## Switches <br> Push Buttons <br> Circuit Breakers Indicator Lights



SWITCH
CATALOG 2024


## 2024 SWITCH CATALOG

Proven Connectivity Quality: Over 70-year's supplying major global brands with private labeled product. RNA products will conform to CE, CSA, UL certifications and many other Certs as need by customers. Our facilities are ISO9001/ISO14001 certified; follows OHSAS18001/RoHS.

Broad Standard Product Offering: Large selection of, PCB, DIN Rail Mount, and Barrier Terminal Blocks that will cross to many of the major brands.

Value Strategy: Our customers enjoy RNA's High-Quality products, Super Competitive pricing, Quick delivery, US based Sales technical support and National and Regional Distribution.

Custom Solutions: RNA has unsurpassed in-house capabilities for product engineering with in-house testing lab, 110+ engineers, 90+ molding staff to provides customers with quick turn around on custom product designs or, standard product modifications.

Deep Technical Expertise: RNA has extensive experience and knowledge with Terminal Block Technologies and provides the needed engineering and sales support for our sales reps, distributors, and customers.

RNA strives to provides our customers with QUALITY PRODUCTS, BETTER PRICING, BETTER DELIVERY, and BETTER SUPPORT than all our competitors.

Full line catalogue links available online at: www.reliancenorthamerica.com

# RN Reliance North America 

(14) N. 新 CB © C RoHS<br>ISO 9001:2008 ISO:14001:2004 TS16949

Rocker switches Pushbutton switches

22mm Switches \& Buzzers


Key switches \& Rotary switches


Rotary switches


Pushbutton switches \& Door switches


Micro switches

LA133 Series Model And Implication ..... 12-15
Model ..... 12
Code for button head \& Bracket house ..... 12
Code for product feature ..... 13
Contact code ..... 14
Voltage code of indicator for illuminated switch ..... 14
Code of full-face colour ..... 14
Assembly diagram ..... 15
(Ф22mm) LA133-A Series ..... 16-18
(Ф22mm) LA133-B Series ..... 19-21
(Ф30mm) LA133-E Series ..... 22-24
Mounting instruction ..... 25
Contact label ..... 25
Mounting hole size ..... 25
Function diagram of selectors and key lock switch ..... 25
Accessory of LA133 series pushbutton ..... 26-27
AD111 series indicator ..... 28-32
KCD Series Rocker switches ..... 33-57
KCD1 Series Rocker Switches ..... 33-36
KCD2 Series Rocker Switches ..... 37-39
KCD3 Series Rocker Switches ..... 40-42
KCD5 Series Rocker Switches ..... 43-44
KCD6 Series Rocker Switches ..... 45-46
KCD7 Series Rocker Switches ..... 47-48
KCD8 Series Rocker Switches ..... 49-51
KCD10 Series Rocker Switches ..... 52-53
KCD11 Series Rocker Switches ..... 54
KCD Series Printing Graphics And Bar Code ..... 55-57

Pushbutton Switches, Rotary Switches, Key Switches

AD Series Pushbutton Switches ..... 58-65
AJ/AT Series Pushbutton Switches ..... 66
KD16 Series Pushbutton Switches ..... 67-68
AX16 Series Rotary Switches ..... 69-70
AY16 Series Keylock Switches ..... 71-72
UZ16 Series Buzzers ..... 73
RS1 Series Rotary Switches ..... 74-76
RS2 Series Rotary Switches ..... 77-78
RS3 Series Rotary Switches ..... 79-80
SS1 Series Model And Implication ..... 81-82
SS2 Series Model And Implication ..... 83
Circuit Breaker Switches, Micro Switch, Door Switches
SCB Series Circuit Breaker Switches ..... 84-85
KW15 Series Micro Switches ..... 86-87
KW11 Series Micro Switches ..... 88-89
KBM Series Refrigerator Door Switches ..... 90-91
KD2 Series Pushbutton Switches ..... 92-93
FD16 Series Pushbutton Switches ..... 94-95
KA1A KA1B Series Pushbutton Buzzers ..... 96
KA5 Series Pushbutton Switches ..... 97
KA6/7 Series Pushbutton Switches ..... 98-99
KA11 Series Pushbutton Switches ..... 100
KA12 Series Pushbutton Switches ..... 101
JP19Y Metal Key Switches ..... 102
ZD Series Indicators ..... 103-105
BLX Series Fuse Holders ..... 106-107

## Mode I



Code for push button head \& Bracket house

| Series <br> Code | LA133-A1/a1 | Series <br> Code | LA133-B1 | Series <br> Code | LA133-E1/e1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Argentate |  | $\begin{gathered} \text { B1 } \\ \text { Argentate } \\ \text { \&Black } \end{gathered}$ |  | Argentate |  |
| Black |  |  |  | Black |  |
| Series <br> Code | LA133-A2/a2 | Series <br> Code | LA133-B2 | Series <br> Code | LA133-E2/e2 |
| Argentate |  |  |  | Argentate |  |
| Black |  |  |  | Black |  |

## Features:

1. LA133- (A1, a1, B1, E1, e1) : Outline clear-cut appearance, graceful lines. Install and Fix inclined-screw, Succeed to design description for EAO Switzerland, accord to occident strict and soundness of the engineering design concept.
2. LA133-(A2, a2, B2, E2, e2) :Well-bedded appearance, Fixed by high-strength plastic PBT production and Straight screw combination, not only inherited the A1, a1, B1, E1, e1 stable characteristics of a solid, but also take into account the cost of manufacturing, it is A1, a1, B1, E1, e1 simple farm, it is a economic options for consumer.

## Code for product feature

| Code | Description | Code | Description |
| :---: | :---: | :---: | :---: |
| P | Momentary action pushbutton | T | Raised lens Pushbutton |
| PS | Maintained action actuator | TS | Maintaied action actuator Raised Pushbutton |
| PD | Illuminated pushbutton actuator | TD | Illuminated Raised lens Pushbutton |
| PDS | Illuminated maintained action pushbutton actuator | TDS | Illuminated Maintained action actuator Raised lens Pushbutton |
| X2S | Short level 2-position maintained action, selector switch | XL2S | Long level 2-position maintained actionselector switch |
| X3S | Short level 3-position selector switch | XL3S | Long level 3-position selector switch |
| X3 | Short level 3-position retum action selector switch | XL3 | Long level 3-position retum action selector switch |
| X3SR | Short level 3-position left retum action, right maintained action selector switch | XL3SR | Long level 3-position left retum action, right maintained action selector switch |
| X3SL | Short level 3-position left Maintained action, right retum action selector switch | XL3SL | Long level 3-position left Maintained action, right retum action selector switch |
| XD24S | 2-position $45^{\circ}$ illuminated maintained action selector switch | XD3S | 3-position illuminated maintained action selector switch |
| XD24 | 2-position $45^{\circ}$ illuminated retum action selector switch | XD3SR | 3-position illuminated left retum action, right maintained action selector switch |
| XD2S | 2-position $90^{\circ}$ illuminated maintained action selector switch | XD3SL | 3-position illuminated left maintainded action, right retum action selector switch |
| XD3 | 3-position illuminated retum action keylock switch |  |  |


| Code | Description | Code | Description |
| :---: | :--- | :---: | :--- |
| M | Mushroom-head pushbutton actuator | Y2S | 2-positon maintained action keylock switch |
| MS | Mushroom pushbutton with latching | Y3S | 3-position keylock switch |
| MD | Illuminated mushroom-head pushbutton <br> actuator | Y3 | 3-position retum action keylock switch |
| MDS | Illuminated Maintained action mushroom-head <br> pushbutton actuator | Y3SR | 3-pposition left retum action, right <br> maintained action keylock switch |
| J | Emergency stop pushbutton | Y3SL | 3-position, left Maintained action right <br> action keylock switch |

3
Contact code

Description

| Code |  | Description | Code |  | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Snaparation } \\ & \text { suitemen } \\ & \text { element } \end{aligned}$ | $\begin{aligned} & \text { Sow.mawe } \\ & \text { SNuthemen } \end{aligned}$ |  | $\underset{\substack{\text { Snap-action } \\ \text { swithing } \\ \text { delement }}}{\text { and }}$ | Slow-make switching element |  |
| K10 | H10 | 1N0 | K40 | H40 | 4NO |
| K01 | H01 | 1NC | K04 | H04 | 4NC |
| K20 | H 2 O | 2NO | K11 | H11 | 1N0\&1NC |
| K02 | H02 | 2NC | K12 | H12 | 1N0\&2NC |
| K30 | H30 | 3NO | K21 | H21 | 2N0\&1NC |
| K03 | H03 | 3NC | K22 | H22 | 2N0\&2NC |
| K13 | H13 | 1N0\&3NC | K31 | H31 | 3N0\&1NC |



K
Snap-action switching element


H
Slow-make switching element

4 Voltage code of indicator for illuminated switch

| IIlumination | LED (Light-emitting Diode) |  |  |
| :---: | :---: | :---: | :---: |
| Power Suppty | DC • AC | AC | FD |
| Voltage | $6 \mathrm{~V} 12 \mathrm{~V} 24 \mathrm{~V} \mathrm{36V}$ <br> $48 \mathrm{~V} 110 \mathrm{~V} 220 \mathrm{~V} \mathrm{380V}$ | 110 V 220 V 380 V | 380 V |

Note: Special Voltage Can Be Made

## 5 Code of full-face colour

| Code | R | G | Y | W | S | B | $J$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Description | Red | Green | Yellow | White | Blue | Black | Flat Metal Buttons |

## Parts material

| Bezel of head | Bracket | Shell of <br> button head | Contact point | Bracket house | Contact panel |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AL | Zn or PBT | PA | $\mathrm{AgSnO}_{2} \mathrm{In}_{2} \mathrm{O}_{3}$ | PC | Cu |

## Useage

LA133 series of pushbutton for $A C 50 \mathrm{HZ}$ or 60 HZ , voltage rage AC from 600 V to DC400V of CNC machine, and Mechanical, Electrical, Telecommunications, Shipbuilding, Metallurgy, Chemical switch of electrical control devices, which use as control illumination \& interlocking switch etc.

- Environmental conditions

| Operating <br> temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | Installation group Ill Class |
| :--- | :--- | :--- |
| Degree of <br> pullution | Level 3 | Installation height $\leqslant 2000 \mathrm{~m}$ |
| Vibration | $10 \sim 2000 \mathrm{~Hz} \cdot 1 \mathrm{~mm} \cdot 15 \mathrm{~g}$ | Relative humidity $\leqslant 98 \%$ |
| Protection IP40 (Usually usage if not noted in order) <br> IP65 (Should be noted in order) <br> Can be reach IP67 if use Protective membranes for <br> some pushbuttons |  |  |
| Electrical characteristics |  |  |

Rated insulation Voltage:AC660V Rated Thermal Current:10A
Max. insulation voltage: $2500 \mathrm{~V} / \mathrm{min} \quad$ Usage Category: AC-15, DC-13

| Usage Category | Connection Block UiV | working rate voltage UeV | working rate current leA | Rated Thermal Current IthA |
| :---: | :---: | :---: | :---: | :---: |
| AC-15 | 660 | $\begin{aligned} & 220 \\ & 660 \end{aligned}$ | $\begin{aligned} & 6 \\ & 2 \end{aligned}$ | 10 |
| DC-13 | 660 | $\begin{aligned} & 110 \\ & 220 \end{aligned}$ | $\begin{gathered} 1 \\ 0.6 \end{gathered}$ | 10 |

## - Mechanical lifetime

structural style
Pushbutton, Mushroom-head pushbutton \& illuminated pushbutton actuator
Rotary Switch, Keylock switches \&
mechanical life (cycles) operation frequency (cycle/h)
1 million 1200
0.3 million

120
Maintained action actuator

## Electrical lifetime

| Usage Category | Electrical lifetiom(cycles) | Operation frequency (cycle/h) |
| :--- | :---: | :---: |
| AC-15 | 0.6 million | 1200 |
| DC-13 | 0.25 million | 1200 |

## Assembly diagram



| Name | Pattern | Working | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| pushbutton |  | Momentary <br> Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{A} 1 . \mathrm{P} / \square \\ & \mathrm{LA} 133-\mathrm{A} 1 . \mathrm{PS} / \square \end{aligned}$ |  |  |  |
| Raised lens pushbutton |  | Momentary <br> Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{A} 1 . \mathrm{T} / \square \mathbf{~} \\ & \mathrm{LA} 133-\mathrm{A} 1 . \mathrm{TS} / \square \end{aligned}$ | $\begin{aligned} & R \\ & G \\ & Y \\ & \text { W } \\ & \text { S } \\ & \text { B } \end{aligned}$ |  |  |
| Il luminated pushbutton |  | Momentary <br> Maintained | LA133-A1.PD/ <br> LA133-A1.PDS/D | $\begin{aligned} & R \\ & G \\ & Y \\ & W \\ & W \end{aligned}$ | $\begin{aligned} & \text { DC } \\ & 6 \mathrm{~V}, ~ 12 \mathrm{~V}, \\ & 24 \mathrm{~V}, ~ 36 \mathrm{~V}, \\ & 48 \mathrm{~V}, ~ 110 \mathrm{~V}, \\ & 220 \mathrm{~V} \\ & \text { AC } \\ & 110 \mathrm{~V}, ~ 220 \mathrm{~V}, \\ & 380 \mathrm{~V} \\ & \text { FD } \\ & 380 \mathrm{~V} \end{aligned}$ |  |
| Il luminated raised lens pushbutton |  | Momentary <br> Maintained | LA133-A1.TD/ <br> LA133-A1.TDS/[ | $\begin{aligned} & R \\ & G \\ & \mathrm{Y} \\ & \mathrm{~W} \\ & \mathrm{~S} \end{aligned}$ | DC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380V <br> FD <br> 380V |  |

- Description

1. Contact Code is filled in $\boldsymbol{\square}$, voltage in $\boldsymbol{\square}$, color code in $\mathbf{\Delta}$
2. Use bright \& solid color of LED for IIluminated Pushbutton.
3. A1 can be changed into A2 when L2 bracket is necessary on request.
4. A can be changed into a when black pushbutton is necessary on request.

| Name | Pattern | Working | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mushroom pushbutton |  | Momentary Maintained | $\text { LA133-A1.M/ } \square \mathbf{\triangle}$ LA133-A1.MS/[ | - $R$ <br> G  <br>  W <br> - S <br> - $B$ |  |  |
| Il luminated mushroom pushbutton |  | Momentary Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{A} 1 . \mathrm{MD} / \square \square \mathbf{\square} \\ & \mathrm{LA} 133-\mathrm{A} 1 . \mathrm{MDS} / \square \square \mathbf{\square} \end{aligned}$ |  | DC•AC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380V <br> FD <br> 380V |  |
| $\begin{aligned} & \text { Emergency } \\ & \text { stop } \\ & \text { pushbutton } \end{aligned}$ |  | Maintained <br> when <br> pressing <br> button, <br> return <br> after <br> clockwise <br> rotation | LA133-A1.J/ $\square$ ^ | $\begin{aligned} & \mathrm{R} \\ & \mathrm{Y} \end{aligned}$ |  |  |

Description

1. Contact Code is filled in $\square$, voltage in $\square$, color code in $\boldsymbol{\Delta}$
2. Use bright \& solid color of LED for Illuminated Pushbutton..
3. A1 can be changed into $A 2$ when $L 2$ bracket is necessary on request.
4. A can be changed into a when black pushbutton is necessary on request.

| Name | Pattern |  | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short <br> lever <br> rotary <br> selector |  | Twoposition <br> Threeposition |  | $\begin{array}{ll}  & R \\ & G \\ & Y \\ 0 & S \end{array}$ |  |  |
| Long <br> lever rotary selector |  | Twoposition <br> Threeposition |  | $\begin{array}{ll}  & R \\ & G \\ & Y \\ 0 & S \end{array}$ |  |  |
| $\begin{aligned} & \text { Il luminated } \\ & \text { rotary } \end{aligned}$ |  | $\qquad$ <br> Threeposition |  | $\begin{array}{ll}  & R \\ & G \\ & Y \\ O & W \\ & S \end{array}$ | $\begin{aligned} & \mathrm{DC} \cdot \mathrm{AC} \\ & 6 \mathrm{~V}, 12 \mathrm{~V}, \\ & 24 \mathrm{~V}, ~ 36 \mathrm{~V}, \\ & 48 \mathrm{~V}, ~ 110 \mathrm{~V}, \\ & 220 \mathrm{~V} \\ & \text { AC } \\ & 110 \mathrm{~V}, ~ 220 \mathrm{~V}, \\ & 380 \mathrm{~V} \\ & \text { FD } \\ & 380 \mathrm{~V} \end{aligned}$ |  |
| Key lock switch |  | Twoposition $\qquad$ <br> Threeposition |  |  | Key in 0 can be removed, if want take out in other locations, should be indicated on the orders |  |

## Description

1. Contact Code is filled in $\square$, voltage in, color code in
2. Use bright \& solid color of LED for Illuminated Pushbutton.
3. A1 can be changed into A2 when L2 bracket is necessary on request.
4. A can be changed into a when black pushbutton is necessary on request.

| Name | Pattern | Working | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pushbutton |  | Momentary <br> Maintained | LA133-B1.P/ $\square \mathbf{\Delta}$ <br> LA133-B1.PS/ | - $R$ <br>  Y <br> O W <br> - S <br> - $B$ |  |  |
| Raised <br> lens pushbutton |  | Momentary <br> Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{T} / \square \mathbf{~} \\ & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{TS} / \square \mathbf{\Delta} \end{aligned}$ | $\begin{array}{ll}  & R \\ & G \\ & Y \\ 0 & W \\ - & S \\ 0 & B \end{array}$ |  |  |
| II luminated pushbutton |  | Momentary <br> Maintained | LA133-B1.PD/ <br> LA133-B1.PDS/ | $\begin{aligned} & R \\ & \\ & \hline \end{aligned}$ | DC • AC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380 V <br> FD <br> 380 V |  |
| IIluminated <br> raised <br> lens <br> pushbutton |  | Momentary <br> Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{TD} / \square \square \mathbf{\square} \\ & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{TDS} / \square \boldsymbol{\square} \end{aligned}$ |  | DC • AC <br> 6V, 12V, <br> 24V, 36V, <br> $48 \mathrm{~V}, ~ 110 \mathrm{~V}$, <br> 220 V <br> AC <br> 110V, 220V, <br> 380 V <br> FD <br> 380 V |  |

## - Description

1. Contact Code is filled in $\square$, voltage in $\square$, color code in $\mathbf{A}$
2. Use bright \& solid color of LED for Illuminated Pushbutton.
3. B1 can be changed into B2 when L2 bracket is necessary on request.

| Name | Pattern | Working | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mushroom pushbutton |  | Momentary <br> Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{M} / \square \boldsymbol{\wedge} \\ & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{MS} / \square \boldsymbol{} \end{aligned}$ | $\begin{array}{cc}  & R \\ & G \\ & Y \\ & W \\ & S \\ & B \end{array}$ |  |  |
| IIluminated mushroom pushbutton |  | Momentary <br> Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{MD} / \square \square \mathbf{\square} \\ & \mathrm{LA} 133-\mathrm{B} 1 . \mathrm{MDS} / \square \square \boldsymbol{\square} \end{aligned}$ | $\begin{array}{ll}  & R \\ & G \\ & Y \\ & W \\ & S \end{array}$ | $D C \cdot A C$ <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380 V <br> FD <br> 380 V |  |
| $\begin{aligned} & \text { Emergency } \\ & \text { stop } \\ & \text { pushbutton } \end{aligned}$ |  | Maintained when <br> pressing <br> button, <br> return <br> after <br> clockwise <br> rotation | LA133-B1.J/ $\square$ ■ | $\begin{aligned} & \mathrm{R} \\ & \mathrm{Y} \end{aligned}$ |  |  |

## Description

1. Contact Code is filled in $\square$, voltage in $\square$, color code in $\boldsymbol{A}$
2. Use bright \& solid color of LED for Illuminated Pushbutton.
3. B1 can be changed into B2 when L2 bracket is necessary on request.

| Name | Pattern |  | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short <br> lever <br> rotary <br> selector |  | Twoposition $\qquad$ <br> Threeposition |  | $\begin{array}{r} R \\ G \\ Y \\ C \end{array}$ |  |  |
| Long <br> lever <br> rotary <br> selector |  | Twoposition <br> Threeposition |  | $\begin{array}{r} R \\ G \\ Y \\ C \end{array}$ |  |  |
| Illuminated rotary |  | Twoposition <br> Threeposition |  | $\begin{gathered} R \\ G \\ Y \\ W \end{gathered}$ | $\begin{aligned} & \text { DC } \cdot \mathrm{AC} \\ & 6 \mathrm{~V}, 12 \mathrm{~V}, \\ & 24 \mathrm{~V}, 36 \mathrm{~V}, \\ & 48 \mathrm{~V}, ~ 110 \mathrm{~V}, \\ & 220 \mathrm{~V} \\ & \text { AC } \\ & 110 \mathrm{~V}, 220 \mathrm{~V}, \\ & 380 \mathrm{~V} \\ & \text { FD } \\ & 380 \mathrm{~V} \end{aligned}$ |  |
| Keylock switch |  | Twoposition <br> Threeposition |  |  | Key in 0 can be removed, if want take out in other locations, should be indicated on the orders |  |

## Description

1. Contact Code is filled in $\square$, voltage in $\square$, color code in $\boldsymbol{A}$
2. Use bright \& solid color of LED for Illuminated Pushbutton.
3. B1 can be changed into B2 when L2 bracket is necessary on request.

| Name | Pattern | Working | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| pushbutton |  | Momentary <br> Maintained |  | R G Y W S B |  |  |
| $\begin{gathered} \text { Raised } \\ \text { lens } \\ \text { pushbutton } \end{gathered}$ |  | Momentary Maintained | LA133-E1.T/ $\square \mathbf{\Delta}$ <br> LA133-E1.TS/D | R G Y W S B |  |  |
| Illuminated pushbutton |  | Momentary <br> Maintained | LA133-E1.PD/ロ■ <br> LA133-E1.PDS/ $\square$ | $R$ $G$ $Y$ W S | DC • AC <br> 6V, 12V, <br> 24V, 36V, <br> $48 \mathrm{~V}, ~ 110 \mathrm{~V}$, <br> 220 V <br> AC <br> 110V, 220V, <br> 380 V <br> FD <br> 380 V |  |
| II luminated raised lens pushbutton |  | Momentary <br> Maintained | $\begin{aligned} & \mathrm{LA} 133-\mathrm{E} 1 . \mathrm{TD} / \square \square \boldsymbol{\square} \\ & \mathrm{LA} 133-\mathrm{E} 1 . \mathrm{TDS} / \square \boldsymbol{\square} \end{aligned}$ | R G Y W S | DC•AC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380 V <br> FD <br> 380 V |  |

## - Description

1. Contact Code is filled in $\square$, voltage in $\square$, color code in $\mathbf{A}$
2. Use bright \& solid color of LED for Illuminated Pushbutton.
3. E1 can be changed into E2 when L2 bracket is necessary on request.
4. A can be changed into a when black pushbutton is necessary on request.

| Name | Pattern | Working | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mushroom pushbutton |  | Momentary <br> Maintained | LA133-E1.M/ $\square \mathbf{\square}$ <br> LA133-E1.MS/[ |  |  |  |
| Il luminated mushroom pushbutton |  | Momentary <br> Maintained | LA133-E1.MD/ロ■ <br> LA133-E1.MDS/ |  | DC • AC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380V <br> FD <br> 380 V |  |
| $\begin{aligned} & \text { Emergency } \\ & \text { stop } \\ & \text { pushbutto } \end{aligned}$ |  | Maintained when <br> pressing button, return after clockwise rotation | LA133-E1.J/ $\square$ \ | - R <br> Y |  |  |
| Indicator |  | Illuminated | LA133-E1.D/■ |  | DC • AC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380V <br> FD <br> 380 V |  |

- Description

1. Contact Code is filled in $\square$, voltage in $\square$, color code in $\mathbf{\Delta}$.
2. Use bright \& solid color of LED for Illuminated Pushbutton.
3. E1 can be changed into E2 when L2 bracket is necessary on request.
4. A can be changed into a when black pushbutton is necessary on request.

| Name | Pattern |  | Mode I | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short <br> lever <br> rotary <br> selecto |  | position <br> Threeposition |  | $\begin{aligned} & R \\ & G \\ & G \\ & \\ & \hline \end{aligned}$ |  |  |
| Long lever rotary selector |  | Two- <br> position <br> Threeposition |  | $\begin{array}{r} R \\ G \\ Y \\ C \end{array}$ |  |  |
| Keylock switch |  | Twoposition $\qquad$ <br> Threeposition |  |  | Key in 0 can be removed, if want tak out in other locations, should be indicated on the orders |  |

## Description

1. Contact Code is filled in $\square$, voltage in $\square$, color code in $\mathbf{\Delta}$.
2. Use bright \& solid color of LED for Illuminated Pushbutton.
3. E1 can be changed into E2 when L2 bracket is necessary on request.
4. A can be changed into a when black pushbutton is necessary on request.

5. Insert the operator in the mounting hole from the front of panel, then bracket from the back of panel. Fasten the screws (not too stong, max. torque is $25 \mathrm{~N}-\mathrm{cm}$ ). When the panel is plastic and other non-metal material, F1 can be put at the back of the panel. When the mounting hole is 25 mm , F2 can be mounted together with bracket.
For FL1 type, the contact block can be mounted together with bracket. For FL2 type, the contact block should be disassembled, then assemble the bracket.

Note: If it doesn' $t$ work smoothly after mounting, please adjust both tightening screws to keep balance.

2. Contact block can be directly fastened, the symbol parts can be mounted in the front of panel.Please fasten lamp holdeer before the contact block as mounting illuminated buttons.

Note:Please check the buckles of contact block after mounting.

3. Disassembly the contact block and lamp holder, please srewdriver to lift the buckles of the mounting system. The mounted parts can be easily disassembled.

Mounting hole size
A\&B series normal pushbutton, illuminated
pushbutton, key selector and lelector
A\&B series mushroom pushbutton\&long lever
rotary selector

| E series normal pushbutton, illuminated |
| :--- |
| pushbutton, key selector and selector |
| key\&rotary pushbutton. |


| E series mushroom pushbutton\&long lever |
| :--- |
| rotary selectory pushbutton |

Function diagram of selectors and key selectors


| Name |  | Model | Material | Instruction |
| :--- | :--- | :--- | :--- | :--- |
| Bracket |  | For fixing pushbutton |  |  |



Introduction
Adopted bright \& solid color of LED for Illumination. AD111 series indicator take the replacement of Filament lamp and Neon light, which has long lifetime, low energy consumption, light weight \& volume. Have won the majority of users by the characteristics of brightness, reliability, attractive appearance and ingenious. In order to satisifed the
 improving taste of our custoemrs, a seris new items have been developed, such as AD111-22B/C/D, double colored light, position indicator, flashing buzzer and mini-short indicator. Appearance design just like that of LA133 series' style. Relative international standard symbol can be engraved inside the lamp shade which is made by high strength polycarbonate, featureded by good anti-impulsive. Inner-screw connection, more safety \& convenient. All these combination contribute to your perfect usage..


## Instruction

Adopted bright LED chip as its light source, AD111 series indicator can be used as signal in the electronic control circuits of machine tool,machinery,
 grid, teleco, ships, metallurgy \& chemical industries etc, between 50 HZor $60 \mathrm{HZ} \mathrm{AC}, 440 \mathrm{~V}$ AC and 380 V DC. Adopted bright \& solid color of LED for Illumination. AD111 series of buttons used as control illumination \& interlocking switch etc.for AC 50 HZ or 60 HZ (special frequency can be made), voltage rage from AC 600 V to DC 400 V of CNC machine, and Mechanical , Electrical, Telecommunications, Shipbuilding, Metallurgy, Chemical switch of electrical control devices,

- Model

- 3 Voltage code of indicator

| Illumination | LED(Light-emitting Diode) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Power supply | DC •AC | AC | FD |  |
| Voltage | 6 V 12 V 24 V 36 V 48 V 110 V 220 V 380 V | 110 V 220 V 380 V | 380 V |  |

## - Working condition

1. Ambient temperature: $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$;
2. Relative humidity: $\leq 98 \%$
3. Normally workable when vibration frequency is $2-80 \mathrm{~Hz}$ with acceleration of 0.7 g .
4. Pollution degree is3,Inatallation group is III.
5. One with "TH" mark can work in the conditioan of moist heat.

## - Technical data

1.Power frequency with stand voltage:2.5KV per minite.(effective $A C$ value)
2. Insulation resistance: $\geq 2 \mathrm{M} \Omega$
3.Allowable voltage fluctuation: $\pm 20 \%$
4.Continous operating life $\geq 30000 \mathrm{H}$
5.Brightness $\geq 100 \mathrm{~cd} / \mathrm{m} 2$
6.CT| $\geq 100$
7.Protective degreee of the head IP65,IP67 is available on request
8.Applying frequency:AC50~60Hz

## - Installation Diagram



| Name | Pattern | Action | Model | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22A type |  | Illuminating <br> Flashy |  | $\begin{gathered} R \\ G \\ G \\ \text { } \mathrm{F} \\ \mathrm{~S} \end{gathered}$ | DC • AC <br> 6V, 12V, <br> $24 \mathrm{~V}, ~ 36 \mathrm{~V}$, <br> $48 \mathrm{~V}, 110 \mathrm{~V}$, <br> 220 V <br> AC <br> 110V, 220V, <br> 380 V <br> FD <br> 380V |  |
| 22 B type |  | Illuminating <br> Flashy |  | $\begin{gathered} R \\ G \\ Y \\ W \\ C \end{gathered}$ | DC•AC <br> 6V, 12V, <br> $24 \mathrm{~V}, ~ 36 \mathrm{~V}$, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380V <br> FD <br> 380 V |  |
| 22 C type |  | Illuminating <br> Flashy |  | $\begin{gathered} R \\ G \\ Y \\ \text { } W \\ S \end{gathered}$ | DC • AC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380 V <br> FD <br> 380V |  |
| 22D type |  | Illuminating <br> Flashy |  | $\begin{gathered} R \\ G \\ Y \\ \text { } W \\ S \end{gathered}$ | DC•AC <br> 6V, 12V, <br> 24V, 36V, <br> 48V, 110V, <br> 220 V <br> AC <br> 110V, 220V, <br> 380V <br> FD <br> 380 V |  |

## Description

## 1. Filled voltage in $\boldsymbol{\square}$, color in $\boldsymbol{\Delta}$

2. Use L1 dimension for typr of 22B, 22C, 22D, 22K when power supply is less than 48V,Use L2 dimension for typr of 22B, 22C, 22D, 22K when power supply is more than

| Name | Pattern | Action | Model | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22 Ktyp |  | Illuminating <br> Flashy |  | $\begin{array}{ll}  & R \\ & G \\ & Y \\ & W \\ & S \end{array}$ | $\begin{aligned} & \mathrm{DC} \cdot \mathrm{AC} \\ & 6 \mathrm{~V}, 12 \mathrm{~V}, \\ & 24 \mathrm{~V}, ~ 36 \mathrm{~V}, \\ & 48 \mathrm{~V}, 110 \mathrm{~V}, \\ & 220 \mathrm{~V} \\ & \text { AC } \\ & 110 \mathrm{~V}, ~ 220 \mathrm{~V}, \\ & 380 \mathrm{~V} \\ & \text { FD } \\ & 380 \mathrm{~V} \end{aligned}$ |  |
| Bicolor indicator |  | Illuminating | AD111-22E/■ | $\begin{aligned} & \text { - } R \\ & \\ & \\ & G \end{aligned}$ | $\begin{aligned} & D C \cdot A C \\ & 6 \mathrm{~V}, 12 \mathrm{~V}, \\ & 24 \mathrm{~V}, 36 \mathrm{~V}, \\ & 48 \mathrm{~V}, 110 \mathrm{~V}, \\ & 220 \mathrm{~V} \\ & \text { AC } \\ & 110 \mathrm{~V}, 220 \mathrm{~V}, \\ & 380 \mathrm{~V} \end{aligned}$ |  |
| Ground making indicator |  | Illuminating | AD111-22JD/■ | - R | $\begin{aligned} & D C \cdot A C \\ & 6 \mathrm{~V}, 12 \mathrm{~V}, \\ & 24 \mathrm{~V}, 36 \mathrm{~V}, \\ & 48 \mathrm{~V}, 110 \mathrm{~V}, \\ & 220 \mathrm{~V} \\ & \text { AC } \\ & 110 \mathrm{~V}, ~ 220 \mathrm{~V}, \\ & 380 \mathrm{~V} \end{aligned}$ |  |
| Isolator making indicator |  | Illuminating | AD111-22GL/■4 | $\begin{aligned} & \text { OR } \\ & \text { RG } \end{aligned}$ | $\begin{aligned} & D C \cdot A C \\ & 6 \mathrm{~V}, 12 \mathrm{~V}, \\ & 24 \mathrm{~V}, 36 \mathrm{~V}, \\ & 48 \mathrm{~V}, 110 \mathrm{~V}, \\ & 220 \mathrm{~V} \\ & \text { AC } \\ & 110 \mathrm{~V}, 220 \mathrm{~V}, \\ & 380 \mathrm{~V} \end{aligned}$ |  |

## Description

1. Filled voltage in $\square$, color in $\mathbf{\Delta}$.
2. Use L1 dimension for typr of 22B, 22C, 22D, 22K when power supply is less than 48 V , Use L2 dimension for typr of 22B, 22C, 22D, 22 K when power supply is more than

| Name | Pattern | Action | Model | Color | Voltage | Dimension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Breaker making indicato indicato |  | Illuminating | AD111-22DL/喵4 | $\begin{aligned} & \bullet \bullet-R R \\ & \bullet \bullet-R G \end{aligned}$ | DC•AC <br> $6 \mathrm{~V}, ~ 12 \mathrm{~V}$, <br> 24V, 36V. <br> $48 \mathrm{~V}, 110 \mathrm{~V}$. <br> 220 V <br> AC <br> 110V, 220V. <br> 380 V |  |
| Buzzers |  | Continuous sound <br> Discontinuous sound | AD111-22FML/■ AD111-22FM/ | - -B | DC • AC <br> 12V. 24 V , <br> $36 \mathrm{~V}, 48 \mathrm{~V}$, <br> 110V, 220V <br> AC <br> 110V, 220V, <br> 380 V |  |
| Flashing buzzer |  | Flashy, discontinuous sound <br> sound | AD111-22SFM/■ | $\stackrel{\bullet-R}{\bullet-G}$ | DC•AC <br> 12V. 24V, <br> $36 \mathrm{~V}, 48 \mathrm{~V}$. <br> 110V, 220V <br> AC <br> 110V. 220V, <br> 380 V |  |

## Description

[^0]

SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | $\mathrm{T} 55, \mathrm{~T} 85, \mathrm{~T} 125$ |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| $\text { CQC } E$ | 16(4)A 250V AC T85 |
| :---: | :---: |
| ${ }^{\circ}$ | 16R(4)A 125VAC 16R(4)A 250VAC |
|  | 1HP 125VAC |
|  | 16(4)A 250V AC T125, 10(4)A 250V AC T125 16(4)A 250 V AC T85, 16A 250 V AC |

HOW TO ORDER


1 KCDI CIRCUIT CODE

| Code | Circuit | Description | Code | Circuit | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | $\stackrel{\text { ON-OFF }}{ }$ | SP-ST | 21 | $\begin{aligned} & \text { ON-OFF } \\ & \stackrel{\bullet}{\square} \end{aligned}$ | DP-ST |
| 12 | $\begin{array}{ll} \hline O N & -O N \\ \hline & \\ \hline \end{array}$ | SP-DT | 21 N |  | DP-ST Illuminated |
| 11 N | $\begin{array}{cc} \mathrm{ON}-\mathrm{OFF} \\ \bullet \end{array}$ | SP-ST Illuminated | 22 |  | DP-DT |
| 11M | $\stackrel{\text { OFF } \rightarrow \text { ON }}{\uparrow}$ | SP-ST Momentary | 22M | $\begin{array}{ccc} \uparrow \begin{array}{cc} O N & \rightarrow \\ \hline & O N \\ \uparrow & \ddots \end{array} \\ \hline \end{array}$ | DP-DT Momentary |
| 12M |  | SP-DT Momentary | 23 |  | DP-TT |
| 13 |  | SP-TT | 13M | $\uparrow \stackrel{O N-O F F-O N}{\bullet} \uparrow$ | SP-TT Momentary |
| 21M | $\xrightarrow[\uparrow]{\mathrm{OFF} \rightarrow \mathrm{ON}}$ | DP-ST Momentary | 23M | $\uparrow \stackrel{O N-O F F-O N}{ } \uparrow$ | DP-TT Momentary |

## 2 ACTUATOR CODE

| Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A |  | Plane | B | - | V-Shaped | C | -0 | Arc-Shaped | D | 0 - | Arc-Shaped Point Lamp | F | $\begin{gathered} =0 \\ 0=0 \end{gathered}$ | Arc-Shaped With Shied |

## 3 <br> HOUSING CODE

| Code | Diagram | Panel cutout |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Actuator | Circuit | Terminal Blocks |
| A1 |  |  |  | Thickness | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \\ & \text { D/ } \\ & \text { F } \end{aligned}$ | 11M/ <br> 12M/ <br> 13M | A |
| A4 |  |  | $\xrightarrow{\longrightarrow} \mathrm{X}$ | Thickness | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \\ & \text { D/ } \\ & \text { F } \end{aligned}$ | 11 N | $\begin{aligned} & \text { A/ } \\ & C \end{aligned}$ |
| A5 |  |  |  | Thickness | C | 11/ 11N/ 12/ $13$ | C |
| A6 |  |  | C Pa $\frac{\mathrm{X}}{28.4^{+0.10}}$ $28.8^{+0.10} 0$ $29.0_{0}^{+0.10}$ 0 | Thickness | C | $\begin{aligned} & 11 / 11 \mathrm{~N} / \\ & 12 / \\ & 13 \end{aligned}$ | C |
| B1 |  |  | Panel <br> X <br> $28.1_{0}^{+0.10}$ <br> $28.2_{0}^{+0.10}$ <br> $28.3_{0}^{+0.10}$ | ickness | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \\ & \text { D } \end{aligned}$ | 21/22/ $22 M / 23$ $21 M / 23 M$ | A |
| B2 |  |  | Panel T <br> X <br> $29.6_{0}^{+0.10}$ <br> $30.6_{0}^{+0.10}$ <br> $30.8_{0}^{+0.10}$ | ckness | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \\ & \text { D } \end{aligned}$ | $21 /$ $21 N$ | $\begin{aligned} & \text { A/ } \\ & \text { C } \end{aligned}$ |
| B3 |  |  | Panel <br> $X$ <br> $28.1_{0}^{+0.10}$ <br> $28.2_{0}^{+0.10}$ <br> $28.3_{0}^{+0.10}$ | ickness | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \\ & \text { D } \end{aligned}$ | $\begin{aligned} & 21 / \\ & 21 \mathrm{~N} \end{aligned}$ | $\begin{aligned} & \text { A/ } \\ & C \end{aligned}$ |
| F1 <br> waterproof |  | $\begin{gathered} \hline \frac{Z}{0.75 \sim 1.25} \\ \hline 1.25 \sim 2.00 \\ \hline 2.00 \sim 3.00 \end{gathered}$ |  | Thickness | B/ C | $\begin{aligned} & 11 / 12 / \\ & 11 \mathrm{~N} / 13 \end{aligned}$ | B |


| Code | Diagram | Panel cut out |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Operating conditions | Circuit | Terminal Blocks |
|  |  |  |  | nel Thickness | $\begin{aligned} & \text { B/ } \\ & \text { C } \end{aligned}$ | $\begin{aligned} & 11 / 12 / \\ & 11 \mathrm{~N} / 13 \end{aligned}$ | B |
|  |  |  |  | eel Thickness | C | $\begin{aligned} & 21 / 22 / \\ & 21 \mathrm{~N} / 23 \end{aligned}$ | B |
| H1 |  |  |  | nel Thickness | C | $\begin{aligned} & 11 / 2 \\ & \end{aligned}$ | H/ |
| H2 |  |  |  | el Thickness | C | $\begin{aligned} & 11 / 2 \\ & \hline 10 \end{aligned}$ | H/ |

4 TERMINATION CODE

| Code | Diagram | Description |
| :---: | :---: | :---: |
| A |  | 6.3*0.8 Standard Terminal Blocks |
| B |  | 6.3*0.8 Standard Terminal Blocks |
| C |  | 6.3*0.8 Welding type Terminal Blocks |
| H | $\overbrace{}^{4}$ | 6.3*0.8 Welding type Terminal Blocks |
| 1 | $6_{6}^{\pi} 6 \times 0.8$ | 6.3*0.8 Welding type Terminal Blocks |

5 housing color

| Code | R | G | Y | S | W | B | P | A | K |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange | Coffee |

## 6 ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

7 MARKING


8 LAMP VOLTAGE

| Lamp | LED |  |  |  |  |  |  |  |  | Neon |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage | DC6V | DC12V | DC24V | AC/DC6V | AC/DC12V | AC/DC24V | AC/DC110V | AC/DC220V | AC110V | AC220V |  |
| Code | DC6 | DC 12 | DC 24 | AC/DC6 | AC/DC12 | AC/DC24 | AC/DC110 | AC/DC220 | AC 110 | AC 220 |  |

## NOTE

- The operation of the button have a variety of colors, the main color is black, white, red and green.
- The main color of housing is black and white.
- The main types of illuminate switch are 220 V neon lamps, and less LED products, and basically are LED DC24V.
-The printed character on the button according to customer demand, there are a few dozen kinds can be printed and published at present, usually can meet customer demand.
- The special voltage, current and color needs to be customized.


Note: Due to we couldn't get full information from the appearance, such as voltages, parameters and the switch with or without light, so the full model please refer to models based on the actual needs and the definition and parameters of table selection.


SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | $\mathrm{T} 55, \mathrm{~T} 85, \mathrm{~T} 125$ |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| $\text { CQC } C$ | 16(4)A 250V AC T85 |
| :---: | :---: |
|  | $\begin{array}{lrl} \hline 16 R(4) A & 125 \mathrm{VAC} & 16 \mathrm{R}(4) \mathrm{A} 250 \mathrm{VAC} \\ 1 \mathrm{HP} & 125 \mathrm{VAC} & \end{array}$ |
|  | 16(4)A 250 V AC T125, 10(4)A 250 V AC T125 16(4)A 250 V AC T85, 16A 250 V AC |

HOW TO ORDER


1 KCD2 CIRCUIT CODE

| Code | Circuit | Description | Code | Circuit | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | $\stackrel{\mathrm{ON}}{\stackrel{-}{\circ} \quad \mathrm{ON}}$ | SP-DT | 23 |  | DP-TT |
| 12M | $\uparrow \stackrel{O N-O}{\square-\quad \bigcirc 0}$ | SP-DT Momentary | 23N |  | DP-TT Illuminated |
| 21 |  | DP-ST | 21M | $\begin{aligned} & \text { OFF } \rightarrow \text { ON } \\ & \uparrow \bullet: \\ & \bullet \bullet \end{aligned}$ | DP-ST Momentary |
| 21 N | $\begin{aligned} & \text { ON-OFF } \\ & \hdashline \mathbb{O} \\ & \hline \end{aligned}$ | DP-ST Illuminated | 22M |  | DP-DT Return |
| 21N1 |  | DP-ST Illuminated | 23M | $\stackrel{O N \rightarrow O F F \leftarrow O N}{\uparrow}$ | DP-TT Double Momentary |
| 22 |  | DP-DT | 23M1 | $\text { ON } \rightarrow \mathrm{OFF} \leftarrow \mathrm{ON}$ | DP-TT Single Momentary |
| 22N |  | DP-DT Illuminated | 21NM |  | DP-ST Illuminated Momentary |
| 22NM | $\underset{\bullet}{\mathrm{ON}} \rightarrow \rightarrow \quad \mathrm{ON}$ | DP-DT Illuminated Momentary |  |  |  |

2 ACTUATOR CODE

| Code | Diagram | Descripition | Code | Diagram | Descripion | Code | Diagram | Descripion | Code | Diagram | Desscripion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\bigcirc$ | Plane | B | $\bigcirc$ | $v$-Shaped | C | 0 | Arc-Shaped | F | 唯 | Arc-shaped |

3 HOUSING CODE

| Code | Diagram | Panel cut out (mm) |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Actuator | Circuit | Terminal Blocks |
| A1 |  | $\frac{\mathrm{Y}}{\frac{\mathrm{Y}}{\square}} \frac{\mathrm{Z}}{\frac{0.751 .25}{1.25 \sim 2.00}} \frac{2.00 \sim 3.00}{}$ |  | nel Thickness | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \\ & \text { F } \end{aligned}$ | 12/12M/21/ <br> 21N/22/22N/ <br> 23/23N/ <br> 21M/22M/ <br> 23M/23MI/ <br> 21NM/22NM | A |
| A2 |  |  |  |  | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \end{aligned}$ | 12/12M/21/ <br> 21N/22/22N/ <br> 23/23N/ <br> 21M/22M/ <br> 23M/23MI/ <br> 21NM/22NM | A |
|  |  |  |  |  | C | 12/12M/21/ <br> 21N/22/22N/ <br> 23/23N/ <br> 21M/22M/ <br> 23M/23M1/ <br> 21NM/22NM | B |
| F2 4 0 0 0 0 0 0 0 |  | Z: Panel Thickness |  |  | C | 12/12M/21/ <br> 21N/22/22N/ <br> 23/23N/ <br> 21M/22M/ <br> 23M/23MI/ <br> 21NM/22NM | B |
|  |  |  |  |  | C | $\begin{aligned} & 12 / 12 \mathrm{M} / \\ & 21 / 22 / 23 / \\ & 21 \mathrm{M} / 22 \mathrm{M} / \\ & 23 \mathrm{M} / 23 \mathrm{MI} \end{aligned}$ | A |
| H1 |  | X <br> $\mathrm{Y} \\|=$ <br> $\frac{\mathrm{Z}}{\frac{0.75 \sim 1.25}{1.25 \sim 2.00}}$ <br> 2.00~3.00 |  | nel Thickness | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { C/ } \\ & \text { F } \end{aligned}$ | 21/ <br> 21N1/ <br> 21M/ <br> 21N/ <br> 21NM | $\begin{aligned} & \text { A/ } \\ & \text { C } \end{aligned}$ |

4 TERMINAL CODE

| Code | Diagram | Description |
| :---: | :---: | :---: |
| A |  | $\begin{aligned} & \quad 6.3^{*} 0.8 \\ & \text { Standard Terminal Blocks } \end{aligned}$ |
| B |  | $6.3^{*} 0.8$ Standard Terminal Blocks |
| C |  | $\begin{gathered} 6.3^{*} 0.8 \\ \text { Standard Terminal Blocks } \end{gathered}$ |

7 MARKING


01


03


05


06


12

| QUICK |
| :---: |
| SLOW |

22


Specific see attached Iist

| Lamp | LED |  |  |  |  |  |  |  |  | Neon |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage | DC6V | DC12V | DC24V | AC/DC6V | AC/DC12V | AC/DC24V | AC/DC110V | AC/DC220V | AC110V | AC220V |  |
| Code | DC 6 | DC 12 | DC 24 | AC/DC6 | AC/DC12 | AC/DC24 | AC/DC110 | AC/DC220 | AC 110 | AC 220 |  |

## NOTE

- The operation of the button have a variety of colors, the main color is black, white, red and green.
- The main color of housing is black and white.
- The main types of illuminate switch are 220 V neon lamps, and less LED products, and basically are LED DC24V.
-The printed character on the button according to customer demand, there are a few dozen kinds can be printed and published at present, usually can meet customer demand.
- The special voltage, current and color needs to be customized.


## KCD2 EXAMPLE



Note: Due to we couldn't get full information from the appearance, such as voltages, parameters and the switch with or without light, so the full model please refer to models based on the actual needs and the definition and parameters of table selection.


## SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | T55, T105 |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| (CQC) C | 10(3)A 250 V AC T 85 6(3)A 250 V AC T85 |
| :---: | :---: |
| $c{ }^{\circ}$ | $\begin{array}{lll} 15 R(3) & 125 \mathrm{VAC} & 10 \mathrm{R}(3) \\ 1 / 3 \mathrm{HP} & 125 \mathrm{VAC} \end{array}$ |
|  | 10(3)A 250V AC T105, 6(3)A 250V AC T105 6A 250V AC, 4A 250VAC T105 |

HOW TO ORDER


1 CIRCUIT CODE

| Code | Circuit | Description | Code | Circuit | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | $\overbrace{-}^{\text {ON - OFF }}$ | SP-ST | 21 |  | DP-ST |
| 12 |  | SP-DT | 21 N |  | DP-ST Illuminated |
| 11 N |  | SP-ST Illuminated | 22 |  | DP-DT |
| 11M | $\stackrel{\mathrm{ON} \rightarrow \mathrm{OFF}}{\bullet}$ | SP-ST Momentary | 22N |  | DP-DT Illuminated |
| 13 | ON - OFF - ON | SP-TT |  |  |  |

2 ACTUATOR CODE

| Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | Plane | C |  |  |  | Arc-Shaped | P |  |

3 HOUSING CODE

| Code | Diagram | Panel cut out (mm) |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Actuator | Circuit | Terminal Blocks |
| A1 |  | Z: Panel Thickness |  |  | C | $\begin{aligned} & 21 / 21 N / \\ & 22 / 22 N \end{aligned}$ | H |
| B1 |  | Z: Panel Thickness |  |  | C |  | $\begin{aligned} & \text { B/ } \\ & \text { I/ } \\ & \text { J/ } \\ & \text { K } \end{aligned}$ |
| B2 |  | Z: Panel Thickness |  |  | C | 11 | $\begin{aligned} & \text { B/ } \\ & \text { I/ } \\ & \text { J/ } \\ & \text { K } \end{aligned}$ |
| BT |  | Z: Panel Thickness |  |  | A | 11M | $\begin{aligned} & \text { B/ } \\ & \text { I/ } \\ & \text { J/ } \\ & \text { K } \end{aligned}$ |
| E1 |  | Z: Panel Thickness <2m |  |  | C | $\begin{aligned} & 11 / \\ & 11 \mathrm{~N} / \\ & 12 \end{aligned}$ | $\begin{aligned} & \text { B/ } \\ & \text { I/ } \\ & \text { J/ } \\ & \text { K } \end{aligned}$ |
| F1 |  | Z: Panel Thickness |  |  | C | $\begin{aligned} & 11 / \\ & 12 / \\ & 13 \end{aligned}$ | $\begin{aligned} & \mathrm{C} / \\ & \mathrm{E} / \\ & \mathrm{L} \end{aligned}$ |
| H1 |  |  | Thickness <br> NOT | 2 mm <br> The upper and lower position of installation panel need to be ocated | A | $\begin{aligned} & 11 / \\ & 11 \mathrm{~N} \end{aligned}$ | D |
| K1 |  |  |  | nel Thickness | $\begin{aligned} & \mathrm{C} / \\ & \mathrm{F} \end{aligned}$ | $\begin{aligned} & 11 / \\ & 11 \mathrm{~N} \end{aligned}$ | B |

## 4 TERMINAL CODE

| Code | B | C | D | E | H | 1 | J | K | L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Diagram |  |  | $+0.52 .5 \times 0.5$ |  |  | $\stackrel{\infty}{\mathrm{m}_{4}}$ |  |  | $\stackrel{+0}{+}$ |
| Descripion | $4.8^{*} 0.8$ Standard Terminal | 4.8*0.8 Standard Terminal | 2.5*0.5 Standard Termina | 4.8*0.8 Standard Terminal | 2.2*0.6 Welding type Terminal | $\begin{gathered} 4.8 * 0.8 \\ \text { Welding type } \\ \text { Terminal } \end{gathered}$ | $\begin{gathered} 4.8 * 0.8 \\ \text { Welding type } \\ \text { Terminal } \end{gathered}$ | $\begin{gathered} 1.2 * 0.8 \\ \text { Welding type } \\ \text { Terminal } \end{gathered}$ | $\begin{gathered} 4.8 * 0.8 \\ \begin{array}{c} \text { Welding type } \\ \text { Terminal } \end{array} \end{gathered}$ |

5 HOUSING COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

6 ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

7 MARKING


Specific see attached list
8 LAMP VOLTAGE

| Lamp | LED |  |  |  |  |  |  |  |  | Neon |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage | DC6V | DC12V | DC24V | AC/DC6V | AC/DC12V | AC/DC24V | AC/DC110V | AC/DC220V | AC110V | AC220V |  |
| Code | DC6 | DC 12 | DC 24 | AC/DC6 | AC/DC12 | AC/DC24 | AC/DC110 | AC/DC220 | AC 110 | AC 220 |  |

## NOTE

- The operation of the button have a variety of colors, the main color is black, white, red and green.
- The main color of housing is black and white.
- The main types of illuminate switch are 220 V neon lamps, and less LED products, and basically are LED DC24V.
-The printed character on the button according to customer demand, there are a few dozen kinds can be printed and published at present, usually can meet customer demand.
- The special voltage, current and color needs to be customized.
- Shell code A1, B2, BT, F1, H1, K1 product UL certification, UL certification with the rest of the code shell.

KCD3 EXAMPLE


KCD3-22-CA1H-W-R-01



KCD3-11N-AH1D-W-R


KCD3-12-CB1K-B-B-01


KCD3-11-ABTB-B-R


KCD3-11N-CB1B-B-R-01-220A


KCD3-11-CF1C-B-B-01



KCD3-13-CB1I-P-P-98


Note: Due to we couldn't get full information from the appearance, such as voltages, parameters and the switch with or without light, so the full model
please refer to models based on the actual needs and the definition and parameters of table selection.


SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | T 55 |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| CQC | 6 A 250 V AC |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{c}$ | $\begin{aligned} & \hline 15 \mathrm{R}(3) \\ & 1 / 3 \mathrm{HP} \\ & \hline \end{aligned}$ | $\begin{aligned} & 125 \mathrm{~V} \mathrm{AC} \\ & 125 \mathrm{~V} \mathrm{AC} \end{aligned}$ | $10 R(3)$ | $250 \mathrm{VAC}$ |

## HOW TO ORDER



1 KCD5 CIRCUIT CODE

| Code | Circuit | Description | Code | Circuit | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | ON - OFF | DP-ST | 22N | ON - OFF - ON <br> - \|| $\boldsymbol{Q}_{1}$ | DP-DT Illuminated |
| 21 N |  | DP-ST Illuminated | 23 | ON - OFF - ON | DP-TT |
| 22 |  | DP-DT |  |  |  |

## 2 ACTUATOR CODE

| Code | Diagram | Description |
| :--- | :---: | :--- |
| C | Arc-Shaped |  |

3 HOUSING CODE

| Code | Diagram | Panel cut out (mm) |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Actuator | Circuit | Terminal Blocks |
| A1 |  | Z: Panel Thickness |  |  | C | $\begin{aligned} & 21 / 22 / 22 \mathrm{~N} \\ & 21 \mathrm{~N} / 23 \end{aligned}$ | $\begin{aligned} & \mathrm{B} / \\ & \mathrm{H} / \\ & \text { I } \end{aligned}$ |
|  |  | z | $\frac{\mathrm{X}}{19.5{ }^{+0.10}}$ | Y ${ }^{\text {P }}$ |  |  |  |
|  |  | 0.75~1.25 | $19.5{ }^{+0.10}$ | $21.9{ }^{+0.10}$ |  |  |  |
|  |  | $\frac{1.25 \sim 2.00}{2.00 \sim 3.00}$ | $\frac{19.6+0.10}{19.7+0.10}$ | $\frac{21.9^{+0.10}}{21.9^{+0.10}}$ |  |  |  |

## 4 TERMINAL CODE

| Code | B | H | 1 |
| :---: | :---: | :---: | :---: |
| Diagram |  | $\stackrel{\infty}{n} \sqrt{0} \widehat{x}_{4.8 \times 0.8}^{3}$ | $\stackrel{\infty}{\Gamma}$ |
| Descripion | $4.8 * 0.8$ <br> Standard | 4.8*0.8 <br> Welding type | $48 * 08$ <br> Welding type |

5 HOUSING COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

6 ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

Marking

01

06

08
Reverse
09

17
18

26

27

112
Frontward
Backward
116

8 LAMP VOLTAGE

| Lamp | LED |  |  |  |  |  |  |  |  | Neon |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage | DC6V | DC12V | DC24V | AC/DC6V | AC/DC12V | AC/DC24V | AC/DC110V | AC/DC220V | AC110V | AC220V |  |  |
| Code | DC 6 | DC 12 | DC 24 | AC/DC6 | AC/DC12 | AC/DC24 | AC/DC110 | AC/DC220 | AC 110 | AC 220 |  |  |

## NOTE

- The operation of the button have a variety of colors, the main color is black, white, red and green.
- The shell main color is black and white.
- The main types of illuminate switch are 220V neon lamps, and less led products, and basically are led DC24V.
-The printed character on the button according to customer demand, there are a few dozen kinds can be printed and published at present, usually can meet customer demand
- The special voltage, current and color needs to be customized


## EXAMPLE


KCD5-21-CA1B-B-R-01

KCD5-22-CA1B-B-B-01

KCD5-23-CA1B-B-B-112

KCD5-22-CA1B-W-R-01

KCD5-22-CA1B-B-G-01

[^1]

## SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :---: | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | T 55 |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| CQC -6 | $6 A 250 \mathrm{VAC}$ |
| :--- | :--- |

HOW TO ORDER


1 KCD6 CIRCUIT CODE

| Code | Circuit | Description |
| :--- | :---: | :---: |
| 21 | ON - OFF | DP-ST |
| 21 N | ON OFF |  |

2 ACTUATOR CODE

| Code | Diagram | Description |
| :---: | :---: | :---: |
| C |  | Arc-Shaped |
| F |  |  |

3
HOUSING CODE

| Code | Diagram |  | Panel cut out (mm) |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actuator | Circuit | Terminal Blocks |
| B1 |  |  |  |  |  |  |  |  | $\begin{aligned} & \mathrm{C} / \\ & \mathrm{F} \end{aligned}$ | $\begin{aligned} & 21 / \\ & 21 \mathrm{~N} \end{aligned}$ | B |
|  |  |  | $\begin{gathered} \frac{z}{0.75 \sim 1.25} \\ \hline 1.25 \sim 2.00 \\ \hline 2.00 \sim 3.00 \\ \hline \end{gathered}$ | X $19.4_{0}^{+0.10}$ $19.5^{+0.10}$ $19.6_{0}^{+0.10}$ | $\frac{\mathrm{Y}}{\frac{\mathrm{Y}}{13.0^{+0.10}}} \frac{13.0_{0}^{+0.10}}{13.0^{+0.10}}$ |  |  |  |

## KCD6 Series Rocker Switch

## 4 TERMINAL CODE

| Code | B |
| :---: | :---: |
| Diagram | $\infty \quad 0 \quad 4.8 \times 0.8$ |
| Description | $4.8^{*} 0.8$ <br> Standard |

5 HOUSING COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

6 ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

7 Marking


8 LAMP VOLTAGE

| Lamp | LED |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage | DC6V | DC12V | DC24V | AC/DC6V | AC/DC12V | AC/DC24V | AC/DC110V | AC/DC220V | AC110V | AC220V |
| Code | DC 6 | DC 12 | DC 24 | AC/DC6 | AC/DC12 | AC/DC24 | AC/DC110 | AC/DC220 | AC 110 | AC 220 |

## NOTE

- The operation of the button have a variety of colors , the main color is black, white, red and green.
- The main color of housing is black and white.
- The main types of illuminate switch are 220 V neon lamps, and less LED products, and basically are LED DC24V.
- The printed character on the button according to customer demand, there are a few dozen kinds can be printed and published at present, usually can meet customer demand.
- The special voltage, current and color needs to be customized.


## KCD6 EXAMPLE



Note: Due to we couldn't get full information from the appearance, such as voltages, parameters and the switch with or without light, so the full model please refer to models based on the actual needs and the definition and parameters of table selection.


SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | T 55 |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| CQC $C$ | $6 A 250 \mathrm{VAC}$ |
| :--- | :--- |

## HOW TO ORDER



1 KCD7

| Code | Circuit | Description |
| :---: | :---: | :---: |
| 11 | $\bullet$ | ON - OFF |

2 ACTUATOR CODE

| Code | Diagram | Description |
| :---: | :---: | :---: |
| C | Arc-Shaped |  |
| F | O | Waterproof arc surface |

3 HOUSING CODE

| Code | Diagram |  | Panel cut out |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actuator | Circuit | Terminal Blocks |
|  |  |  |  |  |  | Panel Thickness |  |  | CF | 11 | B |
|  |  |  | z | X | Y |  |  |  |
|  |  |  | 0.75~1.25 <br> $1.25 \sim 2.00$ | $19.4{ }^{+0.10}$ | $\frac{6.5}{}{ }^{+0.10}$ |  |  |  |
|  |  |  | 2.00~3.00 | $19.6{ }^{+0.10}$ | $6.5{ }^{+0.10}$ |  |  |  |

4
TERMINATION CODE

| Code | B |
| :--- | :---: |
| Diagram | $\infty$ |
| Description | $4.8 * 0.8$ Standard |

5 HOUSING COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

6 ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

Marking


Specific see attached list

## NOTE

-The operation of the button have a variety of colors, the main color is black, white, red and green.

- The shell main color is black, white and grey.
- The printed character on the button according to customer demand.
- Color needs to be customized.

KCD7 EXAMPLE


KCD7-11-CA1A-B-R-01


KCD7-11-FF1B-B-B-01


KCD7-11-CF1B-B-R-01


KCD7-11-CF1B-B-B


## SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | $\mathrm{T} 55, \mathrm{~T} 85, \mathrm{~T} 105$ |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| $\text { CQC } C$ | 6A 250VAC |
| :---: | :---: |
|  | 10(3)A 250V AC T105, 6(3)A 250V AC T105 6A 250V AC, 4A 250V ACT105 |
| $\mathrm{c}$ | $\begin{array}{llll} 15 \mathrm{R}(3) & 125 \mathrm{VAC} & 10 \mathrm{R}(3) & 250 \mathrm{VAC} \\ 1 / 3 \mathrm{HP} & 125 \mathrm{VAC} & & \\ \hline \end{array}$ |

KCD8 HOW TO ORDER


1 KCD8 CIRCUIT CODE

| Code | Circuit | Description | Code | Circuit | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | $\stackrel{\text { ON-OFF }}{\bullet}$ | SP-ST | 11 N | $\stackrel{O N}{O N}$ | SP-ST Illuminated |
| 12 | $\begin{aligned} & \mathrm{ON} \quad-\quad \mathrm{ON} \\ & \bullet \\ & \bullet \end{aligned}$ | SP-DT | 11N1 | $\xrightarrow[\bullet]{\text { ON - OFF }}$ | SP-ST Illuminated |
| 13 | $\underbrace{O N-O F F-O N}_{-}$ | SP-TT |  |  |  |

2 ACTUATOR CODE

| Code | Diagram | Description | Code | Diagram | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C | Arc-Shaped | D | Arc-Shaped |  |  |
| F | Waterproof arc surface |  |  |  |  |

3 HOUSING CODE

| Code | Diagram | Panel cut out (mm) | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actuator | Circuit | Terminal Blocks |
| A1 |  | Panel Thickness <4mm | $\begin{aligned} & \mathrm{C} / \\ & \mathrm{D} / \\ & \mathrm{F} \end{aligned}$ | $\begin{aligned} & 11 / 11 \mathrm{~N} / \\ & 11 \mathrm{~N} 1 / \\ & 12 / 13 \end{aligned}$ | A |
| A2 |  | Panel Thickness $<4 \mathrm{~mm}$ | $\begin{aligned} & C / \\ & D \end{aligned}$ | $\begin{aligned} & 11 / 11 \mathrm{~N} / \\ & 11 \mathrm{~N} 1 / \\ & 12 / 13 \end{aligned}$ | A |
| B1 |  | Panel Thickness <3mm | $\begin{aligned} & \mathrm{C} / \\ & \mathrm{D} / \\ & \mathrm{F} \end{aligned}$ | $\begin{aligned} & 11 / 11 \mathrm{~N} / \\ & 11 \mathrm{~N} 1 / \\ & 12 / 13 \end{aligned}$ | A |
| B2 |  | Panel Thickness $<3 \mathrm{~mm}$ | $\begin{aligned} & C / \\ & D \end{aligned}$ | $\begin{aligned} & 11 / 11 \mathrm{~N} / \\ & 11 \mathrm{~N} 1 / \\ & 12 / 13 \end{aligned}$ | A |
| K1 |  | Panel Thickness $<3 \mathrm{~mm}$ - $2^{0.0^{10}}$ | C | 11 / $11 \mathrm{~N}$ | B |
| K2 |  | Panel Thickness <4mm | C | $\begin{aligned} & 11 / \\ & 110 \end{aligned}$ | B |

4 TERMINAL CODE

| Code | A | B |
| :---: | :---: | :---: |
| Diagram | $\infty$ | $\infty$ |
| Description | 4.8*0.8 Terminal | 4.8*0.8 Standard |

5 HOUSING COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | (Gray) | Orange |

6 ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | (Gray) | Orange |

7 Marking



Specific see attached list

8 LAMP VOLTAGE

| Lamp | LED |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage | DC6V | DC12V | DC24V | AC/DC6V | AC/DC12V | AC/DC24V | AC/DC110V | AC/DC220V | AC110V | AC220V |
| Code | DC6 | DC 12 | DC 24 | AC/DC6 | AC/DC12 | AC/DC24 | AC/DC110 | AC/DC220 | AC 110 | AC 220 |

## NOTE

- The operation of the button have a variety of colors, the main color is black, white, red and green.
- The main color of housing is black and white
- The main types of illuminate switch are 220 V neon lamps, and less LED products, and basically are LED DC24V.
-The printed character on the button according to customer demand, there are a few dozen kinds can be printed and published at present, usually can meet customer demand.
- The special voltage, current and color needs to be customized.


## KCD8 EXAMPLE



KCD8-12-CA2A-B-R-01


KCD8-13-CB1A-B-B-112


KCD8-11-CA1A-B-B-01


KCD8-12-CK2B-B-R-17


KCD8-11N-CK1B-B-R-17-220A



KCD8-12-CA1A-B-G-01


KCD8-11N1-DA1A-B-B-220A



KCD8-11-CA2A-B-B-01



## SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 1,000 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Operating temperature | $\mathrm{T} 55, \mathrm{~T} 85, \mathrm{~T} 105$ |
| Electronic Life(cycles) | 10,000 |

Max. Rating Current \& Voltage

| CQC C $F$ | $2 A 250 \mathrm{AC}$ |
| :---: | :---: |

KCD10 HOW TO ORDER


1 KCDIO CIRCUIT CODE

| Code | Circuit | Description |
| :---: | :---: | :---: |
| 11 | ON-OFF | SP-ST |
| 12 | $\frac{O N}{}-\frac{O N}{} \quad$ SP-DT |  |

2 ACTUATOR CODE

| Code | Diagram | Description |
| :---: | :---: | :---: |
| C |  | Arc-Shaped |

3 HOUSING CODE

| Code | Diagram | Panel cut out (mm) |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Actuator | Circuit | Terminal Blocks |
| A1 |  | $\frac{X}{\frac{X}{\square} \frac{X}{\frac{0.75 \sim 1.25}{1.25 \sim 2.00}}}$ | $\frac{\mathrm{Z}}{\frac{\mathrm{Z}: \mathrm{Pa}}{}} \frac{\mathrm{X}}{13.7^{+0.10}}$ | Thickness | C | $\begin{aligned} & 11 / \\ & 12 \end{aligned}$ | $\begin{aligned} & \mathrm{A} / \\ & \mathrm{H} \end{aligned}$ |
| A2 |  |  | $\frac{\mathrm{Z}}{\frac{\mathrm{Z}: \mathrm{Pa}}{\mathrm{X}}} \frac{13.9^{+0.10}}{\frac{14.0}{+0.10}} \frac{14.1^{+0.10}}{+0.10}$ | IThickness | C | $\begin{aligned} & 11 / \\ & 12 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{H} \end{aligned}$ |


| Code | Diagram | Panel cut out（mm） |  |  | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Actuator | Circuit | Terminal Blocks |
| A3 | （15）： | $\square$ Z：Panel Thickness |  |  | C | $\begin{aligned} & 11 / \\ & 12 \end{aligned}$ | $\begin{aligned} & \mathrm{A} \\ & \mathrm{H} \end{aligned}$ |
| A4 | （12 | Panel Thickness＜1．5mm$12_{0}^{+0.15}$ |  |  | C | $\begin{aligned} & 11 / \\ & 12 \end{aligned}$ | $\begin{aligned} & \text { A/ } \\ & \text { H } \end{aligned}$ |
| A5 |  | Panel Thickness＜l． 3 mm$12^{+0.15}$ |  |  | C | $\begin{aligned} & 11 / \\ & 12 \end{aligned}$ | $\begin{aligned} & \text { A/ } \\ & \mathrm{H} \end{aligned}$ |
| $\begin{array}{\|c\|} \mathrm{Fl} \\ \text { 防水型 } \end{array}$ | (13.6 |  | $\qquad$X <br> +0.10 $13.8{ }_{0}^{0.10}$ 13.9 10 | el Thickness <br> $Y$ <br> $\frac{Y}{9.0^{+0.10}}$ <br> $9.0^{+0.10}$ <br> $9.0_{0}^{+0.10}$ | C | $\begin{aligned} & 11 / \\ & 12 \end{aligned}$ | B／ |

4 TERMINAL CODE

| Code | A | B | H | I |
| :---: | :---: | :---: | :---: | :---: |
| Diagram | Description | $3.7^{*} 0.5$ <br> Standard | $2.8^{*} 0.5$ <br> Standard | $3.7^{*} 0.5$ <br> Welding type |
| Welding type |  |  |  |  |

5 ：HOUSING COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

6 ：ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

7 Marking

| 1 0 |  | $\bigcirc$ <br> $\bigcirc$ |
| :---: | :---: | :---: |
| 01 | 07 | 110 |

Specific see attached list

## NOTE

－The operation of the button have a variety of colors，the main color is black，white，red and green．
－The shell main color is black and white．The printed character on the button according to customer demand．



## SPECIFICATION

| Function | Rocker Gear Switch, Third Gear |
| :--- | :--- |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | 1500 V |
| Mechanical Life(cycles) | $>10000$ |
| Electronic Life(cycles) | 10000 |
| Amibent temperature | $-0^{\circ} \mathrm{C} \sim 105^{\circ} \mathrm{C}$ |
| Nomal position | $2.5-7 \mathrm{~N}$ |

Max. Rating Current \& Voltage


10(1)A /250V AC T105
Note: Single load 5(1)A 250VAC T105

## HOW TO ORDER



## 1 : CIRCUIT CODE

| Code | Circuit |  | Note |
| :---: | :---: | :---: | :---: |
| 13 T | $\stackrel{1}{C}-5$ |  0 I II <br> $\mathrm{C}-1$ OFF ON ON <br> $\mathrm{C}-2$ OFF OFF ON | SP-TT |

2 : ACTUATOR CODE

| Code | Diagram | Note |
| :--- | :---: | :---: |
| C |  |  |
|  |  | Arc-Shaped |

3 : HOUSING CODE

| Code | Diagram | Fix Size (mm) | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actuator | Circuit | Terminal Blocks |
| A1 |  | Special installation (according to the product appearance with fixed) | C | 13T | H |

4
TERMINAL

| Code | H |
| :---: | :---: |
| Diagram | $-\sqrt{O\}_{i}^{N}+i}$ |
| Note | Standard |

5 : HOUSING COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

## 6 : ACTUATOR COLOR

| Code | R | G | Y | S | W | B | P | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Color | Red | Green | Yellow | Blue | White | Black | Gray | Orange |

7 : Marking


| Code | 001 | 002 | 003 | 005 | 006 | 007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | 1 0 | ○ $\qquad$ | $\begin{aligned} & \text { ON } \\ & \text { OFF } \end{aligned}$ | 1 0 11 | $\pm$ | $\bullet$ |  |


| Code |  |  | 011 | 012 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :--- |
| Marking |  | Remote <br> Control <br> Manual  AUTO   |  |  |  |  |  |  |


| Code | 018 | 019 | 020 | 022 | 023 | 024 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | $11$ | ON cool OFF | ON HOT OFF | QUICK SLOW | $\stackrel{L}{\bullet}$ | POWER |


| Code | 026 | 027 | 028 | 030 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | GOAHEAD <br> BACK | manuale <br> t c | 0 은 ¢ | $\sum_{\text {OFF }}^{\text {ON }}$ |  |  |


| Code | 033 | 034 |  |  |  |  |  | 040 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | 0 |  |  |  |  |  |  | F $R$ |


| Code | 041 |  | 043 | 044 | 045 | 046 | 047 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | $R / C$ <br> Manal |  | Auto <br> Manual | Auto Manal | ㅇII1 ㅇIII | ON <br> C <br> OFF | ON H OFF |  |  |


| Code |  |  |  |  |  |  | 055 | 056 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking |  |  |  |  |  |  | 晏 <br> z | I <br> U <br> U <br> - |


| Code | 057 | 058 | 059 | 060 | 061 | 062 | 063 | 064 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking |  | $\boldsymbol{T}^{\text {F }}$ Warort |  | $\triangle$ Pedal <br> VRente control | © Forward <br> V Back | - Forward Stop VBack |  |  |


| Code | 065 | 066 | 067 | 068 | 069 | 070 | 071 | 072 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | HIGh／HAUTE <br> LOW／BassE | REMOTE <br> MANUAL | Auto | RUN STOP TOY |  | $t$ c <br> Manuale  | AUTOMATIC | FORWARD <br> STOP <br> REVERSE |



| Code |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Marking |  |  |  |  |  |  |  |  |


| Code |  |  |  | 092 | 093 | 094 | 095 | 096 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking |  |  |  | 曰 $\sqsupseteq$ | $\square$ <br> $\square$ <br> 0 | ON <br> POWER <br> OFP | ON OFF ON | RUN <br> STOP |


| Code | 097 | 098 | 099 | 100 | 101 | 102 | 103 | 104 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | $E \cdot S$ | $\stackrel{\square}{\circ}$ | $\pm$ | K 2 0 | 山 ＜ | ロ | $\bigcirc$ | （0） |


| Code | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | $\ll$ | 〕 | $\stackrel{1}{\text {（sTo）}}$ | ST00 | － | $\odot$ $\bigcirc$ | － | － 0 - |


| Code | 113 | 114 | 116 | 117 | 118 | 119 | 120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | \％ | 1／1／ | Frontward Backward | $=$ 0 | ION 0 | SI NO | 1 11 |


| Code | 122 | 123 | 124 | 126 | 127 | 128 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | I | 11 | $\xrightarrow{\prime \prime}$ | ON 1 | ON 2 | ON 3 |


| Code | 129 | 130 | 132 | 133 | 135 | 136 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | ON 4 | ON 5 | ON COLD OFF | $=$ | $\begin{aligned} & \text { OFF } \\ & \text { on } \end{aligned}$ | OFF |


| Code | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | 5 St ¢ | 皿 | $\stackrel{0}{0}$ | II | Hi Low | Off On |  | ON O R |


| Code | 146 | 147 | 148 | 149 | 150 | 151 | 152 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | PEDAL REWOTE CONTROL | ${ }_{\square}^{111}$ | －気 | c | 4 | $\underline{S}^{\prime \prime \prime}$ | 긴ㄴㄴㅢ |


| Code | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | 3 | － | $=$ | 㐘 | ${ }_{\sim}^{20}$ | START | 6 | $\cdots$ |


| Code | 161 | 162 | 168 |
| :---: | :---: | :---: | :---: |
| Narking |  | 次 | ON |


| Code | 169 | 170 | 172 | 173 | 174 | 176 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | $\begin{gathered} \mathrm{ON} \\ \vdots \\ \text { OFF } \end{gathered}$ | $\circ$ $\bigcirc$ | $\triangle$ | I ON <br> O OFF | － | D－R L－R |



| SPECIFICATION |  |
| :--- | :--- |
| Max. Rating Current \&Voltage(Resistive Load) | 3 A 250 V AC |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geq 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | Momentary:50,000 Alternate:25,000 |
| Mechanical Life(cycles) | Momentary:200, 000 Alternate:50,000 |
| Operating temperature | $-5^{\circ} \mathrm{C} \sim+75^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

## HOW TO ORDER



## Example:

Switch Type : AD16-111L2D-R
Indicator Type:AD16-001L6D-R
Lighting pieces of performance indicators

■ LED

| Operating Voltage | 2 V | 6 V | 12V | 24V | 110 V | 220 V | Life | Equivalent circuit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current | Less than 15 mA |  |  |  | Less | an 5 mA | About 50.000 hours (but the brightness will be weaken as the life of using plus) | (+) |
| LED color | Red Green Blue Yellow Orange |  |  |  |  |  |  |  |
| Cap color | Red Green Blue Yellow Orange Black White Gray |  |  |  |  |  |  |  |

## - Neon

| Operating Voltage | 110 VAC | 220 VAC |
| :---: | :---: | :---: |
| Current | Less than 1mA | Less than 1mA |
| Neon Color | Red Green |  |
| Cap color | Red Green |  |

## ø16 Overall \& Dimensions



Dimensions(mm)



Switch Contact


Indicate Contact

## Dimensions (mm)




INDICATOR

## ø16 Overall \& Dimensions




Dimensions(mm)


Switch Contact


Indicate Contact


Dimensions(mm)


Big Rec.


Ф12 Overall \& Dimensions


Round


Switch Contact Indicate Contact
Dimensions(mm)


Square


Rec.


Switch Contact Indicate Contact

## Dimensions(mm)




Switch
wiring \& Circuit
© 10 Overall \& Dimensions(mm)


Round


Switch
wiring \& Circuit


Indicator



Switch Contact


Dimensions(mm)

Separate Fixed



Switch


Indicator


Rec.

$\stackrel{a}{a}-\otimes-{ }^{b}$
Indicator

## ø16 Attachment



FJ16-1 FJ16-2


FJ16-1
Dimensions (mm)


F16-2
)


FJ16-3 FJ16-4


FJ16-3
Dimensions (mm)

## -Note and using Method-

Method of replacing Iamp
To remove the LED lamp, insert the lamp charge in the LED lamp and pull out the LED lamp. To mount the LED lamp, align the lamp terminal side of the main unit with the electrode side of the LED lamp, lightly hold the lamp by hand or with the head of the lamp changer, and insert the lamp. The LED lamp has no polarity, so it can be powered by either AC or DC

## - Handling of LEDs

LED whose luminous color is green or blue is sensitive to static electricity. Be careful when handling the LED. Take thorough measures against static electricity and surges when handling the product. The following antielectrostatic measure is recommended. Use a wristband or anti-electrostatic glove when replacing LED lamps.


LED

- LED lamp malfunctioning (incorrect lighting)

The LED lamp incorporates a circuit to prevent malfunctioning. Compared with conventional models, this LED lamp is less likely to malfunction, but it incorporates no absolute countermeasures. A minute current (approximately 0.25 mA ) turns on the LED lamp. A leakage current from the surge absorption circuit or noncontact circuit, or stray capacitance between cables, may also turn on the LED lamp. In this case, a countermeasure (e.g., attaching a resistor in parallel with the LED lamp) is required.

- Countermeasure against malfunctioning Malfunctioning can be prevented by connecting a shunt resistor © in parallel. The resistance in that case varies with the model and operating conditions.


## - Wiring

- Wiring to tab terminal

Use $110(2.8 \mathrm{~mm})$ series receptacles for tab terminals.
-Pay attention to the following points when soldering.
Type of solder: Use resin-core solder.
Use a soldering iron with a maximum power consumption of $30 \mathrm{~W}\left(300^{\circ} \mathrm{C}\right)$ within five seconds. Make sure that the terminal is free of tension during soldering. Also, do not deform the terminal.

- The melting point of lead-free solder is slightly high, which may make soldering difficult. Use a soldering iron that has a large soldering tip or high heat generation.
- Connectable wires

Two solid wires with a maximum diameter of 0.8 mm (solder) One stranded wire with a maximum area of $0.75 \mathrm{~mm}^{2}$ (solder) Flat-type connection
terminal $\quad(2.8-1.25-5) 0.5$ to $1.25 \mathrm{~mm}^{2}$

$$
(2.8-0.5-5) 0.2 \text { to } 0.5 \mathrm{~mm}^{2}
$$

-Use of contact blocks
When using NO and NC contacts in the same contact block, avoid connection that involves opposite polarity or wiring from different types of power supply.
-For wiring to adjacent terminals, use the terminal cover to prevent shortcircuit, or an insulation tube to assure isolation. For solder terminals, caution is required if thick wires, in particular, are connected or a large quantity of solder is used.


Shunt Resistor
-Note and using Method-

OThe permissible fluctuation range for the operating voltage of the 6 V model is $\pm 5 \%$ and that for the 12 V or 24 V model is $\pm 10 \%$. If the operating voltage is always $5 \%$ or $10 \%$ higher, select a resistor that will make the operating current the same as or lower than the rated current, and connect the resistor in series to the LED lamp.

## OCalculation of external resistance

Example: Connecting a 24 V red LED to a 48 V circuit
External resistance $[\Omega]=\frac{\text { Circuit voltage }[\mathrm{V}] \text { - Rated voltage }[\mathrm{V}]}{\text { Rated current[ }[\mathrm{A}]}$

$$
=\frac{48-24}{3 \times 10^{-3}}=8000[\Omega]
$$

$\Rightarrow$ Therefore, use an external resistor of $8 \mathrm{k} \Omega 1 \mathrm{~W}$. (Select a resistor with sufficient wattage.)

## OSurges

High-bighhtiness LED products use elements that are sensitive to staic electicicty: Keep in mind that an unussul voltage, such as asurge voltage, may casse the product to matunction.

Others

## -Operation

Do not hit or flip the button, or the button may be damaged. Be sure to operate the button by hand. Do not pull the button if the switch is an alternate action type.
OHigh-density mounting of illuminated type
When continuously lighting pilot lights or pressing illuminated pushbuttons, keep in mind that the ambient temperature may exceed the rated value due to the heat radiated by the lamp. Be sure to ventilate the lamp / switch if the mounting panel is not made of metal or if the mounting panel is an enclosed type.

## - Usage locations

- Be sure to use and store the product within the rated ambient temperature and humidity ranges.
- Although the product resists ordinary cutting oils and coolant oils, do not use the unit in places where special oils may be sprayed onto the product.
- If dusts or filings accumulate in the gap between the button and the frame, the switch may fail to operate normally. Take appropriate measures, such as using a dust-proof protective cover, if the switch is to be used in places that are subject to dusts or filings.
- The AD16 series and AD12,AD10 series are for indoor use. Make sure that the product is not exposed to direct sunlight.
- Do not use the product in the places that are subject to the adverse effects of ozone or corrosive gases.


## Circuitwiring (examples)

- Normally Open Circuit wiring

Feature implementation : switch light is always bright,it is operating with load when the switch acted. The switch control the single circuit The voltage of the indicator is different from the load voltage.


## - Normally Close Circuit wiring

Feature implementation : switch light is always bright,the loadstop when the switch acted. The switch control the single circuit The voltage of the indicator is different from the load voltage.


## AD Series Pushbutton switch

- Normally Open Circuit wiring

Feature implementation : it is operating with load and the indicator is brighting when the switch acts. The switch control the single circuit, on the condition that the voltage of load and indicator power is the same.


Feature implementation : switch light is always bright,it is operating with load when the switch acted. The switch control the two circuit. The voltage of the indicator is different from the load voltage.


Feature implementation :it is operating with load and the indicator is brighting when the switch acts. The switch control the two circuit, on the condition that the voltage of load and indicator power is the same.


Feature implementation : it is operating with load and the indicator is brighting when the switch acts. The switch control the two circuit, one controls the load cricuit,the other controls the indicator.the voltage of indicator is different from the load's


## - Normally Close Circuit wiring

Feature implementation:The load stops and the indicator turns off when the switch acting. The switch control the single circuit, on the condition that the voltage of load and indicator power is the same.


Feature implementation : switch light is always bright, The loadstops and the indicator turns off when the switch acting. The switch control the two circuit . The voltage of the indicator is different from the load voltage.


Feature implementation : The load stops and the indicator turns off when the switch acting. The switch control the two circuit, on the condition that the voltage of load and indicator power is the same.


Feature implementation : The load stops and the indicator turns off when the switch acting. The switch control the two circuit, one controls the load cricuit, the other controls the indicator. the voltage of indicator is different from the load's



| SPECIFICATION |  |
| :--- | :--- |
| Max. Rating Current \& Voltage(Resistive Load) | 3 A 250 V AC |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | Alternate:25,000 |
| Mechanical Life(cycles) | Alternate:50,000 |
| Operating temperature | $-5^{\circ} \mathrm{C} \sim+75^{\circ} \mathrm{C}$ |
| IP code | IP 44 |

HOW TO ORDER

©16 Overall \& Dimensions(mm)


Separate Fixed


Panel thickness:0.5~6.0mm
Panel cut out(mm)


| SPECIFICATION |  |
| :--- | :--- |
| Max. Rating Current\&Voltage(Resistive Load) | $8 \mathrm{~A} / 125 \mathrm{~V} \mathrm{AC} 0.2 \mathrm{~A} / 250 \mathrm{~V}$ DC <br> $5 \mathrm{~A} / 250 \mathrm{VAC} 6 \mathrm{~A} / 24 \mathrm{~V} \mathrm{DC}$ |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | 10,000 |
| Mechanical Life(cycles) | 100,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

THE STYLE SKETCH

(Example): Switch Type :KD16-111L2D-R Indicator type: KD16-001L6D-R

Overall \& Dimensions(mm)



KD16 EXAMPLE


Note: Due to we couldn't get full information from the appearance, such as voltages, parameters and the switch with or without light, so the full model please refer to models based on the actual needs and the definition and parameters of table selection.


SPECIFICATION

| Max. Rating Current \& Voltage(Resistive Load) | 3 A 250 V AC |
| :--- | :--- |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | Momentary:50,000 Alternate:25,000 |
| Mechanical Life(cycles) | Momentary: 200,000 Alternate:50,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

## HOW TO ORDER



Example:AX16-1112
AXI6 Diagram of contact

| Position | $\bullet$ |  | $\bullet$ |
| :---: | :---: | :---: | :---: |
| 2 positions |  |  |  |
| 3psoitions |  |  | $\mathrm{com}_{\mathrm{NO}}^{\mathrm{NO}}$ |

The position of operator is changable:
Taking use of front cover's rolation and lock's position. It can change the postion of operator. Every $45^{\circ}$ interval, the front conver can be locked for refrain moving itself from installation. Pull the front cover out to deviate from the lock and then move the cover for $45^{\circ}$ interval to push it on, Lock the covert at last.


Normal


Brought the cover


Rotation $45^{\circ}$


Press the cover

AX16 Round


Overall Dimension (mm

| Poles | Alternate 2P |  |
| :---: | :--- | :--- |
| Please refer to the first page |  |  |
| of the Diagram of contact |  |  |
| Panel cut out(mm) |  |  |
| AP | AX16-1112 | Alternate 3P |
| AX16-2112 | AX16-1113 |  |
| Model List | AX16-2113 |  |

AX16 Square



Panel cut out(mm)
Please refer to the first page of the Diagram of contact
Circuit

| Poles | Alternate 2P | Alternate 3P |
| :---: | :---: | :---: |
| SP | AX16-1122 | AX16-1123 |
| DP | AX16-2122 | AX16-2123P |

Model List

AX16 Rec.



| Panel thickness: $0.5 \sim 6.0 \mathrm{~mm}$ |  | Please refer to the first page of the Diagram of contact |
| :---: | :---: | :---: |
| Panel cut out(mm) |  | ircuit |
| Poles | Alternate 2P | Alternate 3P |
|  | AX16-1132 | AX16-1133 |
|  | AX16-2132 | AX16-2133 |



SPECIFICATION

| Max. Rating Current \& Voltage(Resistive Load) | 3 A 250 V AC |
| :--- | :--- |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | Momentary:50,000 Alternate:25,000 |
| Mechanical Life(cycles) | Momentary: 200,000 Alternate:50,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

## HOW TO ORDER



Example:AY16-1112
AY16 Diagram of contact

| Position | (4) | (1) | (6) |
| :---: | :---: | :---: | :---: |
| 2 positions | ${ }_{\text {con }}^{\text {cos }}$ |  | come |
| $3 p s$ oitions | $\xrightarrow{\text { coll }}$ |  | $\stackrel{\text { coan }}{\substack{\text { No }}}$ |

The position of operator is changable:
Taking use of front cover's rolation and lock's position. It can change the postion of operator.Every $45^{\circ}$ interval, the front conver can be locked for refrain moving itself from installation. Pull the front cover out to deviate from the lock and then move the cover for $45^{\circ}$ interval to push it on, Lock the covert at last.


Normal


Brought the cover


Rotation $45^{\circ}$


Press the cover


| Please refer to the first page |  |  |
| :---: | :--- | :--- |
| of the Diagram of contact |  |  |
| Poles | Alternate 2P | Circuit |
| SP | AY16-1112 | Alternate 3P |
| AP | AY16-2112 | AY16-21113 |

AY16 Square


| Please refer to the first page |  |  |
| :---: | :---: | :---: |
| of the Diagram of contact |  |  |
| Poles | Alternate 2P | Circuit |
| SP | AY16-1122 | AY16-1123 |
| AP | AY16-2122 | AY16-2123 |

## AY16 Rec.





| SPECIFICATION |  |
| :--- | :--- |
| Max. Rating Voltage | $6 \mathrm{~V} \mathrm{AC/DC}, 12 \mathrm{~V} \mathrm{AC} / \mathrm{DC}, 24 \mathrm{~V} \mathrm{AC} / \mathrm{DC}$ |
| Frequency | $2.3 \pm 0.5 \mathrm{KHz}$ |
| Sound output(1m) | 75 dB |
| Dielectric Strength | $1,000 \mathrm{~V}$ |
| Electronic Life(hours) | $1,000 \mathrm{H}$ |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

Note: The buzzers can be used in AC/DC Contunuous and Susponded could be made sperately from every different models.

HOW TO ORDER


UZ16 Round



Overall Dimension(mm)


| Voltage | Continuous | Suspended |
| :---: | :---: | :---: |
| $6 \mathrm{~V} \mathrm{AC/DC}$ | UZ16-116 | UZ16-126 |
| 12V AC/DC | UZ16-1112 | UZ16-1212 |
| $24 \mathrm{~V} \mathrm{AC/DC}$ | UZ16-1124 | UZ16-1224 |
| Model List |  |  |

UZ16 Square


| Voltage | Continuous | Suspended |
| :---: | :---: | :---: |
| 6V AC/DC | UZ16-216 | UZ16-226 |
| 12V AC/DC | UZ16-2112 | UZ16-2212 |
| $24 V$ AC/DC | UZ16-2124 | UZ16-2224 |
| Model List |  |  |

UZ16 Rec.



| SPECIFICATION |  |
| :---: | :---: |
| Max. Rating Cnrreni\&VOltage(Resisive load) | 6A 250VAC |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Resistance | 1500V |
| Electronic lifécycles) | 10,000 |
| Operating temperature | T125 |
| (cac) ${ }^{\text {a }}$ | 6A 250VAC 1E4 T125 |

Range of application: it is widely used in electronics, electronic instruments, communications,
audio and video, household appliances, medical equipment, oil lamp, electric cooker,
water heater, hang ironing machine, food machine, etc

## HOW TO ORDER



## SHAFT OPTIONS



CIRCUIT

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Circuit No. | A | Circuit No. | B | Circuit No. | C | Circuit No. | C |
| Ciecuit feature | Two stalls | Ciecuit feature | Two stalls | Ciecuit feature | Two sallst | Ciecuit feature | Two sallst |
| Product model | RS1-12A | Product model | RS1-12B | Product model | RS1-12C | Product model | RS1-12C |
|  |  | (1)momentary |  |  |  |  |  |
| Circuit No. | E | Circuit No. | F | Circuit No. | G | Circuit No. | H |
| Ciecuit feature | Three reset | Ciecuit feature | Four reset | Ciecuit feature | Five reset | Ciecuit feature | Five reset |
| Product model | RS1-13E | Product mode I | RS1-14F | Product model | RS1-15G | Product model | RS1-15H |
|  |  |  |  |  |  |  |  |
| Circuit No. | 1 | Circuit No. | $J$ | Circuit No. | K | Circuit No. | L |
| Ciecuit feature | Five stalls | Ciecuit feature | Six reset | Ciecuit feature | Six reset | Ciecuit feature | Six stalls |
| Product model | RS1-151 | Product model | RS1-16J | Product model | RS1-16K | Product model | RS1-16L |
|  |  |  |  |  |  |  |  |
| Circuit No. | M | Circuit No. | N | Circuit No. | P | Circuit No. | Q |
| Ciecuit feature | Six stalls | Ciecuit feature | Seven reset | Ciecuit feature | Seven stalls | Ciecuit feature | Seven stalls |
| Product mode I | RS1-16M | Product mode I | RS1-17N | Product model RS1-17P |  | Product model | RS1-17Q |
|  |  |  |  |  |  |  |  |
| Circuit No. | R | Circuit No. | S |  |  |  |  |
| Ciecuit feature | Seven reset | Ciecuit feature | Eight stalls |  |  |  |  |
| Product model | RS1-17R | Product model | RS1-18S |  |  |  |  |

## DIMENSIONS



Panel cut out (mm)

TERMINAL CODE

| Code | B | H |
| :---: | :---: | :---: |
| Diagram |  |  |

## RS1 EXAMPLE



RS1-18S-ACH-BBA 100101-011


RS1-14F-AAH-BBA-S1 100101-002

RS1 MARKING



| SPECIFICATION |  |
| :--- | :--- |
| Max. Rating Cnrient\&Voltage(Resisive load) | 6 A 250 VAC |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Resistance | 1500 V |
| Electronic life(cycles) | 50,000 |
| Operating temperature | T125 |
| COC | 16(4)A 250VAC 5E4 T125 <br> 8(8)A 250VAC 5E4 T125 |

Range of application: it is widely used in electronics, electronic instruments, communications, audio and video, household appliances, medical equipment, oil lamp, electric cooker,
water heater, hang ironing machine, food machine, etc

## HOW TO ORDER




Special requirment can with $\mathrm{S} 1 /$ S2... said Label /Mark : A, B, C said

Shell color:B-black
Knob color : B-black
Terminal option : Plug type with A, B, C, D, E, F said

Shell color :with A, B, C... said, see below
Shaft option: with A, B, C...said, see below
Circuit feature:with A, B, C...said, see below
Edge foot :With 1-9 digits to represent
Pole: With 1-9 digits to represent
Design serial No.: 2 said
Basic No. : RS

## SHAFT OPTIONS

| Code | A | B |
| :---: | :---: | :---: |
| Seres NO. | RS2 | RS2 |
| Diagram |  |  |

CIRCUIT


## DIMENSIONS



## TERMINAL CODE

| Code | A |
| :---: | :---: |
| Diagram |  |

## RS2 EXAMPLE



RS2-24D


RS2-23C


RS2-12B


| SPECIFICATION |  |
| :---: | :---: |
| Max. Rating CnrenitiVoltage(Resisive load) | 6A 250VAC |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Resistance | 1500 V |
| Electronic life(cycles) | 10,000 |
| Operating temperature | T125 |
| (cac) | 6.5A 250VAC T150 1E4/13A 125VAC T150 1E4 |

Range of application: it is widely used in electronics, electronic instruments, communications, audio and video, household appliances, medical equipment, oil lamp, electric cooker,
water heater, hang ironing machine, food machine, etc

## HOW TO ORDER



## CIRCUIT

| $45^{\circ}$ |  | Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Circuit <br> feature |  | 0 | 1 | 2 | 3 |
|  | RS3-11 | OS3-12 | OFF | L-1-3 |  |
|  | OFF | L-1-3 | $\mathrm{L}-1-2$ |  |  |
|  | RS3-13 | OFF | $\mathrm{L}-1-3$ | $\mathrm{~L}-1-2$ | $\mathrm{~L}-2-3$ |

## SHAFT OPTIONS

| Code | A |
| :---: | :---: |
| Seres NO. | RS3 |
| Diagram | A8.3 |
|  |  |
|  |  |

## DIMENSIONS



## CABLE REQUIREMENT



RS3 EXAMPLE


RS3-13


## SPECIFICATION

| Max. Rating Cnrrenti2Voltage(Resistive load) | $3(1) \mathrm{A} 250 \mathrm{VAC}$ |
| :--- | :--- |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Resistance | 1500 V |
| Electronic life(cycles) | 10,000 |
| Operating temperature | T 85 |

## HOW TO ORDER



## CIRCUIT

| Circuit feature |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feature No. | A | Feature No. | B | Feature No. | C |
|  | Serial No. | SS1-12 | Serial No. | SS1-11 | Serial No. | SS1-11 |

SHAFT OPTIONS


TERMINAL CODE

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\stackrel{ }{+}$ | Feature No. | H |  | R |
|  | Serial No. | SS1 |  | SS1 |

## DIMENSIONS



## EXAMPLE



SS1-12A-BBH


SS1-12A-BBR

| SPECIFICATION |  |
| :---: | :---: |
| Max.Rating Cnrrent\&Voltage(Resistive load) | 8(2)A 250VAC |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Electronic life(cycles) | 1500V |
| Electronic life(cycles) | 10,000 |
| Operating temperature | T85 |
| (CQC ES/ | 8(2) A 250VAC u T85 |

## HOW TO ORDER



 Special requirement can use S1, S2..represent
Word label style :With A, B, C said
Foundation /Base Color :B-black
Operating Lever color :B-black R-Red
Terminal option :Welding type terminal with $H, I, J, K, M, P$ said
Other type terminal with R, Q, S, T said
Top Shell Option :With A, B, C said
Operating Lever Option :with A, B, C said
Circuit feature :with A, B, C said
Edge feet :With 2, 3, 4 said
Poles: With 1 said
Design Serial No.: With 2 said
Basic No.: S S

## DIMENSIONS



CIRCUIT


SHAFT OPTIONS


| Code |  | $H$ |
| :---: | :---: | :---: |
| Diagram | Herser |  |



| SPECIFICATION |  |
| :--- | :--- |
| Function | Provides power switching and circcuitprotection in a single unit |
| Rating Current | $5-15 \mathrm{~A}$ |
| Rating Voltage | AC 125 V 220 V DC50V |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ DC500V |
| Dielectric Strength | AC 1500 V 1 min |
| Life(cycles ) | $>6000$ |
| Amibent temperature | $-10^{\circ} \mathrm{C} \sim 60^{\circ} \mathrm{C}$ |

HOW TO ORDER


4 Terminal

| Code | 1 | 2 |
| :---: | :---: | :---: |
| Diagram |  |  |
| Note | Standard | Standard |

5 Base


## 6. Actuator

| Code | Diagram | Note | Code | Diagram | Note | Code | Diagram | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 1 | Arc-Shaped | A | $\xrightarrow{2}$ | Plane | B | 9 | V-Shaped |

## 9 Marking

| Code | 1 |
| :--- | :---: |
| Diagram |  |
|  |  |
| Note | Reset/OFF Molded |



## SCB series switch with cirecuit breaker

## Tripping curves and temperature compensation coefficients refer to the following

## Trip Curves



| Capacity Correction Factors <br> For Ambient Temperatures |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current <br> Rating <br> Amps | ${ }^{\circ} \mathrm{F}$ | +23 | +32 | +68 | +77 | +86 | +104 | +122 | +140 |
|  | ${ }^{\circ} \mathrm{C}$ | -5 | +0 | +20 | +25 | +30 | +40 | +50 | +60 |
|  | .75 | .80 | .90 | 1.00 | 1.05 | 1.10 | 1.20 | 1.40 |  |
| 7 to 15A | .80 | .85 | .95 | 1.00 | 1.05 | 1.15 | 1.25 | 1.40 |  |



## SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | 50,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+125^{\circ} \mathrm{C}$ |

Max. Rating Current \& Voltage


HOW TO ORDER


1 TERMINAL CODE
Code

2 ACTUATOR CODE

| Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | $\xrightarrow{14}$ | 14 mm | A2 | $\square$ | 28 mm | A3 | $\square$ | 32 mm | A4 | $\xrightarrow{52}$ | 52 mm |
| A5 | $\square$ | 24 mm | B | $\xrightarrow{16.5}$ | 26.5 mm | C1 | (12.5 | 12.5 mm | C2 | (\%) | 26.5 mm |
| D | $\xrightarrow{53}$ | 53 mm | E | $=\frac{54.7}{65.4}$ | 65.4 mm | D1 | $\bigcirc$ | 68 mm | D2 | 96 | 96 mm |
| F |  | 18.9 mm | G | $\square$ | 64.4 mm |  |  |  |  |  |  |

3 housing code

| Code | Diagram | Panel cut out(mm) | Match the project selection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Actuator | Circuit | Terminal | Marking |
| A |  |  | A1...Ai B/ C1...Ci/ | $\begin{array}{\|l\|} \hline 11 \mathrm{~A} / \\ 11 \mathrm{~B} / \\ 12 \end{array}$ | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \mathrm{H} / \\ & \text { I } \end{aligned}$ | $\begin{aligned} & \text { A/ } \\ & \text { B/ } \\ & \text { D } \end{aligned}$ |
| B |  |  |  | 11B/ | $\begin{aligned} & \mathrm{J} / \\ & \mathrm{C} \end{aligned}$ | C |

4 KW15 CIRCUIT CODE

| Code | Circuit | Description | Code | Circuit | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11A |  | SP-ST-NO | 11B |  | SP-ST-NC |
| 12 |  | SP-DT |  |  | DP-ST-NC |

5 Marking

A

B

C

D

E

## KW15EXAMPLE



KW15-12-OAA-BBB


KW15-11A-C2AA-BBB


| SPECIFICATION |  |
| :--- | :---: |
| Contact Resistance |  |
| Insulation Resistance |  |
| Dielectric Strength |  |
| Electronic Life(cycles) |  |
| Operating temperature |  |
| Max. Rating Current \& Voltage |  |
| CQC $50,500 \mathrm{~m} \Omega$ |  |

HOW TO ORDER


3 ACTUATOR CODE

| Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description | Code | Diagram | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A1 | 17.5 | 17.5 mm | A2 | 25.5 | 22.5 mm | B |  | 19 mm | C |  | 15 mm |

4 HOUSING CODE
Circuit
Terminal

| Code | Diagram | Panel cut out(mm) | Match the project selection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ACTUATOR | Circuit | Terminal |
| A |  |  | A1...Ai B/ C | $\begin{aligned} & 11(S P-S T) \\ & 12(S P-D T) \end{aligned}$ | $\begin{aligned} & \mathrm{A} / \\ & \mathrm{B} \end{aligned}$ |
| F |  |  |  |  |  |

## 5 TERMINATION CODE

| Code | Diagram |
| :---: | :---: |
| B |  |
| B |  |

## KW11 Overall Dimension(mm)



KW11 EXAMPLE


KW11-12-OFA-F-B


KW11-12-OAA-B


KW11-12-CFA-F-B


KW11-12-CAA-B


KW11-12-BFA-F-B


KW11-12-BAA-B


KW11-12-A1FA-F-B


KW11-12-A1AA-B


KW11-12-A2FA-F-B


KW11-12-A2AA-B


## SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $100 \mathrm{M} \Omega$ |
| Dielectric Strength | $\mathrm{KBM}: 1,500 \mathrm{~V}, \mathrm{KBM}-\mathrm{A}: 1000 \mathrm{~V}$ |
| Electronic Life(cycles) | 10,000 |
| Mechanical Life(cycles) | 50,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

Max. Rating Current \& Voltage

| $C Q C$ | $K B M: 2 A / 250 V A C$ | $K B M-A: 4 A / 250 V A C$ |
| :--- | :--- | :--- |

HOW TO ORDER


Example:KBM-113-W

KBM



Note: This product is the default color is white, other colors and special models, please contact the Company.

Model List


KBMEXAMPLE

KBM-112-W

KBM-113-W

KBM-113-P

KBM-114-B

KBM-A13-W


| SPECIFICATION |  |
| :--- | :--- |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | 10,000 |
| Mechanical Life (cycles) | 50,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

Max. Rating Current \& Voltage
CQC C

HOW TO ORDER


Example:KD2-A21L2WY
SIZE(mm)



Page/092

Lighting pieces of performance indicator

| Operating voltage | 2 V | 6 V | 12V | 24V | 110 V | 220 V | Life | Equivalent circuit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current | Less than 15 mA |  |  |  | Less than 5mA |  | About 50,000 hours (but the brightness will be weaken as the life of using plus.) | $(+) \mathrm{O}-\frac{1}{1}-\mathrm{O}(-)$ |
| LED color | Red Green Blue Yellow Orange |  |  |  |  |  |  |  |
| Cap Color | Red Green Blue Yellow Orange Black White Gray |  |  |  |  |  |  |  |


| Operating voltage | 110 V AC | 220 V AC |
| :---: | :---: | :---: |
| Current | Less than 1mA | Less than 1mA |
| Neon color | Red Green |  |
| Cap Color | Red Green |  |

## Accessories



Kd2 the socket type for the dedicated button to switch socket, the socket can be used to facilitate the installation and replacement of switch switch, but also eliminates the need to switch the direct welding, in order to extend the service life of switch.

## NOTE

- The shell main color is black and white.
- With light switches and other main types of AC-DC universal LED products, the voltage of products for 2 V only DC products, the voltage of point LED products only can do the 2 V . If you want the high-voltage, can circuit in series with an external resistor divider. Surface lighing more than 6 V products (including 6 V ) more generic products for the $A C$ and $D C$ 。If single voltage types require special instructions.
- The special voltage current and color needs to be customized.


## KD2 EXAMPLE



KD2-A21L2D-WG-R


KD2-B21-WY


KD2-B21L2D-WR-R


KD2-A21L2D-BB-R


KD2-B21L12-WY-Y

0 Note: Due to we couldn't getfull information from the appearance, such as voltages, parameters and the switch with or without light, so the full model please refer to models based on the actual needs and the definition and parameters of table selection.


SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | Moment:10,000 Alternate:5,000 |
| Mechanical Life(cycles) | Moment:50,000 Alternate:10,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

Max. Rating Current \& Voltage
© C
$1 \mathrm{~A} / 250 \mathrm{~V}$ AC

HOW TO ORDER


SIZE(mm)


Page/094

Model List

| Shape | Products | Lamp | SP-Alternate | SP-Momentary |
| :---: | :---: | :---: | :---: | :---: |
| Round |  | LED | FDI6-1וורי $\square$ - | FDI6-1211■-O |
|  |  | Nero | FDI6-111N-O | FD16-121N-O |
|  |  | No lamp | FD16-111-O | FD16-121-O |
| Square |  | LED | FD16-112L $\square$ - 0 | FD16-122Lロ-O |
|  |  | Nero | FD16-112N■-O | FDI6-122N■-O |
|  |  | No lamp | FD16-112-O | FD16-122-O |

Note: LED table $\square$ said DC voltage level, according to the needs of the circuit can choose to $2 \mathrm{~V}, 6 \mathrm{~V}, 12 \mathrm{~V}, 24 \mathrm{~V}$. said AC voltage rating of neon $110 \mathrm{~V}, 220 \mathrm{~V}$. . color for the case on behalf of code, I have used shell companies for the black colors. Othat the button color code.

Lighting pieces of performance indicators

■ LED

| Operating voltage | 2 V | 6 V | 12V | 24V | 110V | 220 V | Life | Equivalent circuit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current | Less than 15 mA |  |  |  | Less | n 5 mA | About 50,000 hours (but the brightness will be weaken as the life of using plus. ) |  |
| LED color | Red Green Blue Yellow Orange |  |  |  |  |  |  |  |
| Cap Color | Red Green Blue Yellow Orange Black White Gray |  |  |  |  |  |  |  |

- Neon

| Operating voltage | 110 V AC | 220 V AC |
| :--- | :--- | :--- |
| Current | Less than 1mA | Less than 1mA |
| Neon color | Red Green |  |
| Cap Color | Red Green |  |



HOW TO ORDER


| SPECIFICATION |  |
| :--- | :--- |
| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| Insulation Resistance | $100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Electronic Life(cycles) | 10,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 40 |

Max. Rating Current \& Voltage
CQC C -1 /250VAC


KAIB


Penel Cutout(mm)



KAIA


## KAIA M12



TERMINATION CODE


2 Button shape

| Code | 5 | 10 | 15 | 17 |
| :---: | :---: | :---: | :---: | :---: |
| Diagram | $\square)^{10}$ | $\square$ | $\square$ |  |
|  | $\Phi 4$ button one | $\Phi 5$ button one | $\Phi 4$ button two | $\Phi 5$ button two |



## SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,500 \mathrm{~V}$ |
| Mechanical Life(cycles) | 50,000 |
| Electronic Life(cycles) | 10,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}$ |
| IP code | $\mathrm{IP} 40 / \mathrm{IP} 65$ |

Max. Rating Current \& Voltage
(COC) (€

## HOW TO ORDER



Shape


Overall \& Dimensions(mm)




| SPECIFICATION |  |
| :--- | :---: |
| Contact Resistance |  |
| Insulation Resistance |  |
| Dielectric Strength |  |
| Mechanical Life(cycles) |  |
| Electronic Life(cycles) |  |
| Operating temperature |  |
| IP code |  |
| CQC CB |  |

## HOW TO ORDER



Overall \& Dimensions(mm)


Panel thickness:1.2~2.5mm


SPECIFICATION

| Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |
| :--- | :--- |
| Insulation Resistance | $\geqslant 100 \mathrm{M} \Omega$ |
| Dielectric Strength | $1,000 \mathrm{~V} 1 \mathrm{~min}$ |
| Mechanical Life(cycles) | 100,000 |
| Electronic Life(cycles) | 50,000 |
| Operating temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| IP code | IP 65 |
| Max. Rating Current \& Voltage | $30 \mathrm{~A} / 12 \mathrm{~V} \mathrm{DC}$ |

## HOW TO ORDER



Overall \& Dimensions(mm)


Patent No. :200930097860. 1


SPECIFICATION

| Rating Current | $4 \mathrm{~A} / 28 \mathrm{~V}$ DC $4 \mathrm{~A} / 125 \mathrm{~V} \mathrm{AC} 2 \mathrm{~A} / 250 \mathrm{~V} \mathrm{AC}$ |
| :--- | :---: |
| Contact Resistance | $\leqslant 0.05 \Omega \quad 25 \mathrm{C}$ |
| Insulation Resistance | $\geqslant 500 \mathrm{M} \Omega \quad(500 \mathrm{VDC})$ |
| Operating temperature | $-20 \mathrm{C} \sim+60 \mathrm{C}$ |
| Store temperature | $-20 \mathrm{C} \sim+80 \mathrm{C}$ |
| Dielectric Strength | $50 \mathrm{~Hz}, 1500 \mathrm{VAC}, 1 \mathrm{~min}$ |
| Corrosion resistance | $>48 \mathrm{H}$ Salt spray |
| Electronic life(cycles) | 10,000 |
| Mechanical life(cycles) | 20,000 |

## HOW TO ORDER


 $\square$ Nut option: Blank--M19 hex nut Inserting or pulling key position option: Blank--L position for inserting or pulling keys Rotary angle option: Blank--90
Terminal option: Blank--0.5*2. 1mm solder terminal Housing option: Blank--M19*1 Thead housing plated Ni, SR

- Actuator option: Blank--With 1pc round key+1pc sheet key
$1--$ With $2 p c s$ sheet keys
$2--$ With 2 pcs round keys
Poles: 1--SP; 2--DP
SERIE No.: JP19Y


## CIRCUIT DIAGRAM

| Position |  |  |
| :---: | :---: | :---: |
| 2 Positions(SPDT) | $\begin{gathered} \mathrm{NO} \bullet \\ \mathrm{NC} \\ \end{gathered}$ | $\frac{\mathrm{NO}}{\mathrm{NC}} \cdot \mathrm{COM}$ |
| 2 Positions(DPDT) | $\stackrel{\mathrm{NO}}{\mathrm{NC}} \mathrm{COM} \mathrm{COM} \text { • } \mathrm{NO}$ | $\xrightarrow{\mathrm{NO}} \stackrel{\mathrm{COM}}{\substack{ \\\mathrm{NCOM}}}$ |

## PANEL CUT OUT



DIMENSIONS



## SPECIFICATION

1. Power frequency with stand voltage: 2.5 Kv per minite. (effective AC value)
2. Insulation resistance: $\geqslant 2 \mathrm{M} \Omega$
3. Rated voltage $>48 \mathrm{v}$, allow vol tage fluctuation plus or minus $20 \%$; Acuities 48 v , a llow voltage fluctuation plus or minus $5 \%$
4. LED continuous working life 30000 hours or more; Neon continuous working life 3000 hours or more
5. CTI: $\geqslant 2 \mathrm{M} \Omega$
6. Applying frequency: AC50~60Hz

## HOW TO ORDER




ZD7-11









ZD10-14


Overall Dimension (mm)


Pennl Cut out (mm)



SPECIFICATION

| Styles | BLX-2 | BLX-3 |
| :--- | :---: | :---: |
| Specification <br> Max. Rating Current Voltage <br> Resistive Load) | $10 \mathrm{~A} \mathrm{250V}$ | $15 \mathrm{~A} \mathrm{250V}$ |
| Adapt to the fuse wire | $\Phi 5 \times 20$ | $\Phi 6 \times 30$ |
| Contact Resistance | $\leqslant 50 \mathrm{M} \Omega$ |  |
| Insulated Resistance | $\geqslant 100 \mathrm{M} \Omega$ |  |
| Dielectric Strength | $\geqslant 100 \mathrm{M} \Omega$ |  |

HOW TO ORDER



BLX-211


BLX-212


BLX-221


Overall Dimension (mm)


Overall Dimension (mm)



Panel Cut out (mm)


BLX-222


BLX-311


BLX-321


BLX-322



Panel Cut out (mm)


Panel Cut out (mm)


Panel Cut out (mm)


Panel Cut out (mm)


# Reliance [لฺN North America 

The Smarter Alternative

## Reliance North America

30 Gick Road, Saratoga Springs, NY 12866 tel:518.393.6911
email:info@RelianceNorthAmerica.com
Learn more at:
www.RelianceNorthAmerica.com

## RNA Reliance North America



## Metal Switch Catalog 2018

## Reliance North America

30 Gick Road
Saratoga Springs, NY 12866
518.393.6911
information@RelianceNorthAmerica.com
www.RelianceNorthAmerica.com

## RNA Retanc North America



Reliance North America's Switch manufacturing partner was founded in 1985 in Shanghai, China. We produce electromechanical electrical Switches and connectors. Our Switch products are categorized into the following major classes: push button switches, rocker switches, rotary switches, micro switches, refrigerator door switches, smallsize toggle switches, indicator lights, solenoid valves, connecting terminal and buzzers. We have over 4,000 styles or variations available as well as in house custom design capabilities for various applications.

Our Switch products are widely applied to various fields such as electronics, electrical appliances, instruments, communications, audio and video, household appliances and medical equipment.

All of our Switch products are ISO14001, ISO9001 and TS16949 certified. In 2008 we implemented a Quality Management System and many of our products have passed quality certifications or authoritative certification bodies such as CQC, CB, CCC, CE, ENEC, UL and RoHS.

We pride ourselves by using the best technology available while improving our products for our customers.

## Relíance 匂North America




Sales Center


Assembly Workshop


Testing Product


Numerical Control Workshop

## Reliance UUU North America $^{2}$

The Smarter Alternative

$$
\rightarrow 0^{00} 0^{00}
$$



$=76^{20}$

$-\cos ^{00}=0$
$4 a^{3 /-9}$
[日.ㅇㅇㅇㅢ

www.RelianceNorthAmerica.com

## Reliance $\mathbb{U U}^{N}$ North America

# The Smarter Alternative 

YXGQ Signal Lamp
(c) Model Explanation

| YXGQ | $\star$ | ■ | $\square$ | $\diamond$ | / | $\triangle$ | 1 A | 1 (0) 1 | $\star$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series Number | Mounting Hole Size 8 © 8 mm 12 © 12 mm 16 Ф16mm 19 © 19 mm 22 Ф22mm | The FrontShape $B$ B Domed F Flat Round H High Round P Flat | Contact Configuration 10 1NO | Lamp Type <br> D Dot <br> E Ring <br> Em <br> Buzzer with illumination | Terminal Type J J Pin Terminal No letter means screw terminal. | Color of Lamp and Colorized Button <br> R Red <br> G Green <br> Y Yellow <br> O Orange <br> B Blue <br> W White | Lamp Voltage AC/DC6V AC/DC12V AC/DC24V AC/DC36V <br> Other voltage can be made to order | N <br> S <br> A <br> The Crust Material <br> N Nckel-plated Brass <br> G Godd-plated Brass <br> S Stainess Steel <br> A Zn-al Aloy(Blad) <br> T Zn-al Aloy(Siver White) | Color of Colorful push button's head or Case <br> R Red <br> G Green <br> Y Yellow <br> O Blue <br> B. White <br> N Black |

Note: Please carefully read the product specification, then select the appropriate code according to different symbols in the table.
() Switch Structure Explanation

() LED Lamp Specifications

| Lamp Type | Bi-directional LED lamp (AC DC Universal) |  | AC-DC Universal LED lamp, terminal differentiate between positive and negative; lamp beads built-in protection resistors, no external. |
| :---: | :---: | :---: | :---: |
| Rated Voltage | $1.8 \mathrm{~V}, ~ 2.8 \mathrm{~V}, ~ 6 \mathrm{~V}, ~ 12 \mathrm{~V}, ~ 24 \mathrm{~V}, ~ 36 \mathrm{~V}$ |  |  |
| Rated Current | 15 mA about 15 mA |  |  |
| Color | R G O B W |  |  |
| Life | 50000 hours (reference value) |  |  |

Note: Unidirectional DC LED lamp can be customized if needed; other voltage specifications could be special made
() Installation Effect Preview


## Reliance ${ }_{\text {UUU North America }}$

The Smarter Alternative
YXGQ Signal Lamp

## () YXGQ8C-D/ $\triangle / \Delta / N$

Signal lamp


## () YXGQ8F-D/ $\triangle / \mathbf{A} / \mathrm{N}$




Page 02

## Reliance ${ }_{\text {UUU North America }}$

The Smarter Alternative
YXGQ Signal Lamp

## (c) YXGQ12C-D/ $\triangle / \Delta / N$



```
Mourting Hole Size: ©12mm
(0) Voltage Class: }\leqslant220\textrm{V
Rated Current: 15mA
` Lamp Type: LED
(-) Lamp Color: Red / Green / Yellow / Orange / Bue / White
(0) The Crust Material: Nickel-plated Brass
(`) Protection Degree: IP67,IK10
```


(c) YXGQ12F-D/ $\triangle / \mathbf{A} / \mathrm{N}$



Page 03

## Reliance［⿹勹巳U North America

The Smarter Alternative
YXGQ Signal Lamp

## （1）YXGQ12F－D／J／$\triangle / \mathbf{A} / \bigcirc$



```
Mounting Hole Size: }\Phi12\textrm{mm
(c) Voltage Class: }\leqslant220\textrm{V
Rated Current: 15mA
(c) Lamp Type: LED
Lamp Type: LED
Lamp Color: Red / Green / Yellow / Orange / Blue / White
(-)
The Crust Material: Nickel-plated Brass/Stainless Steel
(©) Protection Degree: IP67,IK10
```



## （－）$Y$ XGQ12F－D／$\triangle / \Delta /$（）



| Specificaions |  | YXGQ12F－D／J／$\triangle / \mathbf{L} /$ \％ |  | YXGQ12F－D／$\triangle / \mathbf{/ L} / \bigcirc$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Teminal Type | Pin Terminal（ $2.0 \times 0.5 \mathrm{~mm}$ ） |  | Screw Terminal |  |
|  | Dielectic Stengh | 2000VAC |  | 2000VAC |  |
|  | Operaing Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |
|  | Panel Thickness | 1～10mm |  | 1～10mm |  |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ |  | $5 \sim 14 \mathrm{Nm}$ |  |
|  | Protection Degree | IP67，IK10 |  | IP67，IK10 |  |
|  | Shade | PC |  | PC |  |
|  | 外壳 Case | Stainless Steel／Nickel－plated Brass |  | Stainless Steel／Nickel－plated Brass |  |
|  | Base | PBT |  | PBT |  |
|  | RoHS | Can be made to order |  | Can be made to order |  |
| $\begin{aligned} & \text { 50 } \\ & 0 \end{aligned}$ | Type | （LED）Flat dot |  | （LED）Flat dot |  |
|  | Rated Voltage | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$about 15 mA | $110 \mathrm{~V} / 220 \mathrm{~V}$ | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ | $110 \mathrm{~V} / 220 \mathrm{~V}$ |
|  | Rated Curent |  | about3mA | about 15 mA | about3mA |
|  | Color | R G Y O B W |  | $R$ G Y O B W |  |
|  | Life | 50000 hours |  | 50000 hours |  |

Page 04

## Reliance［⿹勹巳U North America

## （c）YXGQ12B－10／J／A／$\star$

Domed

## © $\mathrm{YXGQ12B-10/A/} \mathrm{\star}$


（1）YXGQ12B－10／J／O


|  | Specificaions | YXGQ12B－10／J／A／＊ | YXGQ12B－10／A／＊ | YXGQ12B－10／J／O |
| :---: | :---: | :---: | :---: | :---: |
|  | Teminal Type | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） | Screw Terminal | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |
|  | Swith Type | $\mathrm{X} \quad$Twot terminal breakpoints <br> slow moving contact | $\mathrm{X} \quad$Two terminal breakpoints <br> slow moving contact | $\mathrm{X} \quad$Twoterminal breakpoints <br> slow moving contact |
|  | Swith Specifications | 2A／36VDC | 2A／36VDC | 2A／36VDC |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
|  | Insulation Resistance | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
|  | Dielectric Strengh | 2000 VAC | 2000 VAC | 2000 VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Life | $100>1,000,000$ times | $100>1,000,000$ times | 100 ＞1，000，000 times |
|  | Electrical Life | 20 ＞200，000 times | 20 ＞200，000 times | 20 ＞200，000 times |
|  | Panel Thickness | $1 \sim 5 \mathrm{~mm}$ | $1 \sim 5 \mathrm{~mm}$ | $1 \sim 10 \mathrm{~mm}$ |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | About 5 N | About 5N | About 4N |
|  | Operating Stroke | About 2.5 mm | About 2.5 mm | About 2.5 mm |
|  | Protection Degree | IP65，IK08 | IP65，IK08 | IP65，IK08 |
|  | Contact | Silver Alloy | Silver Alloy | Silver Alloy |
|  | Button | PBT | PBT | CD Sartess Seel：Mirusirase，COPaitem |
|  | Case | Zn －al Alloy | Zn－al Alloy | Nickel－plaied Brass，Stainless Stieel |
|  | Base | PBT | PBT | PBT |
|  | RoHS | Can be made to order | Can be made to order | Can be made to order |
|  | Head Color | $R$ G $Y$ O B N | $R$ G $Y$ O B W |  |

Page 05

# Reliance［⿹勹巳U North America 

The Smarter Alternative
YXGQ12
（－）YXGQ12B－10／O
Domed
（－）Mountina Hole Size：$\Phi 12 \mathrm{~mm}$
（c）Switch Rating：2A36VDC
Contact Coniguration：1NO
Operaton Type：Momertary
The Front Shape：Domed
The Crust Material：Nickel－plated Brass，Staniess Steel
Protection Degree：IP65，｜KOB


## YXGQ12B－10D／J／$\triangle / \mathbf{A} / \mathrm{A} / \star$

Domed


（c）YXGQ12F－10／J／O


|  | Specifications | YXGQ12B－10／O | YXGQ12B－10D／J／$\triangle / \mathbf{L} / \mathrm{A} / \star$ | YXGQ12F－10／J／O |
| :---: | :---: | :---: | :---: | :---: |
|  | Terminal Type | Screw Terminal | Pin Terminal $(2 \times 0.5 \mathrm{~mm})$ | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |
|  | Swith Type | $\mathrm{X} \quad$Two terminal breakpoints <br> slow moving contact | $X \quad$Two terminal breakpoints <br> slow moving contact | $\mathrm{X} \quad$Two terminal breakpoints <br> slow moving contact |
|  | Switch Specifications | 2A／36VDC | 2A／36VDC | 2A／36VDC |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
|  | Insulation Resisiance | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
|  | Dielectric Strengh | 2000 VAC | 2000 VAC | 2000 VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Life | $100>1,000,000$ times | $100>1,000,000$ times | $100>1,000,000$ times |
|  | Electrical Life | 20 ＞200，000 times | 20 ＞200，000 times | 20 ＞200，000 times |
|  | Panel Thickness | 1 $\sim 5 \mathrm{~mm}$ | $1 \sim 10 \mathrm{~mm}$ | $1 \sim 5 \mathrm{~mm}$ |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | About 5N | About 5 N | About 5N |
|  | Operating Stroke | About 2.5 mm | About 2.5 mm | About 1.8 mm |
|  | Protection Degree | IP65，IK08 | IP65，IK08 | IP65，IK08 |
| $\begin{aligned} & \text { Z } \\ & \stackrel{\rightharpoonup}{\omega} \\ & \stackrel{\rightharpoonup}{\omega} \\ & \underline{\omega} \end{aligned}$ | Contact | Silver Alloy | Silver Alloy | Silver Alloy |
|  | Button | CD Sarressiet Mirovirice，COPatem | PBT | PBT |
|  | Case | Nickel－plated Brass，Stainless Steel | Zn －al Alloy | Nickel－paled Brass，Stainless Steel |
|  | Base | PBT | PBT | PBT |
|  | RoHS | Can be made to order | Can be made to order | 可定制 Can be made to order |
|  | Head Color |  | $R$ G $Y$ O B W |  |

Page 06

## Reliance［⿹勹巳U North America

## （©）YXGQ12F－10E／J／$\triangle / \mathbf{A} / \bigcirc$

Flat Round
（c）Mouning Hole Size：$\Phi 12 \mathrm{~mm}$
（c）Suitch Rating： 2 A36VDC
Contact Configuration：1NO
Operation Type：Momentary
The Front Shape：Fat Round
The Cust Material：Nickel－plated Brass，Stainless Steel
Protection Degree：IP65，｜KC8

（c）YXGQ12H－10E／J／$\triangle / \mathbf{A} /$ ©



Page 07

## Reliance ©্খUNorth America

The Smarter Alternative
YXGQ16

## (c) YXGQ16F-D/J/ $\triangle / \mathbf{L} / \bigcirc$

Signal lamp

```
Mounting Hole Size: }\Phi16\textrm{mm
(0) Votage Class: }\leqslant220\textrm{V
Rated Curent: 15mA
Lamp Type: LED
Type: LED
Lamp Color: Red / Green / Yellow / Orange / Blue / White
The Crust Matenal: Nickel-plated Brass, Stainless Steel
(ㄷ)
nust Matenal: Nickel-plated Brass, Stairless Steel
Protection Degree: IP67,IK10
```


(c) $Y X G Q 16 F-D / \triangle / \Delta / O$


|  | Specifications | YXGQ16F-D/J/ $\triangle / \mathbf{/} / \bigcirc$ |  | YXGQ16F-D/ $\triangle / \mathbf{/ L}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Terminal Type | Pin Terminal ( $2.0 \times 0.5 \mathrm{~mm}$ ) |  | Screw Terminal |  |
|  | Dielectric Strength | 2000VAC |  | 2000VAC |  |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |
|  | Panel Thickness | 1 ~ 10 mm |  | $1 \sim 10 \mathrm{~mm}$ |  |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ |  | $5 \sim 14 \mathrm{Nm}$ |  |
|  | Protection Degree | IP67,IK10 |  | IP67,1K10 |  |
|  | Shade | PC |  | PC |  |
|  | Case | Stainless Steel/Nickel-plated Brass |  | Stainless Steel/Nickel-plated Brass |  |
|  | Base | PBT |  | PBT |  |
|  | RoHS | Can be made to order |  | Can be made to order |  |
| 50000033000 | Type | (LED) Flat dot |  | (LED) Flat dot |  |
|  | Rated Voltage | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ | $110 \mathrm{~V} / 220 \mathrm{~V}$ | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ | $110 \mathrm{~V} / 220 \mathrm{~V}$ |
|  | Rated Current | about15mA | about3mA | about15mA | ..about3mA |
|  | Color | $R$ G $Y$ O | W | $R$ G P O B | W |
|  | Life | 50000 hours |  | 50000 hours |  |

Page 08

# Reliance［⿹勹巳U North America 

The Smarter Alternative
YXGQ16

## （）YXGQ16B－10／O

Domed

```
(0) Mounning Hole Size: }$16\textrm{mm
(`).
(`)
Contact Configuation: 1NO(1NC can be astom made)
Operation Type: Momentary
The Front Shape: Domed
The Cust Material: Stainless SleelNickel-plated Brass
Protection Degree: IP65,|KC8
```


（2）YXGQ16F－10／O
Flat Round

```
(0)Mounning Hole Size: }$16\textrm{mm
(0)Switch Rating: 2A36VDC
Contact Configuration: 1NO_1NC can be custom made)
(0) Operation Type: Momentary
(0) The Froon Shape: Fat Round
(0) From: Shape: Fat Round
The Crust Material: Stainless SteelWickel-pated Brass
Protection Degee: IP65,1Kc8
```


（）YXGQ16H－10／0


|  | Specificaions |
| :---: | :---: |
|  | The Front Shape |
|  | Teminal Type |
|  | Swith Type |
|  | Swith Specifications |
|  | Contact Resistance |
|  | Insulation Resistance |
|  | Dielectric Strength |
|  | Operating Temperature |
|  | Mechanical Lite |
|  | Electrical Life |
|  | Panel Thickness |
|  | Torque |
|  | Operating Presure |
|  | Operaing Stroke |
|  | Protection Degree |
|  | Contact |
|  | Button |
|  | Case |
|  | Base |
|  | RoHS |



| YXGQ16F－10／O | YXGQ16H－10／O |
| :---: | :---: |
| Flat Round | High Round |
| Screw Terminal | Screw Terminal |
| $\mathrm{X} \quad$（Two teminal beakpoints <br> siow moving contact） | $\mathrm{X} \quad$（Two teminal breakpoints <br> siow movng contact） |
| 2A／36VDC | 2A／36VDC |
| $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
| $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
| 2000 VAC | 2000VAC |
| $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| $100>1,000,000$ times | 100 万次以上＞1，000，000 times |
| $20>200,000$ times | 20万次以上 $>200,000$ times |
| $1 \sim 6 \mathrm{~mm}$ | 1～6mm |
| $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
| about 4 N | about 4 N |
| about 1.5 mm | about 1.5 mm |
| IP65，IK08 | IP65，IK08 |
| Silver Alloy | Silver Alloy |
| CD Ianless Sieal：Mirros Suface，CDPatern | CD tantess Steed：Miror Suricace，CDPatien |
|  | CD $\begin{aligned} & \text { tandess Sieet：Mrus Surave，CO Paitern } \\ & \text { Neckel－pated Brass }\end{aligned}$ |
| PBT | PBT |
| Can be made to order | Can be made to order |

[^2]
# Reliance ${ }_{\text {UU }}$ North America 

The Smarter Alternative
YXGQ16
（c）YXGQ16B－10／J／O
Domed

```
Mounting Hole Size: ©16mm
(c) Swich Rating: 2A36VDC
C()}\mathrm{ Contact Conflguator: iNO(iNC can be custom made)
(0) Operation Type: Momentary
(c) The Front Shape: Domed
(-)
The Cust Material: Stainless SieelNickel-plated Brass
P(C)Tection Degree: IP65,\K08
```


（ㄷ）YXGQ16F－10／J／O
Flat Round

## （c）YXGQ16H－10／J／O



|  | Specifications |
| :---: | :---: |
|  | The Front Shape |
|  | Terminal Type |
|  | Switch Type |
|  | Switch Specifications |
|  | Contact Resistance |
|  | Insulation Resistance |
|  | Dielectric Strengh |
|  | Operafing Temperature |
|  | Mechanical Life |
|  | Electrical Life |
|  | Panel Thickness |
|  | Torque |
|  | Operating Pressure |
|  | Operaing Stroke |
|  | Protection Degree |
|  | Contact |
|  | Button |
|  | Case |
|  | Base |
|  | RoHS |



| YXGQ16F－10／J／O | YXGQ16H－10／J／O |
| :---: | :---: |
| Flat Round | High Round |
| Pin Terminal $(2 \times 0.5 \mathrm{~mm})$ | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |
| （Two terminal breakpoints slow moving contact） | $\mathrm{X} \quad$（Twot terminal breakpoints <br> slow moving contact） |
| 2A／36VDC | 2A／36VDC |
| $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
| $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
| 2000 VAC | 2000 VAC |
| $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| $100>1,000,000$ times | $100>1,000,000$ times |
| 20 万次以上 $>200,000$ times | $20>200,000$ times |
| $1 \sim 6 \mathrm{~mm}$ | $1 \sim 6 \mathrm{~mm}$ |
| $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
| about 4 N | about 4N |
| about 1.5 mm | about 1.5 mm |
| IP65，IK08 | IP65，IK08 |
| Silver Alloy | Silver Alloy |
| CD tainless Steel：Mirror Surface，CD Pattern | CD tairless Steel：Mirror Sutace，CD Pattern |
| CD $\begin{aligned} & \text { tarless Seep；Mrua Sutface，CD Patem } \\ & \text { Nckel－plated Brass }\end{aligned}$ | CO：$\quad \begin{aligned} & \text { tariess Steed：} \\ & \text { Nickel－plated Brass }\end{aligned}$ |
| PBT | PBT |
| Can be made to order | Can be made to order |

# Reliance［⿹勹巳U North America 

The Smarter Alternative
YXGQ16
（2）YXGQ16PB－10／O
Domed

```
(0)Mounting Hole Size: $16mm
(`) Switch Rating: 2A36VDC
(0) Conalomol
Contact Configuation: 1NO1NC can be astom made)
Operation Type: Momentary
The Front Shape: Domed
The Cust Mateial: Stainless SteelNckel-plated Brass
Protection Degree：IP65，｜KC8
```


（ㄷ）YXGQ16PF－10／O


## （）YXGQ16PH－10／O



|  | Specificaions |
| :---: | :---: |
|  | The Front Shape |
|  | Teminal Type |
|  | Swith Type |
|  | Switch Specifications |
|  | Contact Resistance |
|  | Insulation Resistance |
|  | Dielectric Strength |
|  | Operating Temperature |
|  | Mechanical Lite |
|  | Electrical Life |
|  | Panel Thickness |
|  | Torque |
|  | Operating Pressure |
|  | Operating Stoke |
|  | Protection Degree |
| $\begin{aligned} & \frac{2}{\underline{0}} \\ & \stackrel{\tilde{W}}{\underline{\omega}} \\ & \underline{\underline{3}} \end{aligned}$ | Contact |
|  | Button |
|  | Case |
|  | Base |
|  | RoHS |



| YXGQ16PF－10／O | YXGQ16PH－10／0 |
| :---: | :---: |
| Flat Round | High Round |
| Screw Terminal | Screw Terminal |
| $\mathrm{X} \quad$（Two teminal breakpoints <br> silow moving contact） | $\mathrm{X} \quad$（Two teminal breakpoints <br> sslow moving contact） |
| 2A／36VDC | 2A／36VDC |
| $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
| $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
| 2000 VAC | 2000VAC |
| $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| $100>1,000,000$ times | $100>1,000,000$ times |
| 20 ＞200，000 times | 20 ＞200，000 times |
| $1 \sim 6 \mathrm{~mm}$ | 1～6mm |
| $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
| about 4 N | about 4 N |
| about 1.5 mm | about 1.5 mm |
| IP65，IK08 | IP65，IK08 |
| Silver Alloy | Silver Alloy |
| CD lanless Sieal：Mirorsurfaxe，CDPattem | CD tantessitel：MrrouSurice，CDPatten |
| tainless Steet；Mrror Sutace，CDPatiem Nckel－piated Brass | tainless Sieel：Mror Surace，CD Pathern Nickel－plated Brass |
| PBT | PBT |
| Can be made to order | Can be made to order |

[^3]
# Reliance ${ }_{\text {UU }}$ North America 

The Smarter Alternative
YXGQ16
（）YXGQ16PB－10／J／O
Domed
（）YXGQ16PF－10／J／○
Flat Round

## （）YXGQ16PH－10／J／O



|  | Specificaions |
| :---: | :---: |
|  | The Front Shape |
|  | Teminal Type |
|  | Swith Type |
|  | Swith Specificaions |
|  | Contact Resistance |
|  | Insulation Resistance |
|  | Dielectic Strength |
|  | Operating Temperature |
|  | Mechanical Life |
|  | Electrical Life |
|  | Panel Thickness |
|  | Torque |
|  | Operating Pressure |
|  | Operating Stroke |
|  | Protection Degree |
|  | Contact |
|  | Button |
|  | Case |
|  | Base |
|  | RoHS |



| YXGQ16PF－10／J／O | YXGQ16PH－10／J／O |
| :---: | :---: |
| Flat Round | High Round |
| Pin Terminal $(2 \times 0.5 \mathrm{~mm})$ | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |
| $\mathrm{X} \quad$$\binom{$ wwo terminal breakpoints }{ sow moving contact）} | （Two terminal breakpoints slow moving contact） |
| 2A／36VDC | 2A／36VDC |
| $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
| $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
| 2000VAC | 2000VAC |
| $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| $100>1,000,000$ times | $100>1,000,000$ times |
| 20 ＞200，000 times | 20 ＞200，000 times |
| $1 \sim 6 \mathrm{~mm}$ | $1 \sim 6 \mathrm{~mm}$ |
| $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
| about 4 N | about 4 N |
| about 1.5 mm | about 1.5 mm |
| IP65，IK08 | IP65，IK08 |
| Silver Alloy | Silver Alloy |
| CD tainless Sieel：Miror Sutace，CDPattem | CDS絧tirless Sieel：Miror Surace，CDPattern |
|  |  |
| PBT | PBT |
| 可定制 Can be made to order | Can be made to order |

Page 12

# Reliance［⿹勹巳U North America 

The Smarter Alternative
YXGQ16
（）YXGQ16B－10ZIJ／O


## （）YXGQ16F－10Z／J／O


（c）YXGQ16H－10Z／J／O
High Round

|  | Specificaions |
| :---: | :---: |
|  | The Front Shape |
|  | Teminal Type |
|  | Switch Type |
|  | Swith Specificaions |
|  | Contact Resistance |
|  | Insulation Resistance |
|  | Dielectic Strength |
|  | Operating Temperature |
|  | Mechanical Life |
|  | Electrical Life |
|  | Panel Thickness |
|  | Torque |
|  | Operating Pressure |
|  | Operating Stroke |
|  | Protecion Degree |
|  | Contact |
|  | Button |
|  | Case |
|  | Base |
|  | Rohs |



| YXGQ16F－10Z／J／O | YXGQ16H－10Z／J／O |
| :---: | :---: |
| Flat Round | High Round |
| Pin Terminal $(2 \times 0.5 \mathrm{~mm})$ | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |
| （Two terminal breakpoints slow moving contact） | （Two terminal breakpoints slow moving contact |
| 2A／36VDC | 2A／36VDC |
| $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
| $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
| 2000VAC | 2000VAC |
| $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| $100>1,000,000$ times | $100>1,000,000$ times |
| 20 ＞200，000 times | 20 ＞200，000 times |
| 1 $\sim 6 \mathrm{~mm}$ | 1 $\sim 6 \mathrm{~mm}$ |
| $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
| about 4 N | about 4 N |
| about 1.5 mm | about 1.5 mm |
| IP65，IK08 | IP65，IK08 |
| Silver Alloy | Silver Alloy |
| CD tainless Steel：Mirro Sutace，CDPatiem | CD tainless Stee：M Miror Sutice，CDPatieen |
|  | CD larless Stee：Minu Surfoce，CD Paztem |
| PBT | PBT |
| Can be made to order | Can be made to order |

Page 13

## Reliance [⿶凵 North America

## (c) YXGQ16F-10E/J/ $\triangle / \mathbf{A} / \bigcirc$

Ring-illumination flat switch


() YXGQ16H-10E/J/ $\triangle / \mathbf{A} /$ ©



Page 14

## Reliance［⿹勹巳U North America

The Smarter Alternative
YXGQ16
（c）YXGQ16F－10D／J／$\triangle / \mathbf{\Delta} /$ ©



（๑）YXGQ16F－10T／J／$\triangle / \mathbf{A} /($


|  | Specificaions | YXGQ16F－10D／J／$\triangle / \mathbf{/ L} / \bigcirc$ |  |  |  | YXGQ16F－10T／J／$/$／L／$/$ O |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | The Front Shape | Flat Round |  |  |  | Flat Round |  |  |
|  | Terminal Type | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |  |  |  | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |  |  |
|  | Switch Type | X Two terminal breakpoints slow moving contact |  |  |  | X （ Two terminal breakpoints slow moving contact |  |  |
|  | Swith Specifications | 2A／36VDC |  |  |  | $2 \mathrm{~A} / 36 \mathrm{VDC}$ |  |  |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |  | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |
|  | Insulation Resisitance | $\geqslant 1000 \mathrm{M} \Omega$ |  |  |  | $\geqslant 1000 \mathrm{~m} \Omega$ |  |  |
|  | Dielectric Strengh | 2000 VAC |  |  |  | 2000 VAC |  |  |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |  | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |
|  | Mechanical Life | 10 | $>1,000,000$ times |  |  | 100 | $>1,000,000$ times |  |
|  | Electrical Life | 20 | ＞200，000 times |  |  | 20 | ＞200，000 times |  |
|  | Panel Thickness | 1 $\sim 10 \mathrm{~mm}$ |  |  |  | $1 \sim 10 \mathrm{~mm}$ |  |  |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ |  |  |  | $5 \sim 14 \mathrm{Nm}$ |  |  |
|  | Operating Pressure | About 4 N |  |  |  | About 4 N |  |  |
|  | Operating Stroke | About 1.5 mm |  |  |  | About 1.5 mm |  |  |
|  | Protecion Degree | IP65，IK08 |  |  |  | IP65，IK08 |  |  |
|  | Contact | Silver Alloy |  |  |  | Silver Alloy |  |  |
|  | Button | CD Stantess Sieel：Mirror Surface，CDPatem，Nicke－pated Brass |  |  |  | 5 CD | Stainless Steel：Miror Surtace．CDPatiem，Nicke－paded Brass |  |
|  | Case | CD．Staness Sieed：Mirror Surace，COPatem，Nickel－pated Brass |  |  |  | CD | Stainess Steel：Miror Surace．COPattem，Nchel－paded Brass |  |
|  | Base | PBT |  |  |  | PBT |  |  |
|  | RoHS | Can be made to order |  |  |  | Can be made to order |  |  |
|  | Type | Dot illumination（LED） |  |  |  | Ring－illumination Switch |  |  |
|  | Rated Voltage | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |  | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |
|  | Color | $R$ G $Y$ O B W |  |  |  | R G Y O B W |  |  |
|  | Life | 50000 H |  | Hours |  | 50000 Hours |  |  |
| Current Limiting Resistor Configuration Table （Recommended Value） |  | 工 | Rated Voltage U | 6 V | 12 V | 24 V | 36 V | Formula |
|  |  | $\begin{aligned} & \text { Current } \\ & \text { Limiting } \\ & \text { Resistor } \end{aligned}$ | $\begin{aligned} & R Y O \\ & G B W \end{aligned}$ | $210 \Omega, 1 / 4 \mathrm{~W}$ $160 \Omega, 1 / 4 \mathrm{~W}$ | $510 \Omega, 1 / 2 \mathrm{~W}$ $460 \Omega, 1 / 2 \mathrm{~W}$ | $1.2 \mathrm{k} \Omega, 3 / 4 \mathrm{~W}$ | $\begin{aligned} & 2.2 \mathrm{~K} \Omega, 1 \mathrm{~W} \\ & 2.2 \mathrm{~K} \Omega, 1 \mathrm{~W} \end{aligned}$ | $R=U-U e$ |

Page 15

## Reliance ${ }_{\text {UU }}$ North America

The Smarter Alternative
YXGQ16
（ㄷ）YXGQ16PF－10E／J／$\triangle / \mathbf{A} /$ O
Fing－illumination flat switch

## （）YXGQ16PH－10E／J／$\triangle / \Delta / O$



|  | Specitications | YXGQ16PF－10E／J／$/$／$/$／ |  |  |  | YXGQ16PH－10E／J／$/$／$/$／$/$ O |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | The Front Shape | Flat Round |  |  |  | High Round |  |  |
|  | Terminal Type | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |  |  |  | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |  |  |
|  | Switch Type | X |  | Two terminal breakpoints slow moving contact |  | X （ Two terminal breakpoints slow moving contact |  |  |
|  | Switch Spectications | 2A／36VDC |  |  |  | 2A／36VDC |  |  |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |  | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |
|  | Insulation Resistance | $\geqslant 1000 \mathrm{M} \Omega$ |  |  |  | $\geqslant 1000 \mathrm{M} \Omega$ |  |  |
|  | Dielectric Strength | 2000 VAC |  |  |  | 2000 VAC |  |  |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |  | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |
|  | Mechanical Life |  | $>1,000,000$ times |  |  | 100 | $>1,000,000$ times |  |
|  | Electrical Life | 20 ＞200，000 times |  |  |  | 20 | ＞200，000 times |  |
|  | Panel Thickness | 1～10mm |  |  |  | 1～10mm |  |  |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ |  |  |  | $5 \sim 14 \mathrm{Nm}$ |  |  |
|  | Operating Pressure | About 4 N |  |  |  | About 4 N |  |  |
|  | Operating Stroke | About 1.5 mm |  |  |  | About 1.5 mm |  |  |
|  | Protection Degree | IP65，IK08 |  |  |  | IP65，IK08 |  |  |
| $\begin{aligned} & \frac{3}{3} \\ & \stackrel{0}{0} \\ & \text { N⿳亠口冋刂灬刂 } \end{aligned}$ | Contact | Silver Alloy |  |  |  | Silver Alloy |  |  |
|  | Button | CD |  | Staness Siteel：Mrror Suriace，CDPatem，Nickel－plied Brass |  | CD | Stainless Sieel：Mrro Surface，CDPatem，Nicel－pated Brass |  |
|  | Case | CD Stainess Sieel：Miror Surface，COPatem，Nicele－plated Brass |  |  |  | CD | Stainess Sieel：Mrror Surace，CDPattem，Nciel－pateed Brass |  |
|  | Base | PBT |  |  |  | PBT |  |  |
|  | RoHS | Can be made to order |  |  |  | Can be made to order |  |  |
|  | Type | Ring－illumination（LED） |  |  |  | Ring－illumination（LED） |  |  |
|  | Rated Vatage | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |  | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |
|  | Color | $R$ G Y O B W |  |  |  | $R$ G $Y$ O B W |  |  |
|  | Life | 50000 Ho |  | ours |  | 50000 Hours |  |  |
| Current Limiting Resistor Configuration Table （Recommended Value） |  | I | Rated Voltage U | 6 V | 12 V | 24 V | 36 V | Formula |
|  |  | Current Limiting | $\begin{aligned} & R Y O \\ & R B W \end{aligned}$ | $210 \Omega, 1 / 4 \mathrm{~W}$ $160 \Omega, 1 / 4 \mathrm{~W}$ | $510 \Omega, 1 / 2 W$ $460 \Omega, 1 / 2 W$ | $1.2 \mathrm{k} \Omega, 3 / 4 \mathrm{~W}$ $1.2 \mathrm{~K} \Omega, 3 / 4 \mathrm{~W}$ | $\begin{aligned} & 2.2 \mathrm{~K} \Omega, 1 \mathrm{~W} \\ & 2.2 \mathrm{~K} \Omega, 1 \mathrm{~W} \end{aligned}$ | $\mathrm{B}=\mathrm{U}-\mathrm{Ue}$ |

## Reliance $\mathbb{U U J}^{N}$ North America

The Smarter Alternative
YXGQ16

## (c) YXGQ16PF-10D/J/ $\triangle / \mathbf{L} /$ O




(c) YXGQ16PF-10T/J/ $\triangle / \mathbf{A} /$ ©



Page 17

## Reliance $\mathbb{U U J}^{N}$ North America

## (©) YXGQ16M-10D/J/ $\triangle / \mathbf{A} / T / \star$





## (c) YXGQ16M-10/J//T/ぇ




Page 18

## Reliance［⿹勹巳U North America

（c）YXGQ16F－10EZIJ／$\triangle / \Delta / O$
Ring－illumination flat switch

```
(0) Mouning Hole Size: }\Phi16\textrm{mm
(C) Switch Rating: 2A36VDC
(0) Contact Configuation: 1NO\1NC can be astom made)
(1) Operation Type: Momentary
(c) The From Shape: Ring
(1) The CustMaterial: Stain
The Crust Material: Stainless SteelNickel-plated Brass
(2) Protection Degree: IP65,IKC8
```


（）YXGQ16H－10EZ／J／$\triangle / \Delta / \bigcirc$


|  | Spectications | YXGQ16F－10EZ／J／$/$／$/$／ 0 |  |  |  | YXGQ16H－10EZ／J／$/$／$/$／ 0 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | The Front Shape | Flat Round |  |  |  | High Round |  |  |
|  | Terminal Type | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |  |  |  | Pin Terminal（ $2 \times 0.5 \mathrm{~mm}$ ） |  |  |
|  | Switch Type | X Twoterminal breakpoints slow moving contact |  |  |  | ct X | Two term | slow moving contact |
|  | Switch Specifications | 2A／36VDC |  |  |  | 2A／36VDC |  |  |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |  | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |
|  | Insulation Resisitance | $\geqslant 1000 \mathrm{M} \Omega$ |  |  |  | $\geqslant 1000 \mathrm{M} \Omega$ |  |  |
|  | Dielectric Strengh | 2000 VAC |  |  |  | 2000 VAC |  |  |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |  | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |
|  | Mechanical Life | 10 | $>1,000,000$ times |  |  | 100 | $>1,000,000$ ti |  |
|  | Electrical Life | $20>200,000$ times |  |  |  | 20 ＞200，000 times |  |  |
|  | Panel Thickness | $1 \sim 10 \mathrm{~mm}$ |  |  |  | $1 \sim 10 \mathrm{~mm}$ |  |  |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ |  |  |  | $5 \sim 14 \mathrm{Nm}$ |  |  |
|  | Operating Pressure | About 4 N |  |  |  | About 4 N |  |  |
|  | Operating Stroke | About 1.5 mm |  |  |  | About 1.5 mm |  |  |
|  | Protection Degree | IP65，IK08 |  |  |  | IP65，IK08 |  |  |
|  | Contact | Silver Alloy |  |  |  | Silver Alloy |  |  |
|  | Button | CD |  | Stanless Steel：Wiror Suriace，CDPattem，Nickel－plated Brass |  | 5 CD | Staniess Sited：N | Patem，Nicke－pated Brass |
|  | Case | CD Stainess Sieel：Miror Surace，COPatem，Nickel－pated Brass |  |  |  | $\triangle C D$ | Stainess Sieel：N | Patem，Nicke－pated Brass |
|  | Base | PBT |  |  |  | PBT |  |  |
|  | RoHS | Can be made to order |  |  |  | Can be made to order |  |  |
|  | Type | Ring－illumination（LED） |  |  |  | Ring－illumination（LED） |  |  |
|  | Ra＇ed Vatage | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |  | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |
|  | Color | $R$ G $Y$ O $B$ W |  |  |  | $R$ G $Y$ O B W |  |  |
|  | Life | 50000 Ho |  | ours |  | 50000 Hours |  |  |
| Current Limiting Resistor Configuration Table （Recommended Value） |  | 工 | Rated Votage U | 6 V | 12 V | 24 V | 36 V | Formula |
|  |  | Current Limiting | $\begin{aligned} & R Y O \\ & G B W \end{aligned}$ | $\begin{aligned} & 210 \Omega, 1 / 4 \mathrm{~W} \\ & 160 \Omega, 1 / 4 \mathrm{~W} \end{aligned}$ | $\begin{aligned} & 510 \Omega, 1 / 2 W \\ & 460 \Omega, 1 / 2 W \end{aligned}$ | $1.2 \mathrm{k} \Omega, 3 / 4 \mathrm{~W}$ $1.2 \mathrm{~K} \Omega, 3 / 4 \mathrm{~W}$ | $\begin{aligned} & 2.2 \mathrm{~K} \Omega, 1 \mathrm{~W} \\ & 2.2 \mathrm{~K} \Omega, 1 \mathrm{~W} \end{aligned}$ | $\mathrm{R}=\frac{\mathrm{U}-\mathrm{Ue}}{\mathrm{Ie}}$ |

[^4]
# Reliance $\mathbb{U U J}^{N}$ North America 

## (c) YXGQ19B-10/O

Domed

```
(0) Mounting Hole Size: ©19mm
(c) Swich Rating: 2A36VDC
(). Contar Configuration: INO1NC can be custom made)
(0) Operation Type: Momentay
(c) The Front Shape: Domed
(0)
```



```
P(1) Protection Degree: IP65,K09
```


(c) YXGQ19F-10/0
Flat Round
(c) Mounting Hde Size: $\Phi 19 \mathrm{~mm}$
(c) Switch Rating: $2 A 36 V O C$
Contad Coniguration: 1 NO (1NC can be custom made)
Operaton Type: Momentay
The Front Shape: Flat round

Protection Degree: $\mathbb{P} 65,1 \mathrm{~K} 09$

(c) YXGQ19H-10/O



Page 20

# Reliance ${ }_{\text {UU }}$ North America 

## (c) YXGQ19B-10/J/O


() YXGQ19F-10/J/O
Flat Round



## (c) YXGQ19H-10/J/O



|  | Specificaions | YXGQ19B-10/J/O | YXGQ19F-10/J/O | YXGQ19H-10/J/O |
| :---: | :---: | :---: | :---: | :---: |
|  | The Front Shape | Domed | Domed | Domed |
|  | Teminal Type | Pin Terminal ( $2.8 \times 0.5 \mathrm{~mm}$ ) | Pin Terminal $(2.8 \times 0.5 \mathrm{~mm})$ | Pin Terminal $(2.8 \times 0.5 \mathrm{~mm})$ |
|  | Swith Type | $X \quad$ Twoteminal breakpoints slow moving cortict | $X \quad$ Twoterninal breakpoints stow moving contact | Twoterinid breakoints sow moving contact |
|  | Switch Specificaions | 2A/36VDC | 2A/36VDC | 2A/36VDC |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
|  | Insulation Resistance | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
|  | Dielectric Strengh | 2000 VAC | 2000 VAC | 2000 VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Life | $100>1,000,000$ times | $100 .>1,000,000$ times | $100>1,000,000$ times |
|  | Electrical Life | $20>200,000$ times | 20 >200,000 times | 20 >200,000 times |
|  | Panel Thickness | 1~10 mm | 1~10mm | $1 \sim 10 \mathrm{~mm}$ |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | About 4 N | About 4 N | About 4 N |
|  | Operating Stroke | About 1.8 mm | About 1.8 mm | About 1.8 mm |
|  | Protection Degree | IP65,IK09 | IP65,IK09 | IP65,IK09 |
|  | Contact | Silver Alloy | Silver Alloy | Silver Alloy |
|  | Button | CD tainess Sieel: MirrorSurace, CDPattern | CD tainessSieel: Miror Sutace, CDPatiem | CD tainless Steel: Miror Suriace, COPatiem |
|  | Case | CD $\quad \begin{aligned} & \text { tariess SSeet: Minvo Surface, CD Patien } \\ & \text { Nickel-plated Brass }\end{aligned}$ |  |  |
|  | Base | PBT | PBT | PBT |
|  | RoHS | Can be made to order | Can be made to order | Can be made to order |

Page 21

## Relíance ${ }_{\text {UU North America }}$

The Smarter Alternative
YXGQ19
(c) YXGQ19-EM/ $\triangle / \mathbf{/} /$

(c) $\mathrm{YXGQ} 19-\mathrm{EM} / \mathrm{J} / \triangle / \mathbf{\Delta} /$


|  | Specificaions | YXGQ19-EM/ $\triangle /$ / |
| :---: | :---: | :---: |
|  | The Front Shape | Flat Round with holes |
|  | Temminal Type | Screw Terminal |
|  | Switch Type | -- |
|  | Swith Specifications | -- |
|  | Contact Resistance | -- |
|  | Insulation Resisitance | -- |
|  | Dielectric Stength | 2000 VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Lite | -- |
|  | Electrical Life | -- |
|  | Panel Thickness | 1~10mm |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | -- |
|  | Operating Stroke | -- |
|  | Protection Degree | IP50,IK04 |
|  | Contact | -- |
|  | Button | Stainless Steel |
|  | Case | Stainless Steel |
|  | Base | PBT |
|  | RoHS | Can be made to order |
|  | Type | Buzzing/Buzzer with illumination |
|  | Rated Voltage | DC12V/DC24V |
|  | Lamp Color | $R$ G Y O B W |
|  | Sound Intensity | $\geqslant 85 \mathrm{~dB}(1 \mathrm{~m})$ |

## Reliance［⿹勹巳U North America

The Smarter Alternative
YXGQ19

## （2）YXGQ19F－10E／J／$\triangle / \mathbf{A} / \mathrm{O}$



（）YXGQ19P－10E／J／$\triangle / \mathbf{L} / T$


|  | Spectications | YXGQ19F－10E／J／$\triangle / \mathbf{/ L} / \bigcirc$ |  |  |  | YXGQ19P－10E／J／$\triangle / \mathbf{/ L} / \mathrm{T}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Teminal Type | Pin Terminal（ $2.8 \times 0.5 \mathrm{~mm}$ ） |  |  |  | Pin Terminal（ $2.8 \times 0.5 \mathrm{~mm}$ ） |  |  |
|  | Switch Type | $\mathrm{X} \quad$ Two terminal breakpoints slow moving contact |  |  |  | X Two terminal breakpoints slow moving contact |  |  |
|  | Swith Specifications | 2A／36VDC |  |  |  | 2A／36VDC |  |  |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |  | $\leqslant 50 \mathrm{~m} \Omega$ |  |  |
|  | Insulation Resisitance | $\geqslant 1000 \mathrm{M} \Omega$ |  |  |  | $\geqslant 1000 \mathrm{~m} \Omega$ |  |  |
|  | Dielectric Strengh | 2000 VAC |  |  |  | 2000 VAC |  |  |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |  | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |  |
|  | Mechanical Lite | 100 | $>1,000,000$ times |  |  | 100 | $>1,000,000$ times |  |
|  | Electrical Life | 20 | ＞200，000 times |  |  | 20 | ＞200，000 times |  |
|  | Panel Thickness | 1 $\sim 10 \mathrm{~mm}$ |  |  |  | $1 \sim 10 \mathrm{~mm}$ |  |  |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ |  |  |  | $5 \sim 14 \mathrm{Nm}$ |  |  |
|  | Operating Pressure | About 4 N |  |  |  | About 4 N |  |  |
|  | Operating Stroke | About 1.8 mm |  |  |  | About 1.8 mm |  |  |
|  | Protection Degree | IP65，IK08 |  |  |  | IP65，IK08 |  |  |
|  | Contact | Silver Alloy |  |  |  | Silver Alloy |  |  |
|  | Button | CD Stainless Steel：Mirror Suriace，CDPattern |  |  |  |  | CD Staine | Suface，CDPatten，Zn－al Alloy |
|  | Case | Stainless Steel，Nickel－plated Brass |  |  |  |  | Stainless Steel，Nickel－plated Brass，Zn－al Alloy |  |
|  | Base | PBT |  |  |  | PBT |  |  |
|  | RoHS | Can be made to order |  |  |  | Can be made to order |  |  |
|  | Type | Ring－illumination（LED） |  |  |  | Ring－illumination（LED） |  |  |
|  | Rated Votage | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |  | $2 \mathrm{~V} / 6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 36 \mathrm{~V}$ |  |  |
|  | Color | $R$ G $Y$ O $W$ |  |  |  | $R$ G $Y$ O B W |  |  |
|  | Life | 50000小时Hours |  |  |  | 50000 Hours |  |  |
| Current Limiting Resistor <br> Configuration Table <br> （Recommended Value） |  | I | Rated Votage U | 6 V | 12 V | 24 V | 36 V | Formula |
|  |  | Current Lemining | $\begin{aligned} & R Y O \\ & G B W \end{aligned}$ | $210 \Omega, 1 / 4 \mathrm{~W}$ $160 \Omega, 1 / 4 \mathrm{~W}$ | $510 \Omega, 1 / 2 \mathrm{~W}$ $460 \Omega, 1 / 2 \mathrm{~W}$ | $1.2 \mathrm{k} \Omega, 3 / 4 \mathrm{~W}$ $1.2 \mathrm{~K} \Omega, 3 / 4 \mathrm{~W}$ | $2.2 \mathrm{~K} \Omega, 1 \mathrm{~W}$ $2.2 \mathrm{~K} \Omega, 1 \mathrm{~W}$ | $\mathrm{R}=\frac{\mathrm{U}-\mathrm{Ue}}{\mathrm{Ie}}$ |

Page 23

# Reliance［⿹勹巳U North America 

## （c）YXGQ22B－10／O



|  | （）Mounting Hole Size：$\square^{2} 2 \mathrm{~mm}$ |
| :---: | :---: |
| （1） |  |
|  | Switch Rating：2A36VDC |
| © | Contact Configuration：1NO |
| © |  |
|  | Operation Type：Momentary |
|  | The Front Shape：Domed |
| （1） | The Cust Material：Stariess Steel，Nockel－piated Brass or God－phted Brass |
| （1） |  |
|  | Protection Degree：IP65，1K09 |


（）YXGQ22F－10／0
Flat round button


（ㄷ）YXGQ22H－10／O


|  | Specifications |
| :---: | :---: |
|  | The Front Shape |
|  | Temminal Type |
|  | Switch Type |
|  | Switch Specifications |
|  | Contact Resistance |
|  | Insulation Resistance |
|  | Dielectic Strength |
|  | Operating Temperature |
|  | Mecharical Life |
|  | Electrical Life |
|  | Panel Thickness |
|  | Torque |
|  | Operating Pressure |
|  | Operating Stroke |
|  | Protection Degree |
|  | Contact |
|  | Button |
|  | Case |
|  | Base |
|  | RoHS |


| YXGQ22B－10／O |  |
| :---: | :---: |
| Domed |  |
| Screw Terminal |  |
| X | Twotertinal breakpoits slow movingoritact |
| 2A／36VDC |  |
| $\leqslant 50 \mathrm{~m} \Omega$ |  |
| $\geqslant 1000 \mathrm{M} \Omega$ |  |
| 2000 VAC |  |
| $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |  |
| 100 | ＞1，000，000 times |
| 20 | ＞200，000 times |
| $1 \sim 10 \mathrm{~mm}$ |  |
| $5 \sim 14 \mathrm{Nm}$ |  |
| About 4 N |  |
| About 1.8 mm |  |
| IP65，IK09 |  |
| Silver Alloy |  |
| CD tainless Steel：MirooSuriace，COPatiem |  |
| tarless Siee：Mirtor Surface，CD Pattern Nickel－plated Brass |  |
| PBT |  |
| Can be made to order |  |


| YXGQ22F－10／O | YXGQ22H－10／0 |
| :---: | :---: |
| Domed | Domed |
| Screw Terminal | Screw Terminal |
| $X \quad$ Twoterminal beakpoints sour movingonlact | $X$ Twotermiral beedkpoits slow moirgacorlad |
| 2A／36VDC | 2A／36VDC |
| $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
| $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
| 2000 VAC | 2000VAC |
| $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| $100>1,000,000$ times | $100>1,000,000$ times |
| $20>200,000$ times | $20>200,000$ times |
| $1 \sim 10 \mathrm{~mm}$ | $1 \sim 10 \mathrm{~mm}$ |
| $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
| About 4 N | About 4 N |
| About 1.8 mm | About 1.8 mm |
| IP65，1K09 | IP65，IK09 |
| Silver Alloy | Silver Alloy |
| CD tainless Steel：Miroo Suriace，CDPattem | CD tainless Steel：Miroo Suricee，COPatiern |
| larless Sied：Mirur Surface，CDPatem Nekel－plated Brass | CDtariess Siet：Mincu Surase，COPatem <br> Nickel－palec Brass |
| PBT | PBT |
| Can be made to order | Can be made to order |

Page 24

# Reliance［⿹勹巳U North America 

## （c）YXGQ22B－10／J／O

Domed button


（c）YXGQ22F－10／J／O
Flat round button



## （c）YXGQ22H－10／J／O

High round switch



|  | Specificaions | YXGQ22B－10／J／O | YXGQ22F－10／J／O | YXGQ22H－10／J／O |
| :---: | :---: | :---: | :---: | :---: |
|  | The Front Shape | Domed | Domed | Domed |
|  | Teminal Type | Pin Terminal $(2.8 \times 0.5 \mathrm{~mm})$ | Pin Terminal $(2.8 \times 0.5 \mathrm{~mm})$ | Pin Terminal $(2.8 \times 0.5 \mathrm{~mm})$ |
|  | Swith Type | $X \quad$ Twoteminal beakpoits stow movingocriact | X Twoterminal veakpoits slow moving crict | X Twoteminal beakpoirs stormovingocriact |
|  | Switch Specificaions | 2A／36VDC | 2A／36VDC | 2A／36VDC |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
|  | Insulation Resisitance | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
|  | Dielectric Strength | 2000VAC | 2000 VAC | 2000VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Life | $100>1,000,000$ times | $100>1,000,000$ times | $100>1,000,000$ times |
|  | Electrical Life | $20>200,000$ times | $20>200,000$ times | $20>200,000$ times |
|  | Panel Thickness | $1 \sim 10 \mathrm{~mm}$ | 1～10mm | 1～10mm |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | About 4 N | About 4 N | About 4 N |
|  | Operating Stoke | About 1.8 mm | About 1.8 mm | About 1.8 mm |
|  | Protecion Degree | IP65，IK09 | IP65，IK09 | IP65，IK09 |
|  | Contact | Silver Alloy | Silver Alloy | Silver Alloy |
|  | Button | CD｜ainless Sieel：Miror Suritace，CDPatiem | CD Iainless Steel：Mirro Suticee，CDPatiem | CD Iainless Steel：Miror Suriace，CDPatierm |
|  | Case |  |  | $\begin{array}{ll} \text { CD } \quad \text { tanless Sied: Mros Sitaxe, CDPatiem } \\ \text { Nckel-plated Brass } \end{array}$ |
|  | Base | PBT | PBT | PBT |
|  | RoHS | Can be made to order | Can be made to order | Can be made to order |

Page 25

## Reliance UUU North America $^{\text {a }}$

## (©) YXGQ22M-10/ $\triangle / \Delta / \star$

Mushroom switch NNEW


(ㄱ) YXGQ22M-10/J/ $\star$


|  | Specificaions | YXGQ22M-10/ $/$ / $/$ / * | YXGQ22M-10/J/ ${ }^{\text {/ }}$ |
| :---: | :---: | :---: | :---: |
|  | The Front Shape | Mushroom | Mushroom |
|  | Teminal Type | Screw Terminal | Pin Terminal ( $2 \times 0.5 \mathrm{~mm}$ ) |
|  | Swith Type | X Two terminal breakpoints slow moving contact | X Two terminal breakpoints slow moving contact |
|  | Swith Specificaions | 2A/36VDC | 2A/36VDC |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
|  | Insulation Resistance | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
|  | Dielectric Strength | 2000 VAC | 2000 VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Lite | $100>1,000,000$ times | $100>1,000,000$ times |
|  | Electrical Lite | $20>200,000$ times | $20>200,000$ times |
|  | Panel Thickness | 1~10mm | 1 $\sim 10 \mathrm{~mm}$ |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | About 4 N | About 4 N |
|  | Operating Stroke | About 1.5 mm | About 1.5 mm |
|  | Protection Degree | IP65,IK08 | IP65,IK08 |
|  | Contact | Silver Alloy | Silver Alloy |
|  | Button | Zn -al Alloy (Colorful head) | Zn -al Alloy (Colorful head) |
|  | Case | Zn -al Alloy (Silver white) | Zn -al Alloy (Silver white) |
|  | Base | PBT | PBT |
|  | RoHS | Can be made to order | Can be made to order |

## Reliance ${ }_{\text {UUU North America }}$

The Smarter Alternative
YXS2GQ Series
(1) Model Explanation

| YXS2 | GQ | $\star$ | $\square$ | $\diamond$ | ■ | $\triangle$ | - | 1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series <br> Number | Modified <br> Code | The Front Shape <br> F <br> Flat Round <br> H <br> High Round <br> C <br> Concave Round <br> G <br> High-concave <br> Round | Contact Configuration 111NO1NC 222NO2NC | Lamp Type <br> D Dot <br> E Ring | Operation <br> Type <br> Z <br> Latching <br> Push Button <br> No letter means momentary push button | Color of lamp or colorful push button <br> R Red <br> G Green <br> Y Yellow <br> O Orange <br> B Blue <br> W White | Lamp Voltage AC/DC6V <br> AC/DC12V <br> AC/DC24V <br> AC/DC110V <br> AC/DC220V <br> Other voltage can be made to order | S: <br> Stainless Steel <br> N : <br> Nickel-plated Brass <br> A: <br> Zn -al Alloy |  | of Colorful button's d or Case <br> Red <br> Green <br> Yellow <br> Orange <br> Blue <br> White <br> Black |

Note: Please carefully read the product specification, then select the appropriate code according to different symbols in the table.
© LED Lamp Specifications


Note: For unidirectional DC LED lamp can be custom made; other voltage specifications can be special made.
(0) Switch Structure Explanation

| Type | Co |
| ---: | ---: |
| Diagram | NO |
| Symbol | CO |
| Explanation | NO |

() Pin Description


Lamp Pin
Can be configured up to two sets of switches.
C1, NO1, NC1 C2, NO2, NC2
C1, NO1, NC1 and C2, NO2 , NC2, are a set of switches respectively;
Pin C is utility pin and pin NO is normally open pin, pin NC is normally closed;
,+- pins are LED lamp pins, normal lamp configuration has no difference between positive and negative ;

LED and switch pin are separated,but switch and external circuit can control the LED state by connecting the LED pin.
© Installation Effect Preview


Page 27

# Reliance ${ }_{\text {UUJ North America }}$ 

The Smarter Alternative
YXS2GQ
() YXS2GQF- $\square \square / \bigcirc$

(C) YXS2GQF- $\square$ D $\square / \triangle / \Delta / \bigcirc$

(e) YXS2GQF- $\square E \square / \triangle / \Delta /($

() YXS2GQH- $\square$ (O)

(®) YXS2GQH- $\square \square D / \triangle / \Delta /(0$
High round switch

## Reliance [⿶凵 North America

The Smarter Alternative
YXS2GQ
() YXS2GQH- $\square E \square / \triangle / \mathbf{L} / O$
Ring-illumination high round switch
© YXS2GQF- $\square E \square / \triangle / \Delta / \bigcirc$

() YXS2GQC- $\square$ (O)

() YXS2GQF- $\square$ (O/T

(1) YXS2GQF- $\square$ (O)


# Reliance ${ }_{\text {UU }}$ North America 

The Smarter Alternative
YXS2GQ
() YXS2GQF- $\square$ D■/ $\triangle / \mathbf{A} /$ ©

(c) YXS2GQF- $\square E \square / \triangle / \mathbf{A}$ (O)

() YXS2GQF- $\square E T$ [/ $\triangle / \mathbf{A} / \bigcirc$
Ring-illumination Switch
() YXS2GQF- $\square \square /(0$

(๑) YXS2GQF- $\square$ D■/ $\triangle / \mathbf{A} /$ (O)


# Reliance ${ }_{\text {UUU North America }}$ 

(1) YXS2GQF- $\square E \square / \triangle / \mathbf{A}$ (O)

(1) YXS2GQF- $\square E T \square / \triangle / \mathbf{A} / \bigcirc$


Page 31

## Relíance 包North America

The Smarter Alternative
YXS1GQ Series
© Model Explanation

| YXS1 | GQ | $\square$ | $\diamond$ | ■ |  | $\triangle$ | A | (0) | * |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series Number | Modified Code | Contact Configuration 11 1NO1NC | Lamp Type <br> D Dot <br> E Ring | Operation Type <br> Z <br> Latching Push Button <br> No letter means momentary push button | Terminal Type L Screw Terminal <br> No letter means pin terminal | Color of lamp  <br> R Red <br> G Green <br> Y Yellow <br> O Orange <br> B Blue <br> W White | Lamp Voltage AC/DC6V AC/DC12V AC/DC24V AC/DC110V AC/DC220V <br> Other voltage can be made to order | Crust Material <br> S <br> Stainless Steel <br> A <br> Zn -Al Alloy | Color of Colorful push button's head or Case <br> R Red <br> G Green <br> Y Yellow <br> 0 Orange <br> B Blue <br> N Black |

Note: Please carefully read the product specification, then select the appropriate code according to different symbols in the table.
© LED Lamp Specifications

| Lamp Type | Bi-directional LED lamp (Universal Current) |  |  |  | Adopting Universal Current LED lamp, terminal has no differentiate between positive and negative; LED has built-in protection resistors, no need external connection. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rated Voltage | AC/DC6V | AC/DC12V | AC/DC110V |  |  |
|  | AC/DC24V | AC/DC36V | AC/DC220V |  |  |
| Rated Current |  | mA | about 3 mA |  |  |
| Color |  | G Y |  |  |  |
| Lifetime | 50000 | Hours ( | value) |  |  |

(1) Switch Structure Explanation

(c) Pin Description
NC: pin1, pin2 is normally closed contact NC.
4, - pins are LED lamp pins, normal lamp configuration has
no differentiate between positive and negative ;
LED and switch pin are separated, but switch and external
circuit can control the LED state by connecting the LED pin.

Installation Effect Preview


## Reliance［⿹勹巳U North America

## （c）YXS1GQ－11■／O




（c）YXS1GQ－11■／L／O


|  | Specifications | YXS1GQ－11㐌／O | YXS1GQ－11畧／L／ |
| :---: | :---: | :---: | :---: |
|  | The Front Shape | Flat Round | Flat Round |
|  | Teminal Type | Pin Terminal $(2.8 \times 0.5 \mathrm{~mm})$ | Screw Terminal |
|  | Switch Type | Za | Za |
|  | Switch Specifications | Ith：5A Ui：250VAC | Ith：5A Ui：250VAC |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
|  | Insulation Resistance | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
|  | Dielectric Strength | 2000 VAC | 2000 VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Life | $100>1,000,000$ times | $100>1,000,000$ times |
|  | Electrical Life | $5>200,000$ times | $5>200,000$ times |
|  | Panel Thickness | $1 \sim 10 \mathrm{~mm}$ | 1～10mm |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | about 4 N | about 4 N |
|  | Operating Stroke | about 2.5 mm | about 2.5 mm |
|  | Protection Degree | IP65 ，IK09 | IP65 ，IK09 |
|  | Contact | Silver Alloy | Silver Alloy |
|  | Button | Stainless Steel | Stainless Steel |
|  | Case | Stainless Steel | Stainless Steel |
|  | Base | PC | PA |
|  | RoHS | Can be made to order | Can be made to order |

Page 33

## Reliance［⿹勹巳U North America

## （c）YXS1GQ－11D■／D／A／O

Dot－illumination Switch

```
（c）Mounting Hole Size：\(\Phi 19 \mathrm{~mm}\)
（c）Switch Rating：5A／250VAC
（）Contact Configuration：1NO1NC
Operation Type：Momentary
（c）Crust Material：Stainless Steel
© Illuminated Type：Dot
（0）Protection Degree：IP65，IK09
```


（c）$Y X S 1 G Q-11 E \square / \triangle / \Delta / O$
Ring－illumination Switch
Mounting Hole Size：$\Phi 19 \mathrm{~mm}$
Switch Rating．5A／250VAC
Contact Configuration：1NO1NC
Operation Type：Momentary
Crust Material：Stainless Steel
illuminated Type：Ring
Protection Degree：IP65，IK09


Page 34

## Reliance［⿹勹巳U North America

## （c）$Y$ XSS1GQ－11D■／$/ \triangle / \Delta /$ ©



```
(`) Mounting Hole Size:Ф19mm
(-) Switch Rating:5A/250VAC
(-) Contact Configuration:1NO1NC
(%)Operation Type:Momentary/Latching
(0) Crust Matenal:Stainless Steel
(1) lluminated Type:Dot
(())Protection Degree:IP65,IK09
```


（c）$Y X S$ SGQ－11E■／L／$\triangle / \Delta /$（O）


```
(c)Mounting Hole Size:ه 19mm
Switch Rating:5A/250VAC
Contact Configuration:1NO1NC
Operation Type:Momentar/Latching
Crust Material:Stainless Steel
Illuminated Type:Fing
Protection Degree:IP65,IK09
```



|  | Specilications | YXS1GQ－11DE／L／$/ \mathbf{/ 4 / O}$ | YXS1GQ－11ER／L／$/$／／$/ \bigcirc$ |
| :---: | :---: | :---: | :---: |
|  | The Front Shape | Flat Round | Flat Round |
|  | Terminal Type | Screw Terminal | Screw Terminal |
|  | Switch Type | Za | Za |
|  | Switch Specifications | Ith：5A Ui：250VAC | Ith：5A Ui：250VAC |
|  | Contact Resistance | $\leqslant 50 \mathrm{~m} \Omega$ | $\leqslant 50 \mathrm{~m} \Omega$ |
|  | Insulation Resistance | $\geqslant 1000 \mathrm{M} \Omega$ | $\geqslant 1000 \mathrm{M} \Omega$ |
|  | Dielectric Strength | 2000VAC | 2000 VAC |
|  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
|  | Mechanical Life | $100>1,000,000$ times | $100>1,000,000$ times |
|  | Electrical Life | $5>200,000$ times | $5>200,000$ times |
|  | Panel Thickness | 1～10mm | 1～10mm |
|  | Torque | $5 \sim 14 \mathrm{Nm}$ | $5 \sim 14 \mathrm{Nm}$ |
|  | Operating Pressure | about 4 N | about 4 N |
|  | Operating Stroke | about 2.5 mm | about 2.5 mm |
|  | Protection Degree | IP65 ，IK09 | IP65 ,IK09 |
|  | Contact | Silver Alloy | Silver Alloy |
|  | Button | Stainless Steel | Stainless Steel |
|  | Case | Stainless Steel | Stainless Steel |
|  | Base | PC | PC |
|  | RoHS | Can be made to order | Can be made to order |
|  | Type | Dot illumination（LED） | Ring－illumination（LED） |
|  | Rated Votage | $6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 110 \mathrm{~V} / 220 \mathrm{~V}$ | $6 \mathrm{~V} / 12 \mathrm{~V} / 24 \mathrm{~V} / 110 \mathrm{~V} / 220 \mathrm{~V}$ |
|  | Color | $R$ G $Y$ B W | $R$ G P O W W |
|  | Life | 50000 Hours | 50000 Hours |

Page 35

## Reliance North America

30 Gick Road
Saratoga Springs, NY 12866
518.393.6911
information@RelianceNorthAmerica.com
www.RelianceNorthAmerica.com


[^0]:    1. Filled voltage in $\square$, color in $\boldsymbol{\Delta}$
    2. Use L1 dimension for typr of $22 \mathrm{~B}, ~ 22 \mathrm{C}, ~ 22 \mathrm{D}, ~ 22 \mathrm{~K}$ when power supply is less than 48 V, Use L 2 dimension for typr of 22B, 22C, 22D, 22K when power supply is more than
[^1]:    Note: Due to we couldn't get full information from the appearance, such as voltages, parameters and the switch with or without light, so the full model please refer to models based on the actual needs and the definition and parameters of table selection.

[^2]:    Page 09

[^3]:    Page 11

[^4]:    Page 19

