

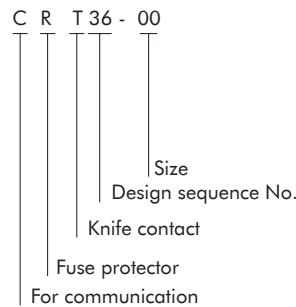


## CRT36-00 DC Fuse Protector

### 1.General

CRT36-00 DC fuse protector is applicable to DC circuit with rated voltage not more than DC80V, rated current not more than 600A and rated short-circuit capacity not more than 25kA for short-circuit protection. Its base materials are DMC resin and T3 red copper; its main material is high-frequency electric porcelain and T3 red copper. CRT36-00 series is a fuse protector series with miniaturization, large capacity, low power consumption and high limit flow capacity, specially designed by Chint Group for communication industry power supply cabinet, power distribution cabinet and other power distribution system in communication industry. Such series fuse protector has passed through serious test of well-known manufactures in communication industry. Breaking scope and use categories: gS. It conforms to GB/T 13539.4, IEC 60269-4 and EU RoHS environmental protection requirements and has obtained CCC, TUV and other domestic and international certification.

### 2.Type designation



### 3. Normal operating conditions and installation conditions

**3.1 Ambient temperature:** The ambient temperature does not exceed 40°C, of which average value measured over 24h does not exceed 35°C, and average value measured over one year is lower than this value; the lowest value of the ambient air temperature is -5°C.

**3.2 Atmospheric conditions:** The air is clean, with relative humidity not exceeding 50% when the maximum temperature is 40°C. Higher relative humidity is possible when the temperature is lower. For example, at 20°C, the relative humidity can attain 90%. Measures are taken against condensation on the product body due to temperature variation.

**3.3 Class of pollution:** Class III

**3.4 Installation category:** Class III

**3.5 Installation conditions:** The fuse should be installed in places free of significant shaking and shock vibration.

**3.6 Altitude:** See the table below for correction coefficients of operating current at different altitudes:

Altitude	≤2000m	2000m~3000m	≤3000m	Example
Current correction factor	1	0.9	0.8	Product with rated current of 10A at altitude of 2500m The rated current after derating is 0.9X10=9A

**3.7** If the operating conditions of fuse are different from those in the above table, please consult with the manufacturer.

#### 4. Technical data

##### 4.1 Main technical parameters (See Table 1)

Table 1

Type specification	Rated voltage(V)	Breaking capacity(kA)	Rated dissipation power(W)	Temperature rising(K)	Rated current(A)
CRT36-00	80	25	≤30	≤70	2,4,6,10,16,20,25,32,35,40,50,63,80,100,125,160,200,224,250,300,315,355,400,425,500,600

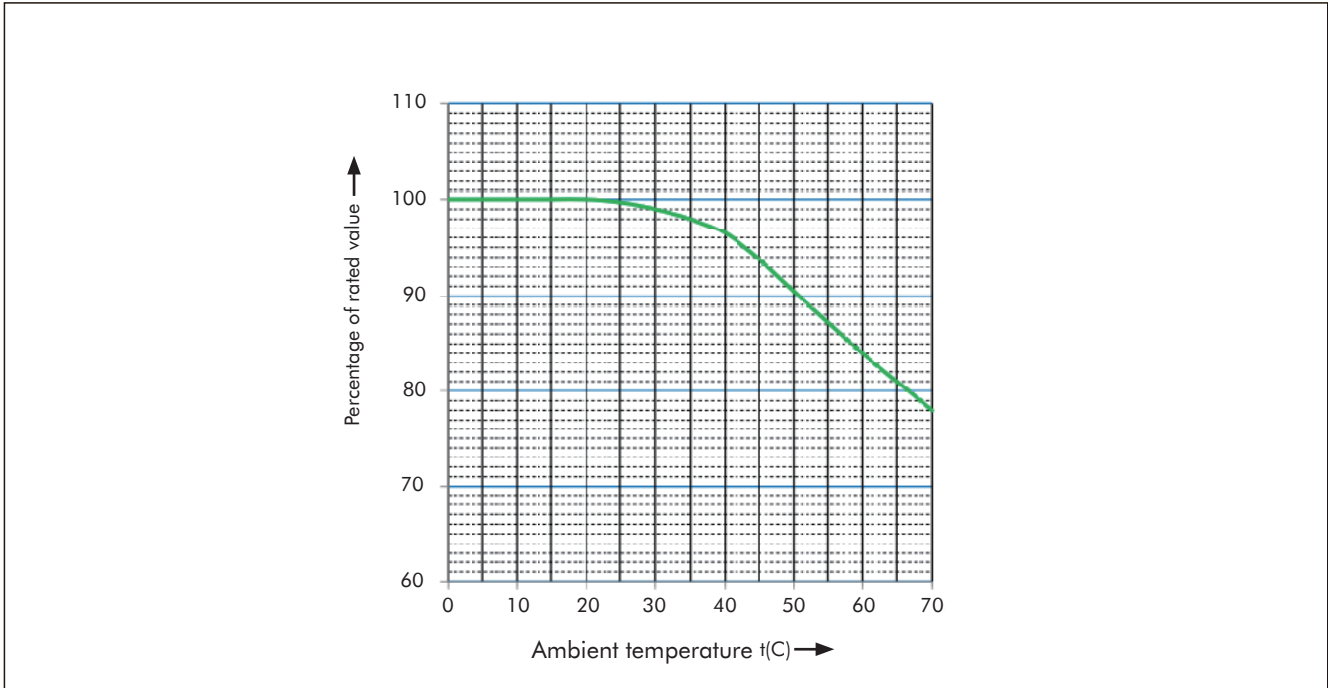
##### 4.2 Size code of pedestal and electric mechanical parameters (see Table 2)

Table 2

Specifications and models of pedestal	CRT36-00 160A	CRT36-00250A	CRT36-00 600A
Adapted fuse-link tube No.	00	00	00
Rated current(A)	2A~160A	200A~250A	300A~600A
Rated voltage(V)	DC80V	DC80V	DC80V
Connection thread size	M8	M8/M10	M10/M12
Tightening torque of connection bolt(N.m)	11	11/21	21/38
Recommended copper conductor cross-section	70	120	400

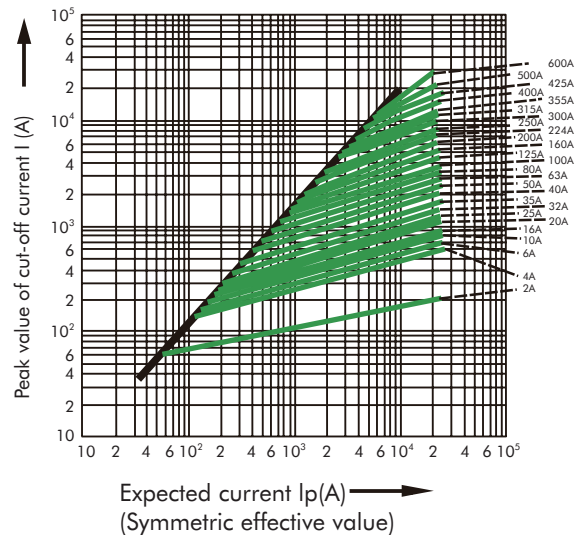
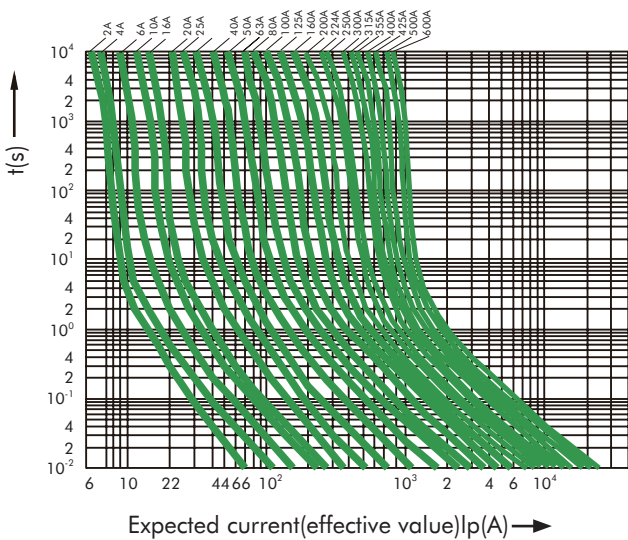
4.3 Use at lower capacity At 20 °C Ambient temperature, the recommended actual working current of fuse link shall not be more than rated current. Changes in environment and working conditions, such as sealing degree, air flow, connecting cable size (length, cross section), instantaneous peak value shall be taken into account when selecting fuse link. Test for current bearing capacity of fuse link is done at 20 °C Ambient temperature and fuse link will be affected by changes in Ambient temperature in actual use. The higher Ambient temperature, the higher working temperature and shorter service life of fuse link will be. To the contrary, running at lower temperature will extend the service life of fuse link. Normal working condition: -5 °C ~ 40 °C. The fuse works under normal conditions and does not require additional corrections. Allowable working condition: -35 °C ~ 70 °C. When the fuse works below -5 °C, the pre-arc time of the fuse's low multiplication overload-overcurrent is slightly extended, and the rated current is slightly increased. Generally, there is no need to increase the rated current of the fuse. When the fuse works above 40 °C, the rated current needs additional correction. The following figure is the typical curve of impact of Ambient temperature on current bearing capacity.

Ambient temperature-bearing capacity curve



For example: When the Ambient temperature at a service site is 20°C and select a (gS) fuse link with rated current of  $I_n=63A$ , the above fuse link shall be used at lower capacity under the high temperature of 70°C. Curve A in the figure at left side shows that the percentage of running rated value is 0.78 when the temperature is 70°C. In order to prevent fuse link from occurring misoperation, re-selection of rated current ( $I_n=63A/0.78 = 80.77A$ ) of such fuse link is required: select  $I_n=80A$  according to standard current class of fuse link.

4.4 Characteristic curve



### 5. Overall and mounting dimensions

Fig. 1: CRT36-00 160A Pedestal appearance and installation dimensions

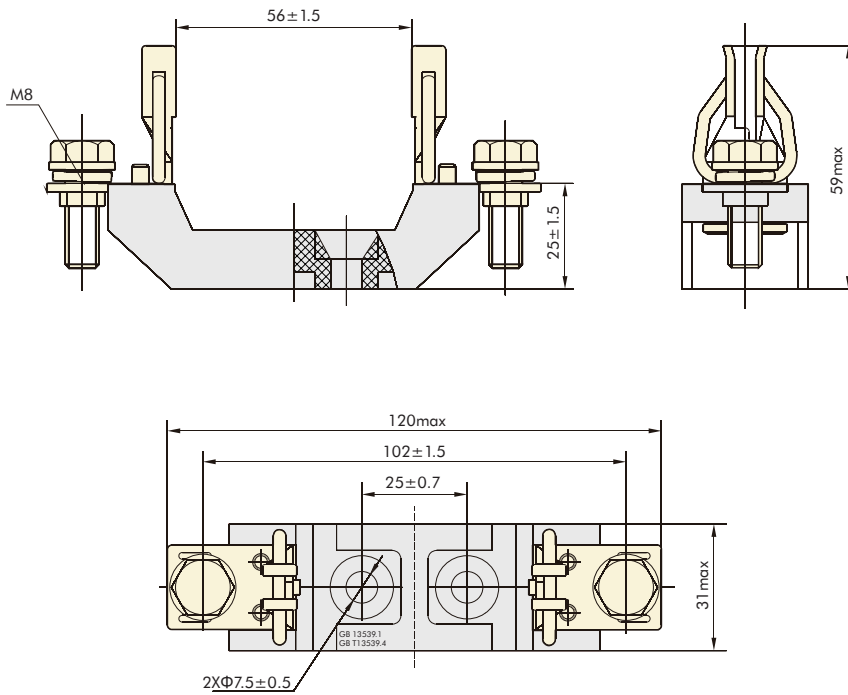


Fig. 2: CRT36-00 250A Pedestal appearance and installation dimensions

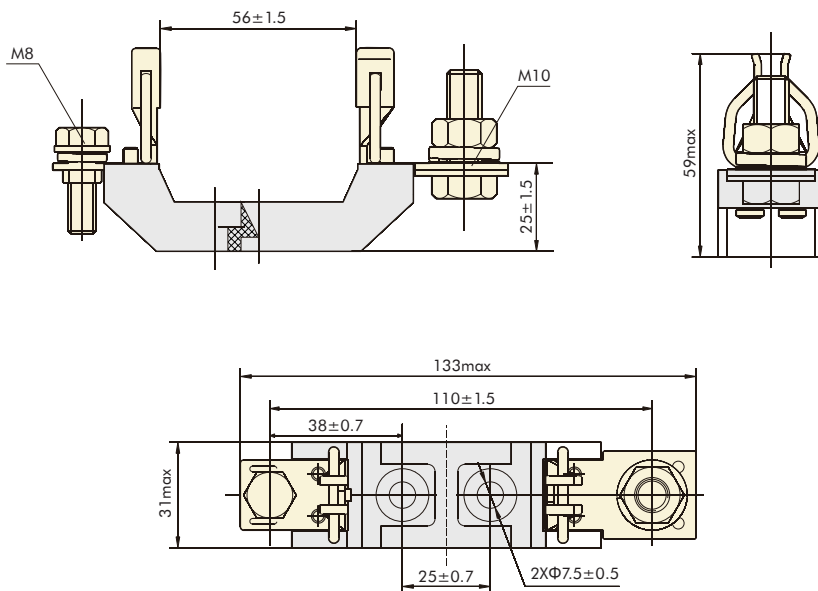


Fig. 3: CRT36-00 600 Pedestal appearance and installation dimensions

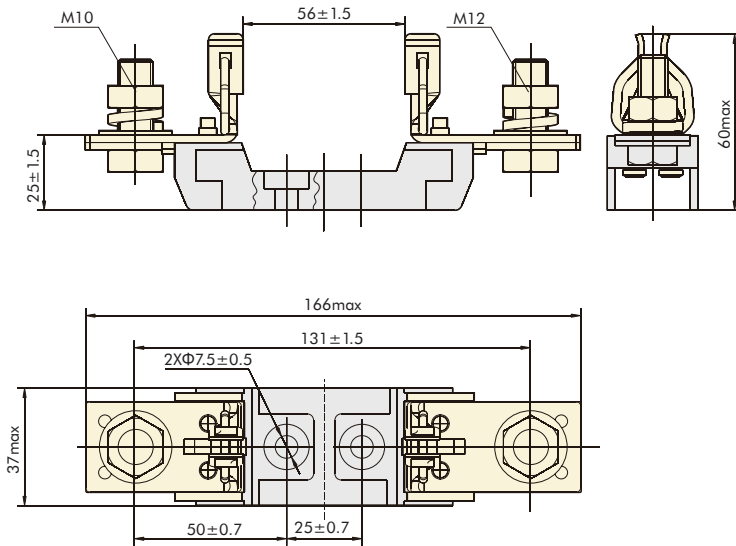
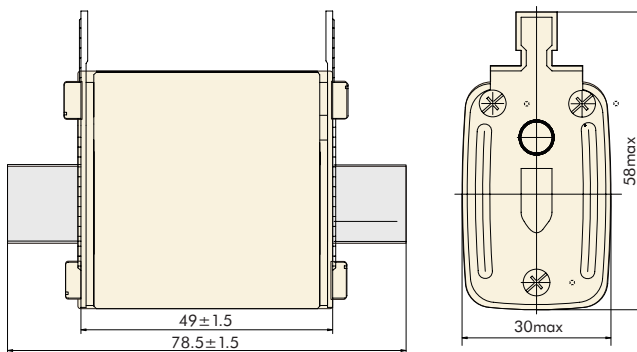


Fig. 4: CRT36-00 600A Fuse-link appearance dimensions



## 6. Ordering information

### 6.1 It needs to notify the following when ordering

Fuse link shall be marked with product model, rated current and quantity

### 6.2 It needs to notify the rated current of pedestal when ordering fuse-link pedestal

### 6.3 Ordering samples

For example: CRaAT36-00/600A, 100 fuse links represent 100 fuse links with product model of NRZ36-1 and rated current of 600A. CRT36-00/160A 100 pedestals represent 100 pedestals with product model of CRT36-00 and rated current of 160A.