

NRL709E 磁保持继电器 /Magnetic Latching Relay



◆ 特点 Characteristic

- > 100A/120A 触点切换能力；
- > 线圈功耗小、温升极低；
- > 触点接触电阻小，电接触稳定性好；
- > 抗冲击、抗振动能力强；
- > 外形尺寸：52×43×22mm；
- > 符合 IEC62055-31 UC3 标准；
- > 100A/120A switching capability.
- > Low coil consumption, ultra-low temperature rise.
- > Low contact resistance.
- > Strong anti-shock and anti-vibration capability.
- > Outline size: 52×43×22mm.
- > IEC62055-31 UC3 Compliant

◆ 订货标记 Ordering Information

|                                                                                                                                                                                             |   |                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------|
| <div><div>NRL</div><div>709E</div><div>-</div><div>12</div><div>-</div><div>S</div><div>-</div><div>100</div></div> <div><div>①</div><div>②</div><div>③</div><div>④</div><div>⑤</div></div> | ① | 磁保持继电器代号 Latching Relay                           |
|                                                                                                                                                                                             | ② | 产品型号 Part Number                                  |
|                                                                                                                                                                                             | ③ | 线圈电压 Coil Voltage                                 |
|                                                                                                                                                                                             | ④ | D 表示双线圈，S 表示单线圈<br>D= Double Coil; S= Single Coil |
|                                                                                                                                                                                             | ⑤ | 100=100A; 120=120A                                |

◆ 性能 Characteristics

|                                |                                   |                             |
|--------------------------------|-----------------------------------|-----------------------------|
| 绝缘电阻 Insulation resistance     |                                   | 1000MΩ (500VDC)             |
| 介质耐压<br>Dielectric<br>Strength | 触点与线圈间<br>Between Coil & Contacts | 4000VAC 1min                |
|                                | 断开触点间<br>Between Open Contacts    | 2000VAC 1min                |
| 闭合时间 Operate Time              |                                   | 20msec. Max.                |
| 断开时间 Release Time              |                                   | 20msec. Max.                |
| 抗冲击<br>Shock<br>resistance     | 稳定性 Functional                    | 100m/S <sup>2</sup> (10g)   |
|                                | 强度 Destructive                    | 1000m/S <sup>2</sup> (100g) |
| 振动 Vibration resistance        |                                   | 10~55Hz 1.5mm               |
| 湿度 Humidity                    |                                   | 98%RH ,40℃                  |
| 温度范围 Ambient temperature       |                                   | -40~ +70℃                   |
| 引出端方式 Termination              |                                   | 快连接式 Fast connection        |
| 重量 Unit weight                 |                                   | 80g                         |
| 封装形式 Constrution               |                                   | 防尘罩 Dust protected          |

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◆ 触点参数 Contact Data

|                             |                                     |
|-----------------------------|-------------------------------------|
| 触点形式 Contact form           | 1A/1B                               |
| 触点材料 Contact material       | AgSnO2                              |
| 接触电阻 Contact resistance     | 100A: Max: 1.0mΩ 、 120A: Max: 0.8mΩ |
| 触点负载 Contact Rating         | 100/120A 250VAC                     |
| 最大转换功率 Max. Switching Power | 25000VA/30000VA                     |
| 机械寿命 Mechanical life        | 5×10 <sup>5</sup>                   |
| 电气寿命 Electrical life        | 1×10 <sup>4</sup>                   |

◆ 线圈 Coil

|                 |                                                             |
|-----------------|-------------------------------------------------------------|
| 线圈功耗 Coil power | 单线圈 : 2.3W 双线圈 :4.6W<br>Single coil: 2.3W Double coil: 4.6W |
|-----------------|-------------------------------------------------------------|

◆ 线圈参数 Coil Data

| 额定电压 (VDC)<br>Rated Voltage | 动作电压 (VDC)<br>Pick-up voltage | 脉冲宽度 (ms)<br>Pulse Duration | 线圈电阻 (Ω)<br>Coil Resistance |
|-----------------------------|-------------------------------|-----------------------------|-----------------------------|
| 单线圈 Single coil             |                               |                             |                             |
| 9                           | 6.75                          | 100                         | 35±10%                      |
| 12                          | 9                             | 100                         | 63±10%                      |
| 24                          | 18                            | 100                         | 250±10%                     |
| 48                          | 36                            | 100                         | 1002±10%                    |
| 双线圈 Double coil             |                               |                             |                             |
| 9                           | 6.75                          | 100                         | 2×18±10%                    |
| 12                          | 9                             | 100                         | 2×31±10%                    |
| 24                          | 18                            | 100                         | 2×125±10%                   |
| 48                          | 36                            | 100                         | 2×501±10%                   |

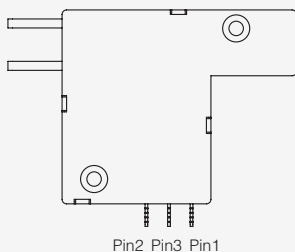
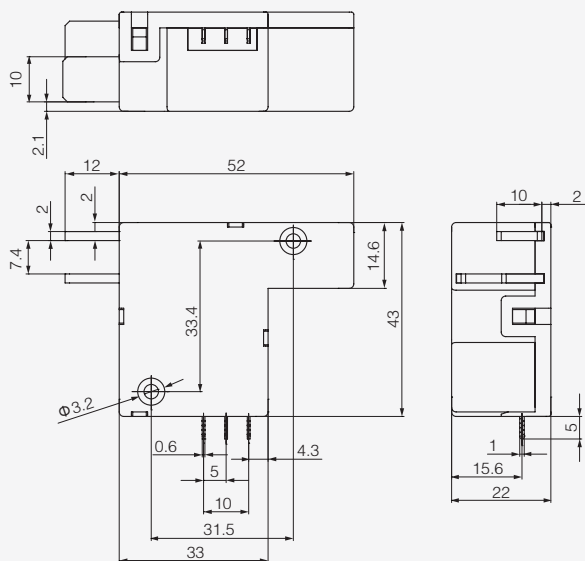
备注：如需其它额定电压，可特殊定货。  
Note: Special ordering for other coil voltage.

◆ 典型应用 Typical Application

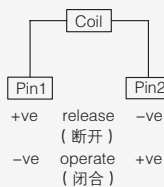
- 1) 主要用于 IC 卡预付费电表，集中抄表系统；  
Prepayment Energy Meter; AMR System;  
2) 也用于复合开关、家电和自动控制装置。  
Compound Switch; Automatic Control System.

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### ◆ 尺寸图 Dimensions(mm)/ 接线图 Circuit Diagram



单线圈 Single coil



双线圈 Double coil

