

NU6- II G  
Surge Arrester

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# User Instructions

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## Safety Warning

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- ① This product is strictly prohibited from being installed in an environment where there are flammable or explosive gases or moisture or condensation. It is strictly prohibited to operate the product with wet hands.
- ② It is strictly prohibited to touch the conductive parts of the product when it is in operation.
- ③ Be sure to de-energize the line when installing and repairing the product.
- ④ The product must be wired and installed by qualified personnel and be checked regularly.
- ⑤ It is strictly prohibited for children to play with the product or packaging materials.
- ⑥ Prevent foreign objects from falling into the products.
- ⑦ Do not install the product in places where gaseous media can corrode metals and damage insulation.
- ⑧ When the product is installed and used, the wiring screws should be tightened, the wires should not be easy to loosen or pull out. The wires and the external disconnecter should be selected in strict accordance with the requirements.
- ⑨ When the indication window changes from green to red, please replace the product in time.
- ⑩ The surge protector with the maximum continuous working voltage of 275V and 320V is not applicable to the circuit with inductive load.

## 1 Purpose of Use

The NU6-IIIG surge arrester is suitable for single-phase/three-phase power distribution and control systems with a frequency of 50 Hz/60Hz and a rated voltage of 230V/400V. It meets the level II SPD test and is used to suppress transient overvoltage lower than the equipment withstand overvoltage and discharge surge energy to protect system circuits and equipment. Main features of the surge arrester: With the L-PE, N-PE and L-N protection modes, it is suitable for various power grid systems; with aging overheating protection and body degradation indication, it has a plug-in structure and the optional remote alarm function.

## 2 Key Technical Parameters

Table 1 Key Technical Parameters

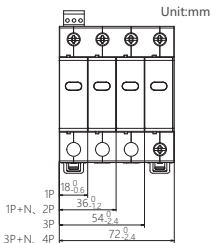
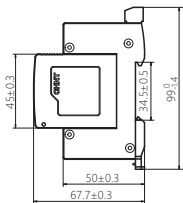
| No. | Maximum discharge current $I_{max}$ (8/20 $\mu$ s)kA | Maximum continuous working voltage $U_c$ V~ | Voltage protection level $U_p$ kV | Nominal discharge current $I_n$ (8/20 $\mu$ s)kA | External disconnector |
|-----|--|---|-----------------------------------|--|-----------------------|
| 1   | 40   | 275   | 1.5                               | 20   | Fuse<br>125A gL/gG    |
|     |  | 320   | 1.6                               |  |                       |
|     |  | 385   | 1.8                               |  |                       |
|     |  | 440   | 2.0                               |  |                       |
| 2   | 65   | 255 <sup>a</sup>                            | 1.5                               | 30   | Fuse<br>160A gL/gG    |
|     |  | 275   | 1.6                               |  |                       |
|     |  | 320   | 1.8                               |  |                       |
|     |  | 385   | 2.0                               |  |                       |
|     |  | 440   | 2.2                               |  |                       |
| 3   | 100  | 255 <sup>b</sup>                            | 1.8                               | 50   | Fuse<br>250A gL/gG    |
|     |  | 275   | 2.0                               |  |                       |
|     |  | 320   | 2.1                               |  |                       |
|     |  | 385   | 2.2                               |  |                       |
|     |  | 440   | 2.4                               |  |                       |

a:  $I_{max}$  is applicable for the 1P+N and 3P+N specification of 65 kA. The  $I_{max}$  is 65 kA for N-PE pole, 255 V for  $U_c$ , 1.5 kV for  $U_p$ , and 30 kA for  $I_n$

b:  $I_{max}$  is applicable for the 1P+N and 3P+N specification of 100 kA. The  $I_{max}$  is 100 kA for N-PE pole, 255 V for  $U_c$ , 1.8 kV for  $U_p$ , and 50 kA for  $I_n$

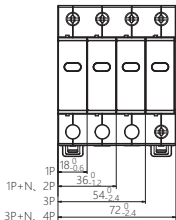
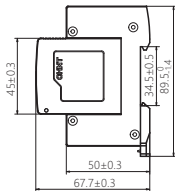
### 3 Installation

#### 1. Outline and installation dimensions

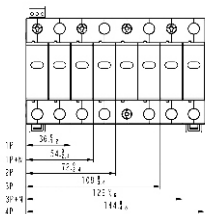
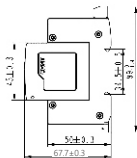


**NU6-IIG/F(40, 65kA)**

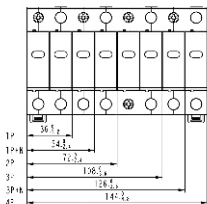
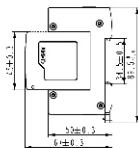
Unit:mm



NU6-IIG(40, 65kA)

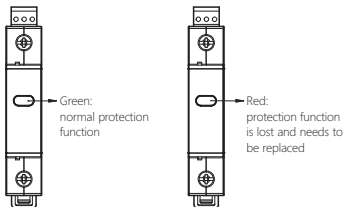


NU6-IIG/F(100kA)



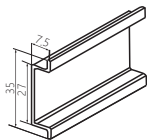
### Nu6-IIIG(100kA)

#### 2. On-off indication

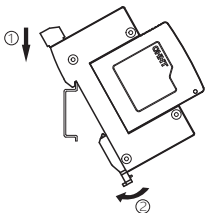


### 3. Installation

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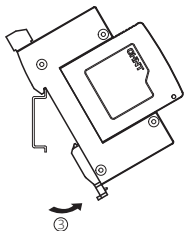
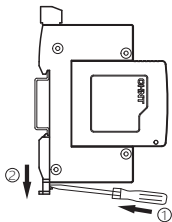


TH35-7.5 typ mounting rail



### 4. Disassembly

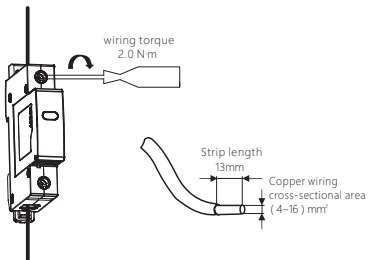
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## 5. Wiring: copper wires only

**Table 2 Copper wire cross-sectional area**

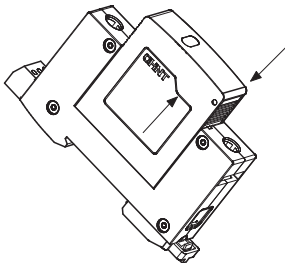
| Specification                    | Copper wire cross-sectional area (mm <sup>2</sup> ) |
|----------------------------------|---|
| L and N incoming lines of 40 kA  | 4   |
| L and N incoming lines of 65 kA  | 6   |
| L and N incoming lines of 100 kA | 10  |
| Ground line of 40 kA             | 6   |
| Ground line of 65 kA             | 10  |
| Ground line of 100 kA            | 16  |





## 4 Maintenance

- Regularly check whether the surrounding environment meets the normal operating conditions of the surge arrester;
- If the degradation indication window of the surge arrester protection module has turned red, it means that the product has degraded and should be replaced in time;



**Table 3 Analysis and troubleshooting of common faults**

| Symptoms       | Cause analysis   | Troubleshooting method                                    |
|----------------|--|---|
| Not protective | Unreliable ground, or large ground impedance   | Ground reliably, or reduce the ground impedance           |
|                | The working voltage of the surge arrester does not match the equipment being protected | Replace the product                                       |
|                | The surge arrester is too far away from the equipment being protected                  | Add a surge arrester within 30 m, or shorten the distance |
|                | Wiring is not tightened or loosens, resulting no power supply                          | Strip and tighten screws as required                      |

## **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.

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**CHINT**

**QC PASS**

NU6- II G  
Surge Arrester  
IEC/EN 61643-11

Check 51

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Test date: Please see The packing

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**ZHEJIANG CHINT ELECTRICS CO.,LTD.**

**CHINT**

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**NU6- II G**  
**Surge Arrester**  
**User Instructions**

**Zhejiang Chint Electrics Co., Ltd.**

Add: No.1, CHINT Road, CHINT Industrial Zone, North Baixiang,  
Yueqing, Zhejiang 325603, P.R.China

E-mail: [global-sales@chint.com](mailto:global-sales@chint.com)

Website: <http://en.chint.com>

