

NPH1 Series
Pushbutton

User Instruction



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.
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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

NPH1 series button 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. Button 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. (°C)	-5°C~+40°C, average temperature should not exceed +35°C within 24h				
	Hot and humid atmospheric	Relative humidity should not exceed 50% at +40°C; up to 90% at +20°C;				
	Altitude	No influence below 2000m				
	Pollution class/installation	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 $U_s(V)$	AC/DC 6,12,24,36 AC 110~230				
	Mechanical life	1 million times for flat type and mushroom type; 100000 times for knob type, self-locking type and key type				
	Electrical life	AC 500000 times/DC 250000 times for flat type and mushroom type, 100000 times for knob type, self-locking type and key type				

Technical parameters	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 - Figure 3 for installation dimensions.



Figure 1 Installation dimensions of NPH1-10

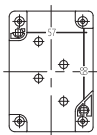


Figure 2 Installation dimensions of NPH1-20

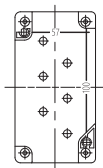


Figure 3 Installation dimensions of NPH1-30

2) See Figure 4 and Table 2 for overall dimensions.

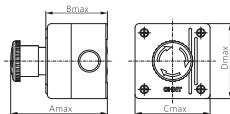


Figure 4 Overall dimensions




Table 2 Overall dimensions

Unit:mm

Model	A	B	C	D
NPH1-10 (J)	/	59	74	74
NPH1-20 (J)	/			106
NPH1-30 (J)	/			138
NPH1-1001~1004	71			74
NPH1-1005~1006	86			74
NPH1-1007~1008	87			74
NPH1-1009~1010	94			74
NPH1-1011	99			74
NPH1-2001~2004	71			106
NPH1-3001~3004	71			138
NPH1-3005~3006	73			138

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

Table 3 Wire selection and tightening torque

Terminal tightening torque N·m	Wire (Hard) mm ²	Wire (Soft) mm ²	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; 2) Wire strip length: 8mm.
M3.5 0.8~1.2	2× (0.5~2.5)	2× (0.5~2.5)	

4) See Figure 5 and Figure 6 for assembly and disassembly drawings.

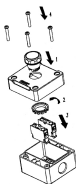


Figure 5 Assembly process

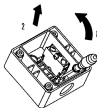


Figure 6 Disassembly drawing of the contact assembly

5) Selector Switches operation position table

Table 4: Selector switches operation position

Selector Switches	Contacts	Positions		
		1	2	3
2-Positions			-	x
		x	-	
3-Positions		x		
		x	x	

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

4 Maintenance

Tighten the terminals of the button on a regular basis.

Clean the surface of button box on a regular basis.

Table 5 Analysis and Troubleshooting of Faults

Symptoms	Cause analysis	Troubleshooting method
Case broken	Improper use of button inside the button box, and the button is used under greasy environment.	Use NP8 button or other button with plastic base. Clean the greasy dirt on the surface of button box on a regular basis.
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

NPH1 Series
Pushbutton
IEC/EN 60947-5-1

Check 37

Test date: Please see The packing

ZHEJIANG CHINT ELECTRICS CO., LTD.

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Pushbutton
User Instruction

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