NO:2024.01

CHINT ELECTRICS

# NP8 Series Pushbutton

# User Instruction

Standard:IEC/EN 60947-5-1

# Safety Warning

1. Only professional technicians are allowed for installation and maintenance.
2. Installation in any damp, condensed-phase environment with inflammable and explosive gas is forbidden.
3. When the product is being installed or maintained, the power must be switched off.
4. You are prohibited from touching the conductive part when the product is operating.

This is the general warning sign. It is used to alert the user to potential hazards. All safety messages that follow this sign shall be obeyed to avoid possible harm.

# 1 Use Purpose

NP8 series pushbutton is used in industrial control circuit with frequency of AC 50Hz (or 60Hz), rated operating voltage up to 415V or DC operating voltage up to 250V. It is used to control electromagnetic starter, contactor, relay and other electrical circuits. Pushbutton with indicator is also suitable for applications that need signal light indication.

# 2 Main Technical Parameters

**Table 1 Environmental conditions and main technical parameters**

| | | | | | | |
|---|---|---|---|---|---|---|
| Environmental conditions | Ambient temp. (℃) | -5℃~+40℃, average temperature should not exceed +35℃ within 24h | | | | |
| | Hot and humid atmospheric | Relative humidity should not exceed 50% at +40℃; up to 90% at +20℃ | | | | |
| | Altitude | No influence below 2000m | | | | |
| | Pollution class/installation category | Class 3/II | | | | |
| Technical parameters | Application category | AC-15 | | | DC-13 | |
| | Rated operating voltage $U_e$(V) | 415 | 240 | 120 | 250 | 125 |
| | Rated operating current $I_e$(mA) | 1.9 | 3 | 6 | 0.27 | 0.55 |
| | Rated insulation voltage $U_i$(V) | 690 | | | | |
| | Conventional thermal current $I_{th}$(A) | 10 | | | | |
| | Rated impulse withstand voltage $U_{imp}$(kV) | 6 | | | | |
| | Head protection class | IP65 | | | | |
| | Rated operating voltage of button with indicator $U_e$(V) | AC/DC 6, 12, 24, 36<br>AC 110~230 | | | | |
| | Mechanical life | 3 million times for flat type, mushroom type and button with indicator; 100000 times for knob type, self-locking type and key type | | | | |
| | Electrical life | AC 1 million times/DC 250000 times for flat type, mushroom type and button with indicator, 100000 times for knob type, self-locking type and key type | | | | |

**Table 1(Continued)**

| | | |
|---|---|---|
| | Conditional short-circuit current(A) | 1000 |
| | Model of matching fuse and Rated current of fuse (A) | gG and 16 |

# 3 Installation

1) See Figure 1 and Table 2 for overall dimensions.

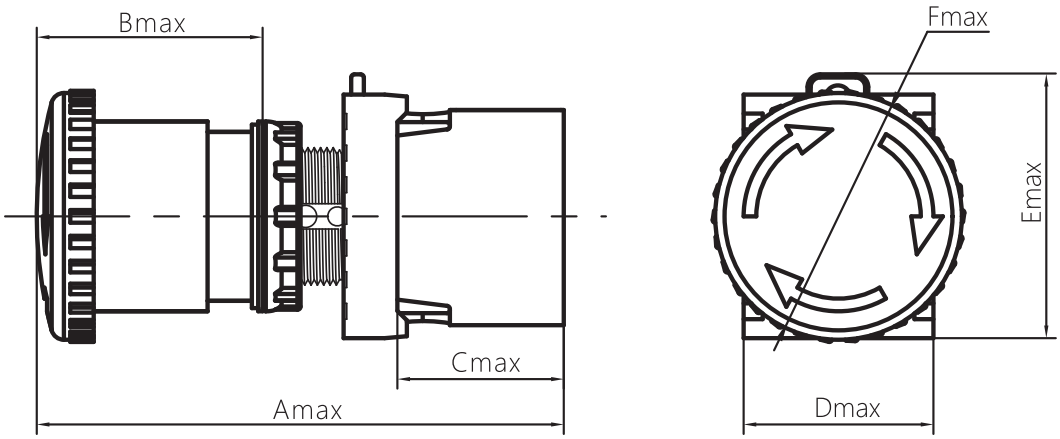



**Figure 1 Overall dimensions**

2) See Figure 2 for the driling dimensions of mounting panel.

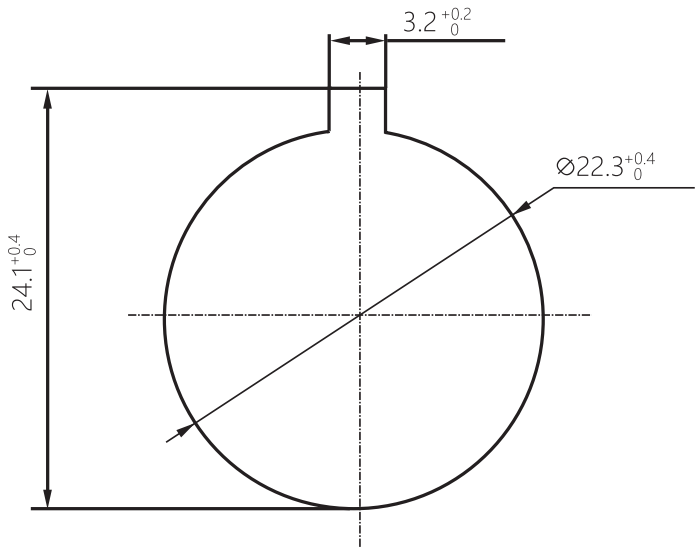



**Figure 2 the driling dimension of mounting panel**

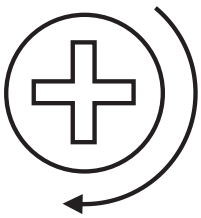
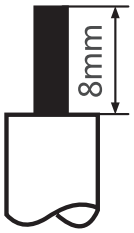
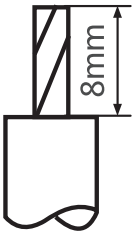
**Table 2 Overall dimensions**

Unit:mm

| Model | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| NP8-11BN ( BND ) | 60 | 12 | 27 | 31 | 43 | / |
| NP8-11GN ( GND ) | 67 | 19 | | | | / |
| NP8-11M ( MD ) | 75 | 27 | | | | Φ41/61 |
| NP8-11ZS | 83 | 35 | | | | Φ31/41/61 |
| NP8-11X ( XD ) | 76 | 28 | | | | / |
| NP8-11Y | 88 | 40 | | | | / |
| NP8-D | 62 | 14 | | | | / |
| NP8-11S(SD) | 60 | 12 | | | 55 | / |

3) See Table 3 for wire selection and tightening torque.

**Table 3 Wire selection and tightening torque**

| Terminal tightening torque N•m | Wire (Hard) mm² | Wire (Soft) mm² | Remarks |
|---|---|---|---|
|  |  |  | 1) Use hard wire or soft wire for a single connection. One terminal can connect up to two conductors with same sectional area and type;<br>2) Wire strip length: 8mm. |
| M3.5 0.8~1.2 | 2×(0.5~2.5) | 2×(0.5~2.5) | |

4) See Figure 3 - Figure 5 for assembly and disassembly drawings

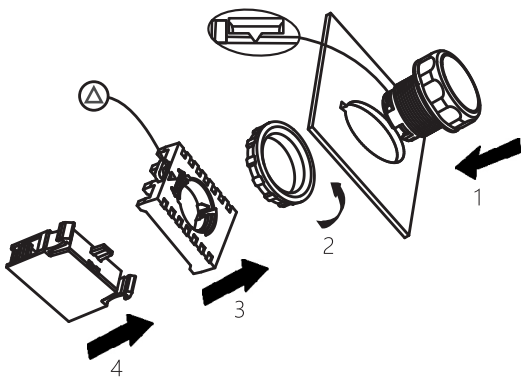



**Figure 3 Assembly process**

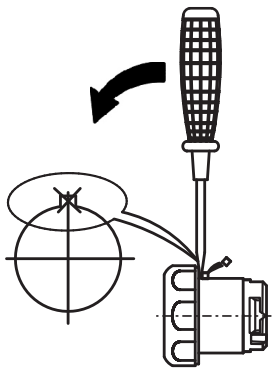


**Figure 4 Pry up the locking block**

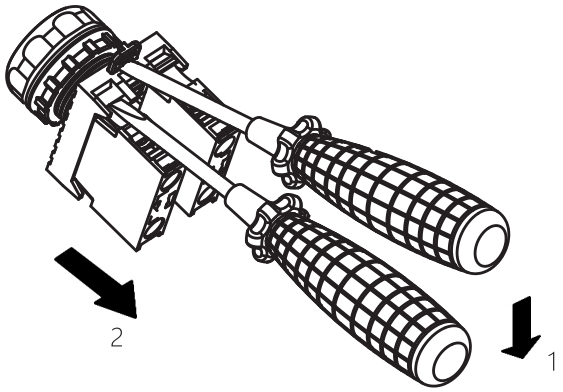



**Figure 5 Dismantle the contact assembly and operation head**

5) Selector Switches operation position table

**Table 4: Selector switches operation position**

| Selector Switches | Contacts | Positions | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| 2-Positions | | | - | × |
| | | × | - | |
| 3-Positions | | × | | |
| | | × | × | |

Note:" ×" indicates make-contact,blank indicates break-contact," -" ineicates without position.

# 4 Maintenance

Tighten the terminals of the button on a regular basis.

Tighten the fixing nuts of the button on a regular basis.

**Table 5 Analysis and Troubleshooting of Faults**

| Symptons | Cause analysis | Troubleshooting method |
|---|---|---|
| The actuator of the button cannot be fixed or pulled out | The installation direction of the actuator and central adapter is not correct. | Align the triangle part on the side of the actuator with the triangle part on the central adapter before putting it in, see Figure 3. |
| Screw slippage | The screws are overtightened. | Tighten the screws with specified torque. |
| No power, the light is off | Loose wire in the terminal. | Connect the wire properly. |

## 5 Environmental Protection

In order to protect the environment, the product or product parts should be disposed of according to the industrial waste treatment process, or be sent to the recycling station for assortment, dismantling and recycling according to local regulations.

CHINT

QC PASS

NP8 Series
Pushbutton
IEC/EN 60947-5-1

Check 35

Test date: Please see the packing

ZHEJIANG CHINT ELECTRICS CO., LTD.

CHINT ELECTRICS

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# Pushbutton
# User Instruction


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