

# LA110-A 系列按钮

Button series



## 型号 Model

LA110 — A 1 2 3 / 4 5 6

按不同的连接件分A1、A2  
Can be classified into A1.A2 according to different connecting piece

按钮代号及序号由上海电器科学研究所颁发。  
Button code and serial no is issued by shanghai electrical appliance science

1 表示常开触头数 (NO)  
Quantity of normally open

2 表示常闭触头数 (NC)  
Quantity of normally closed

3 按钮功能  
Function of button

4 表示按钮颜色及旋钮钥匙钮的动作和拔出位置  
Full-face colour & key selector and key removable pos

| 字母 Letters | 含义 Meaning   | 按钮颜色 Full-face colour   |
|------------|--|---|
|            | 一般按钮<br>Push button                                | 红 Red 绿 Green 黄 Yellow 蓝 Blue 白 White 黑 Black   |
| D          | 带灯按钮<br>Push button with light                     | R G Y B W K   |
| T          | 自锁按钮<br>Self-locking button                        | 动作功能 Spring return action   |
| M          | 蘑菇按钮<br>Mushroom push button                       | 左边自复位 Self reset on the left 右边自复位 Self reset on the right 左右自复位 Self reset on the left and right |
| MT         | 蘑菇自锁按钮<br>Self-locking mushroom push button        | f fu ffu  |
| Z          | 紧急按钮<br>Emergency push button                      | 钥匙拔出位置 Key removable position   |
| Y          | 二位置钥匙按钮<br>Two-position key turn button            | 左边拔出 Pulling out on the left 中间拔出 Pulling out in the middle 右边拔出 Pulling out on the right         |
| YS         | 三位置钥匙按钮<br>Three-position key turn button          | a ao au   |
| X          | 短柄二位置旋钮<br>Short-handle two-position turn button   |   |
| XS         | 短柄三位置旋钮<br>Short-handle three-position turn button |   |
| CX         | 长柄二位置旋钮<br>Long-handle two-position turn button    | 5 带灯按钮指示灯规格 Specification of indicator push button with light                                     |
| CXS        | 长柄三位置旋钮<br>Long-handle three-position turn button  | 代码 Code 21 22 23 24 25 26 27 28 31 32   |
| ZY         | 带钥匙紧急按钮<br>Key emergency turn button               | 电源 Power supply AC.DC DC AC   |
| XD         | 二位置带灯按钮<br>Two-position turn button with light     | 电压 (V) Voltage 6 12 24 36 48 110 127 220 220 380  |
| XSD        | 三位置带灯按钮<br>Three-position turn button with light   | 光源 Light source 发光二极管 Luminous diode LED  |
| R          | 双位按钮<br>Two position push button                   |   |
| RD         | 双位带灯按钮<br>Two position push button with light      | 6 TH 表示湿热型 Indicates tender-heat type   |



## 符合标准 Complied standards

IEC 60947/GB 14048.5

## 主要技术参数 Technical data

| 使用条件 Service conditions    |                  |
|----------------------------|------------------|
| 工作温度 Operating temperature | +55℃~-25℃        |
| 使用类别 Operation category    | AC-15 DC-13      |
| 污染等级 Pollution class       | 3                |
| 作业高度 Working altitude      | ≤2000m           |
| 抗震动 Vibration Durability   | 10~200HZ 1mn.10g |

| 控制能力 Control ability |                                     |                                  |     |
|----------------------|-------------------------------------|----------------------------------|-----|
|                      | 额定工作电压Ue<br>Rated operation voltage | 额定工作电流Ie Rated operation current |     |
|                      |                                     | 弹片式                              | 平压式 |
| 交流<br>AC             | 660V                                | 2                                | 2.3 |
|                      | 380V                                | 4                                | 4.5 |
|                      | 220V                                | 5.5                              | 6.5 |
| 直流<br>DC             | 110V                                | 1.2                              | 1   |
|                      | 48V                                 | 3.6                              | 3   |
|                      | 24V                                 | 7.2                              | 6   |

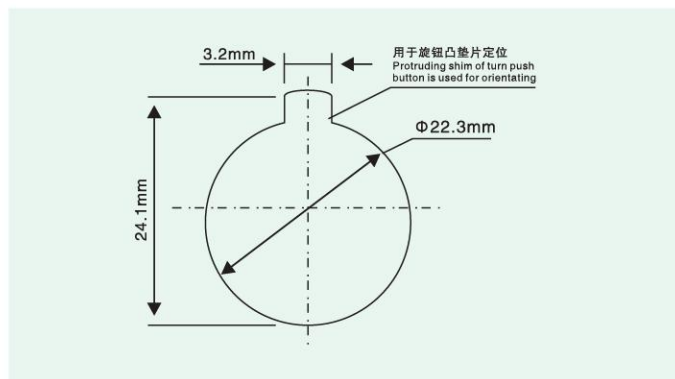
| 使用寿命 Operation life        |                      |  |
|----------------------------|----------------------|--|
|                            | 机械寿命 Mechanical life | 电寿命 Electrical life  |
| 一般按钮 Push button           | 3 × 10 <sup>6</sup>  | 交流电寿命60X10 <sup>4</sup> 次<br>AC electrical life 60X10 <sup>4</sup> times |
| 旋 钮 Turn button            | 30 × 10 <sup>4</sup> |  |
| 钥匙按钮 Key push button       | 5 × 10 <sup>4</sup>  | 直流寿命30X10 <sup>4</sup> 次<br>DC electrical life 30X10 <sup>4</sup> times  |
| 紧急按钮 Emergency push button | 5 × 10 <sup>4</sup>  |  |

| 额定值 Rated value                            |             |
|--|-------------|
| 额定绝缘电压<br>Ui Rated insylation voltage      | AC660V 50HZ |
| 约定发热电流<br>Ith Conventional heating current | 10A         |
| 接触电阻 Contact resistance                    | ≤50mΩ       |
| 前部防护等级 Protective class                    | IP65        |

| 部件材料 Parts materials |      |
|----------------------|------|
| 头部外圈 Front ring      | AL   |
| 头部 Actrator housing  | PBT  |
| 触点 Contact           | AgNi |
| 开关壳体 Switch housing  | PC   |
| 接触板 Contact parts    | Cu   |

| 开关元件触点状态 Contact state of the switch element |                 |                |                 |                |                            |
|--|-----------------|----------------|-----------------|----------------|----------------------------|
| 状态<br>Statie                                 |                 |                |                 |                |                            |
|  | 01              | 10             | 02              | 20             | 11                         |
| 触点代码<br>Contact code                         | 一闭<br>One colse | 一开<br>one open | 二闭<br>two colse | 二开<br>two open | 一开一闭<br>one open one close |

## 安装开孔尺寸图 Dimension diagram of installation hole



# LA110-A1 系列按钮

Button series



| 名称<br>Name                  | 一般按钮<br>Push button                                   | 蘑菇按钮<br>Mushroom push button                          | 短柄旋钮<br>Short handle turn button                   | 长柄旋钮<br>Long handle tun button                     |
|-----------------------------|---|---|--|--|
| 样式<br>Style                 |   |   |  |  |
| 运行状态<br>Operating Condition | 瞬动型<br>Instantaneous type<br>自锁型<br>Self-locking type | 瞬动型<br>Instantaneous type<br>自锁型<br>Self-locking type | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type |
| 型号<br>Model                 | LA110-A1 /<br>LA110-A1 T/                             | LA110-A1 M/<br>LA110-A1 MT/                           | LA110-A1 X/<br>LA110-A1 XS/                        | LA110-A1 CX/<br>LA110-A1 CXS/                      |
| 颜色<br>Color                 | 红 绿 黄 白 蓝<br>R G Y W B                                | 红 绿 黄 白 蓝<br>R G Y W B                                | 黑 红 绿 蓝<br>K R G B                                 | 黑 红 绿 蓝<br>K R G B                                 |
| 外型尺寸<br>Outline Dimensions  |   |   |  |  |

## 说明

斜线前的 填写常开，常闭的触点数，斜线后的 填写颜色；

## Remarks

Filling in normal open and close number in front of , color in back of

# LA110-A1 系列按钮

Button series



| 名称<br>Name                  | 钥匙钮<br>Emergency turn button                       | 紧急钮<br>Emergency push button                            | 带钥匙紧急钮<br>Key emergency turn button                              | 双位按钮<br>Two position push button |
|-----------------------------|--|---|--|----------------------------------|
| 样式<br>Style                 |  |   |  |                                  |
| 运行状态<br>Operating Condition | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type | 按压锁定，顺时针转复位<br>Press to lock twist clockwise to release | 按压锁定，顺时针转复位<br>Press to lock twist clockwise with key to release | 瞬动型<br>Instantaneous type        |
| 型号<br>Model                 | LA110-A1  Y<br>LA110-A1  YS                        | LA110-A1-A1  Z  | LA110-A1-A1  ZY  | LA110-A1  R                      |
| 颜色<br>Color                 |  | 红 绿<br>R G  | 红<br>R   | 红 绿<br>R G                       |
| 外型尺寸<br>Outline Dimensions  |  |   |  |                                  |

## 说明

斜线前的 填写常开，常闭的触点数，斜线后的 填写颜色；

## Remarks

Filling in normal open and close number in front of , color in back of

# LA110-A<sub>1</sub> 系列按钮

Button series



| 名称<br>Name                  | 带灯按钮<br>Push button with light | 带灯蘑菇钮<br>Mushroom push button with light              | 带灯旋钮<br>Turn button with light                     | 双位带灯按钮<br>Two position push button with light |
|-----------------------------|--------------------------------|---|--|---|
| 样式<br>Style                 |                                |   |  |   |
| 运行状态<br>Operating Condition | 瞬动型<br>Instantaneous type      | 瞬动型<br>Instantaneous type<br>自锁型<br>Self-locking type | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type | 瞬动型<br>Instantaneous type                     |
| 型号<br>Model                 | LA110-A1-▨ D<br>LA110-A1-▨ TD  | LA110-A1-▨ MD/▨<br>LA110-A1-▨ MTD/▨                   | LA110-A1-▨ XD/▨<br>LA110-A1-▨ XSD/▨                | LA110-A1-▨ RD                                 |
| 颜色<br>Color                 | 红 绿 黄 白 蓝<br>R G Y W B         | 红 绿 黄 白 蓝<br>R G Y W B                                | 红 绿 黄<br>R G Y                                     | 红 绿<br>R G                                    |
| 外型尺寸<br>Outline Dimensions  |                                |   |  |   |

## 说明

斜线前的 ▨ 填写常开，常闭的触点数，斜线后的 ▨ 填写颜色；

## Remarks

Filling in normal open and close number in front of ▨, color in back of ▨

# LA110-A1 系列按钮

Button series



| 名称<br>Name                  | 一般按钮<br>Push button   | 蘑菇按钮<br>Mushroom push button  | 短柄旋钮<br>Short handle turn button   | 长柄旋钮<br>Long handle turn button   |
|-----------------------------|---|---|--|---|
| 样式<br>Style                 |    |    |    |    |
| 运行状态<br>Operating Condition | 瞬动型<br>Instantaneous type<br>自锁型<br>Self-locking type                               | 瞬动型<br>Instantaneous type<br>自锁型<br>Self-locking type                               | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type                                   | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type                                    |
| 型号<br>Model                 | LA110-A2 ▨ / ▨<br>LA110-A2 ▨ T/ ▨   | LA110-A2 ▨ M/ ▨<br>LA110-A2 ▨ MT/ ▨   | LA110-A2 ▨ X/ ▨<br>LA110-A2 ▨ XS/ ▨  | LA110-A2 ▨ CX/ ▨<br>LA110-A2 ▨ CXS/ ▨   |
| 颜色<br>Color                 | 红 绿 黄 白 蓝<br>R G Y W B  | 红 绿 黄 白 蓝<br>R G Y W B  | 黑 红 绿 蓝<br>K R G B   | 黑 红 绿 蓝<br>K R G B  |
| 外型尺寸<br>Outline Dimensions  |  |  |  |  |

## 说明

斜线前的 ▨ 填写常开，常闭的触点数，斜线后的 ▨ 填写颜色；

## Remarks

Filling in normal open and close number in front of ▨, color in back of ▨

# LA110-A2 系列按钮

Button series





| 名称<br>Name                  | 钥匙钮<br>Key turn button  | 紧急钮<br>Emergency push button   | 带钥匙紧急钮<br>Key emergency turn button   | 双位按钮<br>Two position push button   |
|-----------------------------|---|--|---|--|
| 样式<br>Style                 |    |               |                 |               |
| 运行状态<br>Operating Condition | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type  | 按压锁定，顺时针转复位<br>Press to lock twist clockwise to release  | 按压锁定，钥匙顺时针转复位<br>Press to lock twist clockwise key to release                                     | 瞬动型<br>Instantaneous type  |
| 型号<br>Model                 | LA110-A2  Y<br>LA110-A2  YS | LA110-A2  Z | LA110-A2  ZY | LA110-A2  R |
| 颜色<br>Color                 |   | 红<br>R<br>绿<br>G   | 红<br>R  | 红 / 绿<br>R / G   |
| 外型尺寸<br>Outline Dimensions  |    |             |               |             |

## 说明

斜线前的  填写常开，常闭的触点数，斜线后的  填写颜色；

## Remarks

Filling in normal open and close number in front of  , color in back of 

# LA110-A2 系列按钮

Button series



| 名称<br>Name                  | 带灯按钮<br>Push button with light  | 带灯蘑菇钮<br>Mushroom push button with light  | 带灯旋钮<br>Turn button with light   | 双位带灯按钮<br>Two position push button with light   |
|-----------------------------|---|---|--|---|
| 样式<br>Style                 |    |    |    |    |
| 运行状态<br>Operating Condition | 瞬动型<br>Instantaneous type   | 瞬动型<br>Instantaneous type<br>自锁型<br>Self-locking type                               | 自锁型<br>Self-locking type<br>自复型<br>Self-reset type                                   | 瞬动型<br>Instantaneous type   |
| 型号<br>Model                 | LA110-A2-▨ D<br>LA110-A2-▨ TD   | LA110-A2 ▨ MD/▨<br>LA110-A2 ▨ MTD/▨   | LA110-A2 ▨ XD/▨<br>LA110-A2 ▨ XSD/▨  | LA110-A2 ▨ RD   |
| 颜色<br>Color                 | 红 绿 黄 白 蓝<br>R G Y W B  | 红 绿 黄 白 蓝<br>R G Y W B  | 红 绿 黄<br>R G Y   | 红 绿<br>R G  |
| 外型尺寸<br>Outline Dimensions  |  |  |  |  |

## 说明

斜线前的 ▨ 填写常开，常闭的触点数，斜线后的 ▨ 填写颜色；

## Remarks

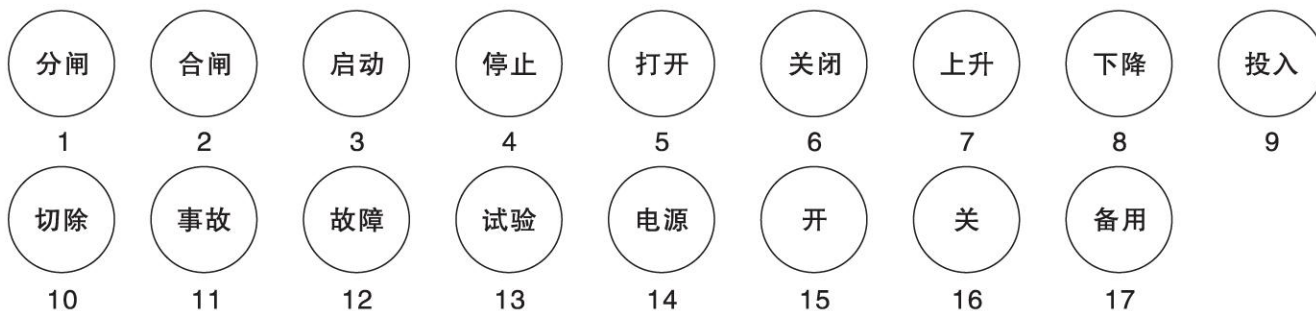
Filling in normal open and close number in front of ▨, color in back of ▨



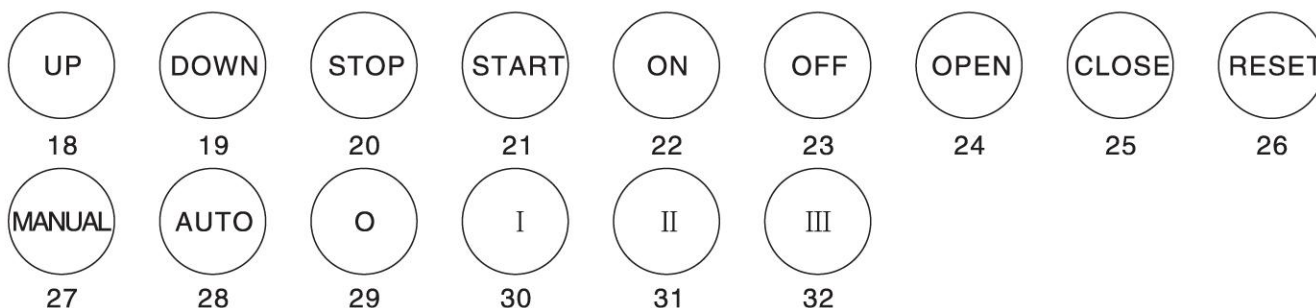
附件 ACCESSORIES

| 图样 Picture  | 名称 Name                          | 尺寸 Size                                | 说明 Remarks   |
|---|----------------------------------|--|--|
|    | 标牌框<br>Brand frame               | 25 × 11<br>25 × 18                     | 安装在 $\phi 22$ 的指示灯、按钮上作符号指示或文字说明用。<br>抽出式结构，可更换标志纸。<br>Hang it on the push button or $\phi 22$ pilot light, for symbol or text explanation.<br>Structure of putting put, which can change signed paper |
|    | 面板塞<br>Panel plug                | $\phi 22$                              | 用于装饰预留孔或多余孔<br>Used for decorating pre-mode hole or excess hole  |
|    | 安装板 (适用A型)<br>Installation plate | $\phi 22$                              | 机箱面板材料为塑料时加安装板以提高强度<br>When panel material of maceina case is plastic, the installation plate should be added for arising strength   |
|    | 带灯机构<br>Structure with lamp      |  | 适用于A1 A2型带灯按钮<br>Applicable for A1 A2 button with lamp   |
|    | LED灯珠<br>LED bulb                | $\phi 9$                               | 适用于B2型带灯按钮代替氖泡<br>Applicable for emergency button, adding caution function   |
|   | 警告圈<br>Alarm circle              | $\phi 40 \ \phi 60 \ \phi 90$          | 适用于紧急按钮增加警示功能<br>Applicable for emergency button, adding caution function  |
|  | 保护圈<br>Protection circle         | $\phi 60$                              | 安装在按钮头部，防撞，防误动<br>Installed onto hesd of button, anti collision or error operating   |
|  | 安装扳手<br>Installation olate       | $\phi 22$ 信号灯<br>$\phi 22$ signal lamp | 适用于安装指示灯.可提高安装效力和降低安装强度<br>Applicable for instaling indicator light. Which increases installation effcacy and decreases installation strength  |
|  | 双边基座<br>Double-side base         | 11 20 02                               | 适用于A1 A2型按钮<br>Applicable for A1 A2 button   |
|  | 单边基座<br>One-side base            | 01 10                                  | 适用于A1 A2型按钮<br>Applicable for A1 A2 button   |
|  | 基座<br>Base                       | 10 01                                  | 适用于B2型按钮<br>Applicable for B2 button   |
|  | 基座<br>Base                       | 10 01                                  | 适用于B4型按钮<br>Applicable for B4 button   |
|  | 变径圈<br>Size-change circle        | $\phi 25 \ \phi 30$                    | 可将 $\phi 22$ 指示灯安装在 $\phi 25 \ \phi 30$ 的孔上<br>The $\phi 22$ indicator light can be installed onto $\phi 25 \ \phi 30$ hole  |

中文符号 Chinese symbols



标准符号 Standard symbols



ISO符号 ISO Symbols



旋钮标牌板或标牌框印字 Typing in knob brand board or brand frame

