 7、防水圈     | Waterproof loop    |
| 8、小垫片     | Gasket             |
| 9、16齿齿轮   | 16 gears           |
| 10、11齿齿轮架 | 11 gears           |
| 11、17齿齿轮  | 17 gears           |
| 12、电机外壳   | Motor Case         |
| 13、密封圈    | Hermetic loop      |
| 14、电机     | Motor              |
| 15、电机后盖   | Motor rear cover   |
| 16、9齿齿轮   | 9 gears            |
| 17、大垫片    | Gasket             |
| 18、9齿齿轮架  | 9 gears gear frame |
| 19、钢珠     | Steel ball         |
| 20、压簧     | Spring             |
| 21、半牙自攻螺丝 | Self tapping screw |

## ◆ 安装孔尺寸 Mounting hole dimensions



## ◆ 接脚形式说明图 Circuit illustration



## ◆ 型号规格命名及含义 Model number legend and meanings

| 产品名称<br>Product | 型号<br>Model No. | 编号(图号)<br>DWG No. | 用途<br>Usage           |
|-----------------|-----------------|-------------------|-----------------------|
|                 | DNL101          | 3.259.001         | 充电枪<br>Charging gun   |
|                 | DNL201          | 3.259.002         | 充电车端<br>Charging car  |
|                 | DNL301          | 3.259.003         | 充电桩端<br>Charging pile |

## ← 按照左边型号命名规则:

According to the model naming rules on the left

1) 用于充电枪的, 均属于1系列, 依次给出101,102,103……

1) For charging guns, all belong to the 1 series, giving 101,102,103……

2) 用于充电车端的, 均属于2系列, 依次给出201,202,203……

2) For the charging car end, all belong to the 2 series, in order to give 201,202,203……

3) 用于充电桩端的, 均属于3系列, 依次给出301,302,303……

3) For the charging pile end, all belong to the 3 series, giving 301,302,303……