



## CRT36-00 DC Fuse Protector

### 1. General

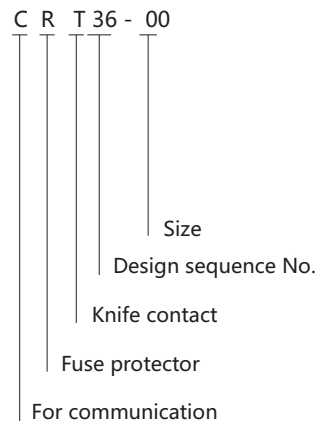
CRT36-00 DC fuse protector is applicable to DC circuit with rated voltage not more than DC80V, rated current not more than 600A and rated short-circuit capacity not more than 25kA for short-circuit protection.

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. Operating conditions

3.1 Ambient temperature: - 35 °C ~ + 40 °C.

3.2 Atmospheric conditions: humidity: the relative air humidity in installation site is not more than 50% when the maximum temperature is +40 °C and it is allowed to have a higher relative humidity at the lowest temperature. In the wettest month, the average monthly lowest temperature is not more than +25 °C and the average monthly maximum relative humidity is not more than 90%. Measures shall be taken if there is condensation on products due to changes in temperature.

3.3 Class of pollution: Class III

3.4 Installation category: Category III

3.5 Altitude at installation site is not more than 2000m.

3.6 If the service condition is different from the above, please negotiate with 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 Conventional fusing and conventional non-fusing (see Table 2)

Table 2

Rated current (A)	Conventional time(h)	Conventional non-fusing current $I_{nf}$ (A)	Conventional fusing current $I_f$ (A)
$I_n \leq 4$	1	$1.5I_n$	$2.1I_n$
$4 < I_n < 16$	1	$1.5I_n$	$1.9I_n$
$16 \leq I_n \leq 63$	1	$1.25I_n$	$1.6I_n$
$63 < I_n \leq 160$	2	$1.25I_n$	$1.6I_n$
$160 < I_n \leq 400$	3	$1.25I_n$	$1.6I_n$
$400 \leq I_n$	4	$1.25I_n$	$1.6I_n$

### 4.3 Size code of pedestal and electric mechanical parameters (see Table 3)

Table 3

Specifications and models of pedestal	CRT36-00 160A	CRT36-00 250A	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

### 4.4 Modified coefficient for using current at different altitudes (see Table 4)

Table 4

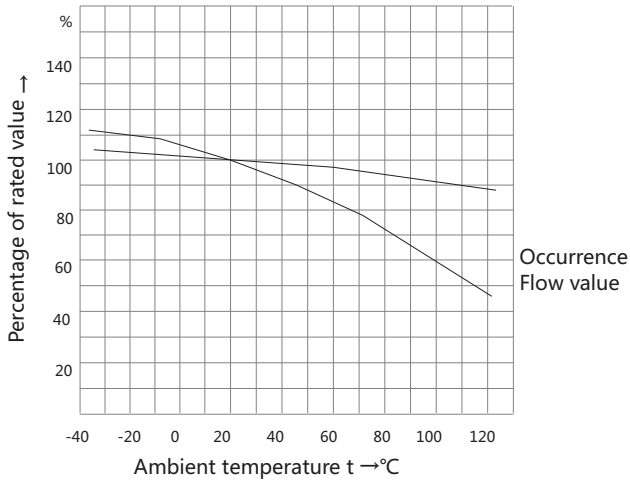
Altitude	≤2000m	2000m~3000m	≥3000m	Example
Modified coefficient of current	1	0.9	0.8	Altitude of product with rated current of 10A is 2500m Rated current (A) at lower capacity is $0.9 \times 10 = 9A$

### 4.5 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.

The following figure is the typical curve of impact of Ambient temperature on current bearing capacity.

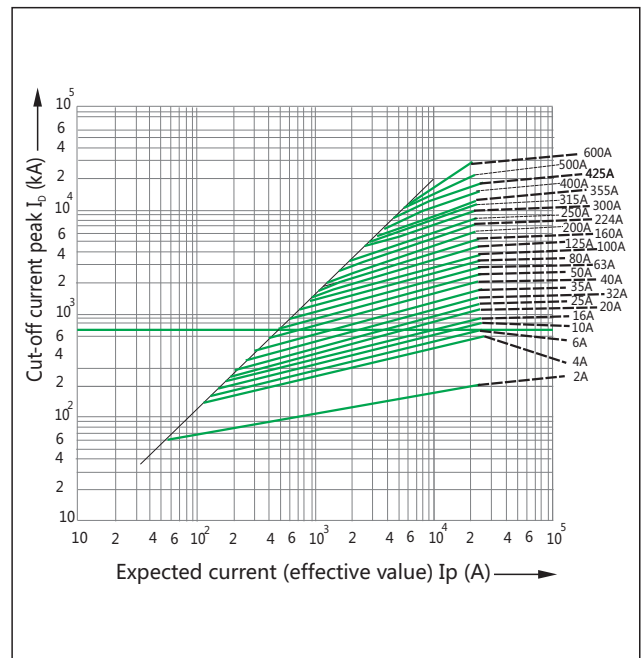
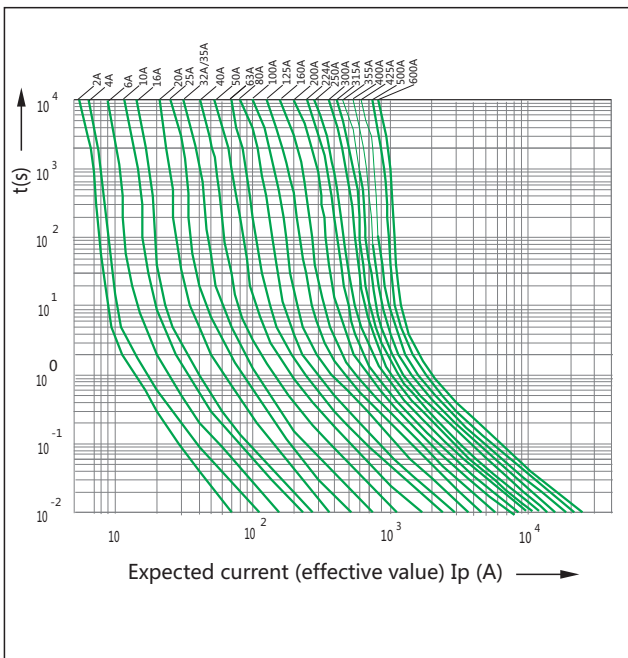
Ambient temperature- bearing capacity curve



Where: Curve A: Ordinary (gS) fuse-link curve for line protection;  
 Curve B: Quick (aR) fuse-link curve for the protection of semiconductor device.

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.

4.6 Characteristic curve



### 5. Overall and mounting dimensions

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

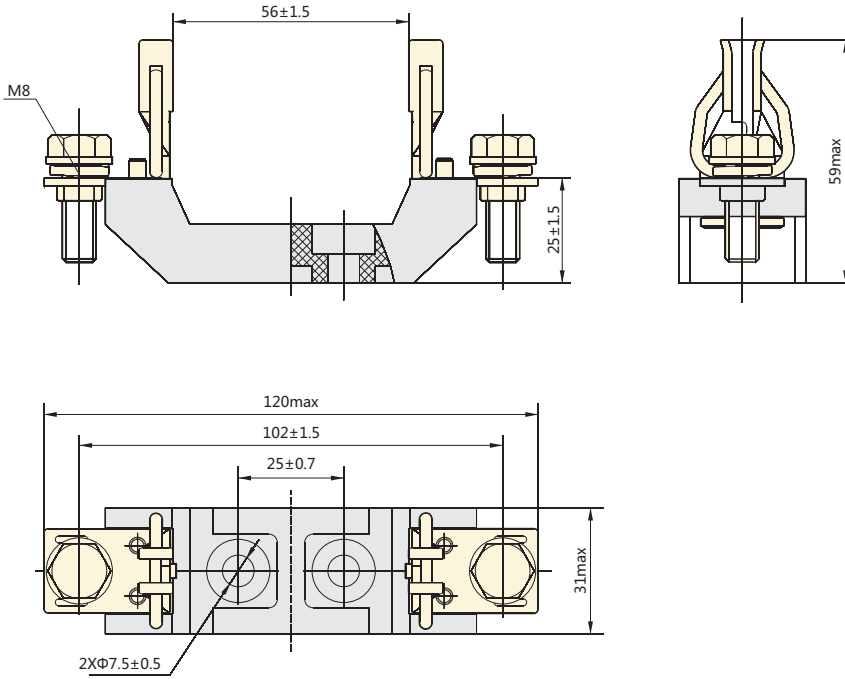


Fig. 2: CRT36-00 250A Pedestal appearance and installation dimensions

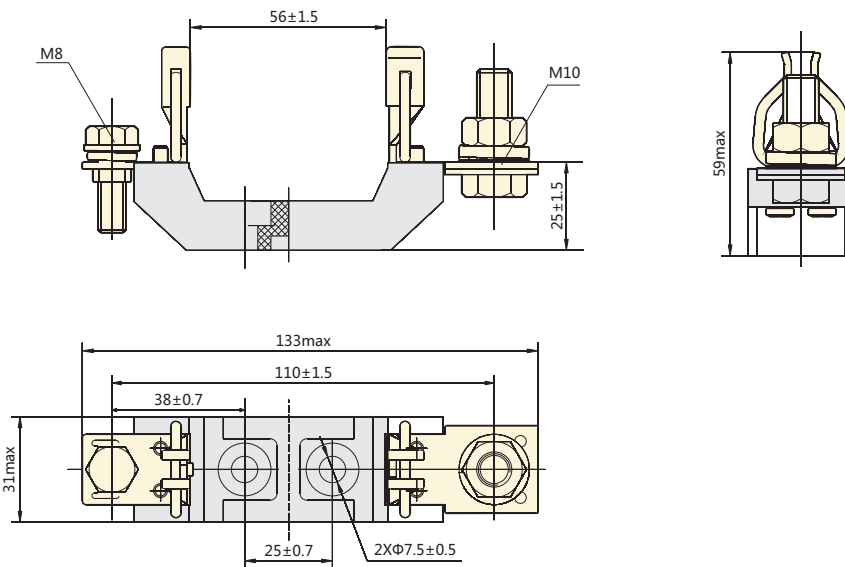


Fig. 3: CRT36-00 600 Pedestal appearance and installation dimensions

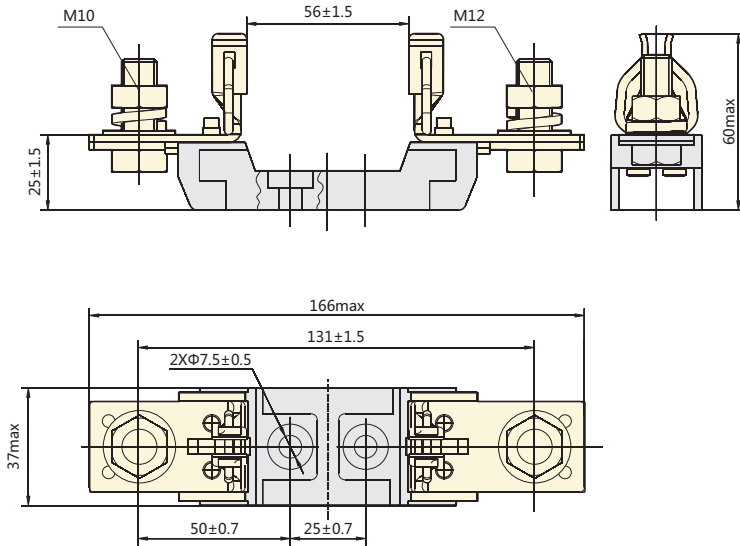
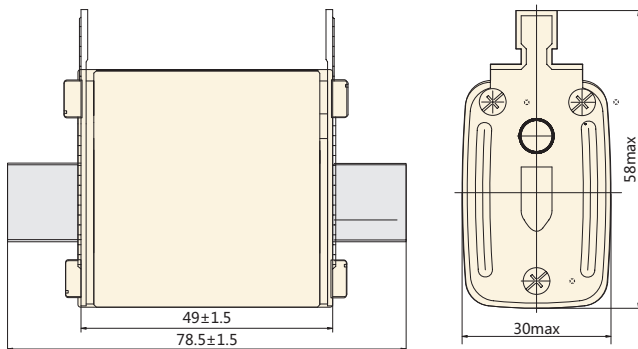


Fig. 4: CRT36-00 600A Fuse-link appearance dimensions



## 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.