

CU-I+II、CU-II  
Surge Arrester

---

# User Instruction

---

## Safety Warning

---

- 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 indication window changes to red, please replace the product in time.

## 1 Purpose of Use

The CU-□ surge arrester complies with the IEC 61643-31 standard and it is suitable for low-voltage DC type communication systems. The SPD is used to suppress transient overvoltage amplitude and release surge energy, thereby shielding system circuits and load equipment.

The CU-I+II meets the SPD level I and level II tests and the CU-II meets the SPD level II test. The CU-□ has two protection modes of -48V - RTN and RTN - PE to provide more comprehensive protection. The indicator will turn red if it has degraded, and it will trip to prevent overheating and fire. The shell material of CU-□ is flame retardant, which meets UL 94 standards V-0 degree. The CU-□ adopts 1U plug-in structure, which can prevent the reverse insertion, and can add remote alarm function.

## 2 Conditions and Technical Parameters

Table 1 Conditions

Altitude	-500 m~3000 m	Working temperature	-45°C~+85°C
Pollution level	Level 2	Humidity	5%~95%
Installation category	Class II、Class III	Location of use	Indoor

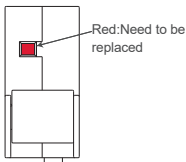
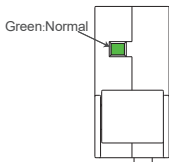
- **Installation conditions:** Under the conditions of meeting safety warnings, there should be no obvious shaking, impact, or vibration at the installation site.
- **Transportation and storage conditions:** The surge protector must not fall or be invaded by rainwater or corrosive gases during storage and transportation.

Table 2 Technical Parameters

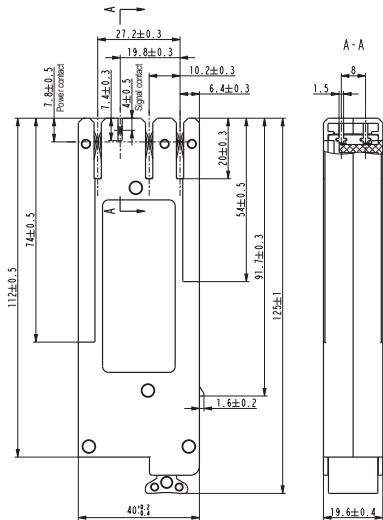
Product model	Protection mode	Maximum continuous working voltage U <sub>c</sub> V DC	Impulse discharge current I <sub>imp</sub> (10/350μs) kA	Nominal discharge current I <sub>n</sub> (8/20μs) kA	Maximum discharge current I <sub>max</sub> (8/20μs) kA	Voltage protection level U <sub>p</sub> V
CU-I-II 6.25CZ CU-I-II/F 6.25CZ	-48V - RTN	75	6.25	20	40	600
	RTN - PE	0	6.25	20	40	1000
CU-II 40CZ CU-II/F 40CZ	-48V - RTN	75	-	20	40	600
	RTN - PE	0	-	20	40	1000

### 3 Installation

#### 1. Status indication



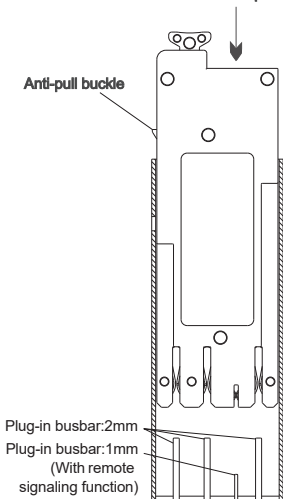
## 2. Dimensions and installation sizes(mm)



### 3. Installation

---

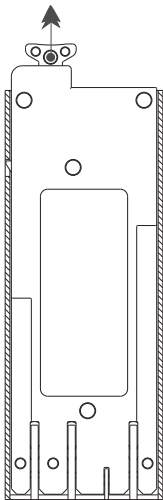
Insert into the cabinet and press to the bottom



## 4. Disassembly

---

**Pull out the handle and pull away from the cabinet**



## 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;
- When replacing the product, pull it out in the vertical direction and do not swing it left and right or up and down. Do not insert it forcefully if it is blocked, while the direction maybe wrong and need to be adjusted.

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

Symptoms	Reasons	Solutions
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 load equipment	Replace the product
	The surge arrester is too far away from the load equipment	Add a surge arrester within 30m, or shorten the distance
	Loose installation and no power supply	Check whether the installation position is correct



## 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.

---

**CHINT**

**QC PASS**

**CU-I+II, CU-II  
Surge Arrester  
IEC/EN 61643-31**

Check 51

---

Test date: Please see The packing

---

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

---

**CHNT**

CHINT ELECTRICS

CU-I+II、 CU-II  
Surge Arrester  
User Instruction

**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>

