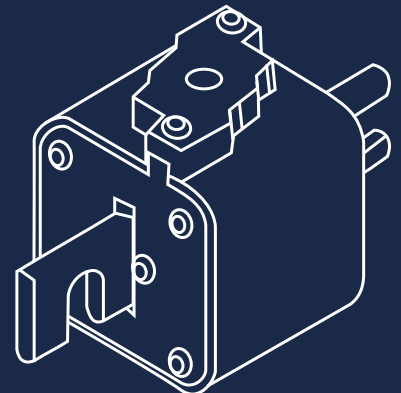




PRODUCTS DATASHEET

FRM系列Series UN型 AC690/700V
母线连接式快速熔断器
Busbar Connection Type Quick fuse

产品规格书
Technical Data Sheet



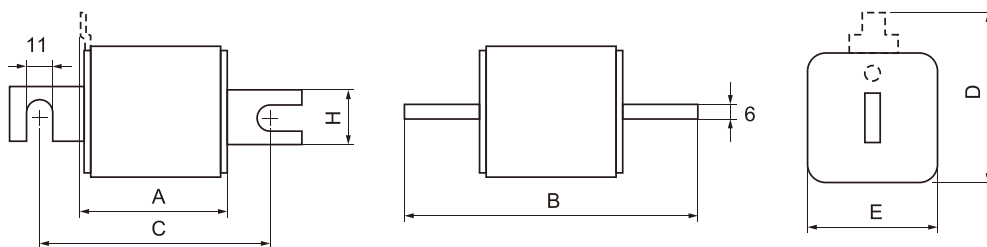
1. 规格型号 Overview

- 1.1 额定电压 Rated Voltage: AC690/700V
- 1.2 功能等级 Functional Level : aR
- 1.3 分断能力 Rated breaking capacity : AC = 100kA

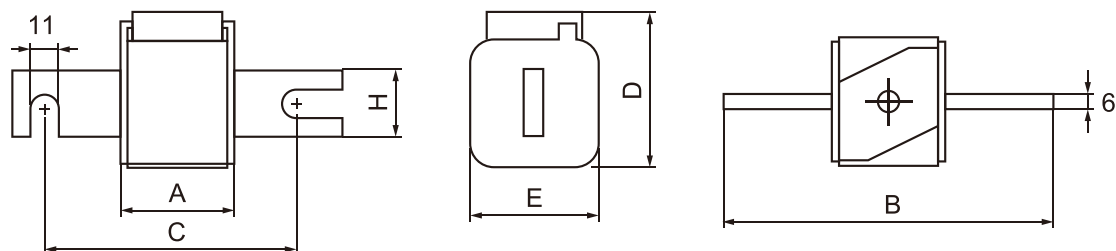
2. 符合标准及规范 Standards : IEC60269-4 GB/T13539.4

3. 产品外形尺寸 Dimension

型号 Model	尺码 Size	安装方式 Installation	额定电压(V) Rated voltage	额定电流(A) Rated current	尺寸Dimension(mm)					
					A(max)	B	C	D	E	H
FRM	30	UN80(T)	IEC/UL AC690/700V	40~630	50	104	78	43(58)	43	20
	31	UN80(T)		200~800 *550V 900	50	108	78	50(66)	50	25
	32	UN80(T)		400~1000 *600V 1100/1250	50	108	78	60(75)	60	25
	33	UN80(T)		500~1600 *600V 1800 *550V 2000	50	109	78	75(90)	75	36
	30	UN110(T)		40~630	50	134	108	43(58)	43	20
	31	UN110(T)		200~800 *550V 900	50	138	108	50(66)	50	25
	32	UN110(T)		400~1000 *600V 1100/1250	50	138	108	60(75)	60	25
	33	UN110(T)		500~1600 *600V 1800 *550V 2000	51	139	108	75(90)	75	36



型号 Model	尺码 Size	安装方式 Installation	额定电压(V) Rated voltage	额定电流(A) Rated current	尺寸Dimension(mm)					
					A(max)	B	C	D	E	H
FRM	30	UN80K	IEC/UL AC690/700V	40~630	50	104	78	58	43	20
	31	UN80K		200~800 *550V 900	50	108	78	69	50	25
	32	UN80K		400~1000 *600V 1100/1250	50	108	78	77	60	25
	33	UN80K		500~1600 *600V 1800 *550V 2000	50	109	78	92	75	36
	30	UN110K		40~630	50	134	108	59	43	20
	31	UN110K		200~800 *550V 900	50	138	108	69	50	25
	32	UN110K		400~1000 *600V 1100/1250	50	138	108	77	60	25
	33	UN110K		500~1600 *600V 1800 *550V 2000	51	139	108	92	75	36



4. 产品技术参数 Technical parameters

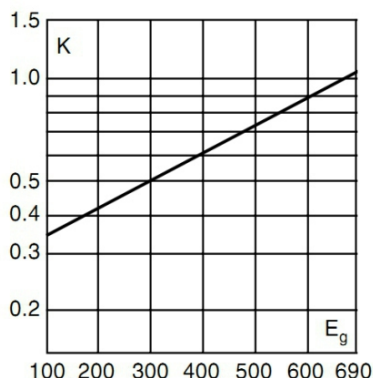
4.1 弧前 I^2t Pre-arc/熔断 I^2t Clearing/额定功率 Watts Loss

型号 Model	尺码 Size	安装方式 Installation	电压(V) Voltage	电流(A) Current	弧前 I^2t Pre-arc	熔断 I^2t Clearing	功耗(W) Watts Loss	曲线图 Curve					
FRM	30	UN80 UN80T UN80K	IEC 690V	40	40	270	9	图Figure 1 图Figure 5					
				50	77	515	11						
				63	115	770	14						
				80	185	1250	18						
				100	360	2450	21						
				125	550	3700	26						
				160	1100	7500	30						
				200	2200	15000	35						
				250	4200	28500	40						
				315	7000	46500	50						
				355	10000	68500	55						
				400	15000	105000	60						
				450	21000	140000	65						
				500	27000	180000	70						
				550	34000	230000	75						
				630	48500	325000	80						
				FRM	31	UN80 UN80T UN80K	IEC 690V		200	1650	11500	45	图Figure 2 图Figure 6
									250	3100	21000	55	
315	6200	42000	58										
355	8500	59000	60										
400	13500	91500	65										
450	17000	120000	70										
500	25000	170000	72										
550	34000	230000	75										
630	52000	350000	80										
700	69500	465000	85										
800	105000	725000	95										
FRM	32	UN80 UN80T UN80K	UL 700V					400	11000	74000	65	图Figure 3 图Figure 7	
								450	15500	105000	70		
								500	21500	145000	75		
								550	28000	190000	80		
								630	41000	275000	90		
								700	60500	405000	95		
								800	86000	575000	105		
				900	125000	840000	110						
				1000	180000	1250000	115						
				1100	245000	1600000	120						
				1250	365000	2400000	130						
				FRM	33	UN80 UN80T UN80K	UL 700V	500	14000	95000	95		图Figure 4 图Figure 8
								550	19500	135000	100		
								630	31000	210000	105		
								700	44500	300000	110		
								800	69500	465000	115		
								900	100000	670000	120		
								1000	140000	945000	125		
1100	190000	1300000	130										
1250	290000	1950000	140										
1400	370000	3100000	155										
1600	580000	3900000	160										
1800	880000	5250000	165										
2000	1150000	6350000	175										

4.1 弧前I²t Pre-arc/熔断I²t Cleaing/额定功率 Watts Loss

型号 Model	尺码 Size	安装方式 Installation	电压(V) Voltage	电流(A) Current	弧前I ² t Pre-arc	熔断I ² t Clearing	功耗(W) Watts Loss	曲线图 Curve					
FRM	30	UN110 UN110T UN110K		40	40	270	9	图Figure 1 图Figure 5					
				50	77	515	11						
				63	115	770	14						
				80	185	1250	18						
				100	360	2450	21						
				125	550	3700	26						
				160	1100	7500	30						
				200	2200	15000	35						
				250	4200	28500	40						
				315	7000	46500	50						
				355	10000	68500	55						
				400	15000	105000	60						
				450	21000	140000	65						
				500	27000	180000	70						
				550	34000	230000	75						
				630	48500	325000	80						
				FRM	31	UN110 UN110T UN110K	IEC 690V		200	1650	11500	45	图Figure 2 图Figure 6
									250	3100	21000	55	
315	6200	42000	58										
355	8500	59000	60										
400	13500	91500	65										
450	17000	120000	70										
500	25000	170000	72										
550	34000	230000	75										
630	52000	350000	80										
700	69500	465000	85										
800	105000	725000	95										
FRM	32	UN110 UN110T UN110K	UL 700V					400	11000	74000	65	图Figure 3 图Figure 7	
								450	15500	105000	70		
								500	21500	145000	75		
								550	28000	190000	80		
								630	41000	275000	90		
								700	60500	405000	95		
								800	86000	575000	105		
				900	125000	840000	110						
				1000	180000	1250000	115						
				1100	245000	1600000	120						
				1250	365000	2400000	130						
				FRM	33	UN110 UN110T UN110K		500	14000	95000	95		图Figure 4 图Figure 8
								550	19500	135000	100		
								630	31000	210000	105		
								700	44500	300000	110		
								800	69500	465000	115		
								900	100000	670000	120		
								1000	140000	945000	125		
1100	190000	1300000	130										
1250	290000	1950000	140										
1400	370000	3100000	155										
1600	580000	3900000	160										
1800	880000	5250000	165										
2000	1150000	6350000	175										

4.2 熔断 I²t 修正系数K Melting I²t Correction Factor K



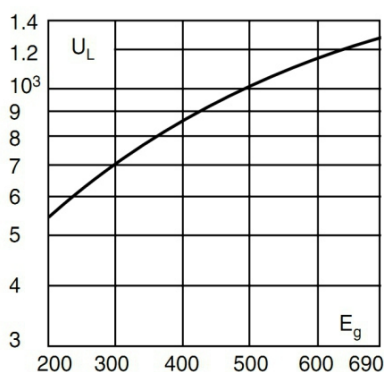
注: Eg为工作电压
Note: Eg is the working voltage

计算方法: $I^2t(\text{修正}) = I^2t(\text{额定}) \times K$

Calculation Method:

$I^2t(\text{correction}) = I^2t(\text{rated}) \times K$

4.3 电弧电压峰值 Peak Value of Arc Voltage



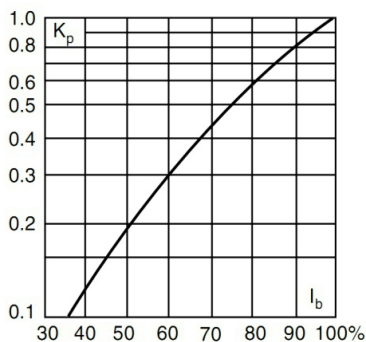
注: UL为电弧电压峰值; Eg为工作电压; 此图为功率因数为15%的情况。

Note: UL is the peak value of arc voltage; Eg is the working voltage; This figure shows the case when the power factor is 15%.

4.4 功耗修正系数 Power consumption correction factor Kp

额定功耗已在4.1给出, 低于额定电流的功耗可按下图计算。

The rated power consumption is given in 4.1, and the power consumption below the rated current can be calculated as shown below.

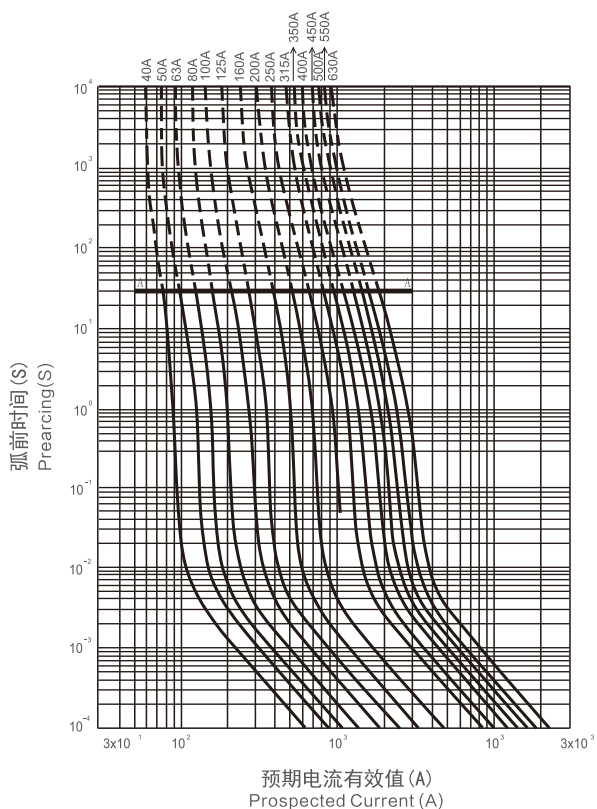


计算方法: $W(\text{修正}) = W(\text{额定}) \times Kp$

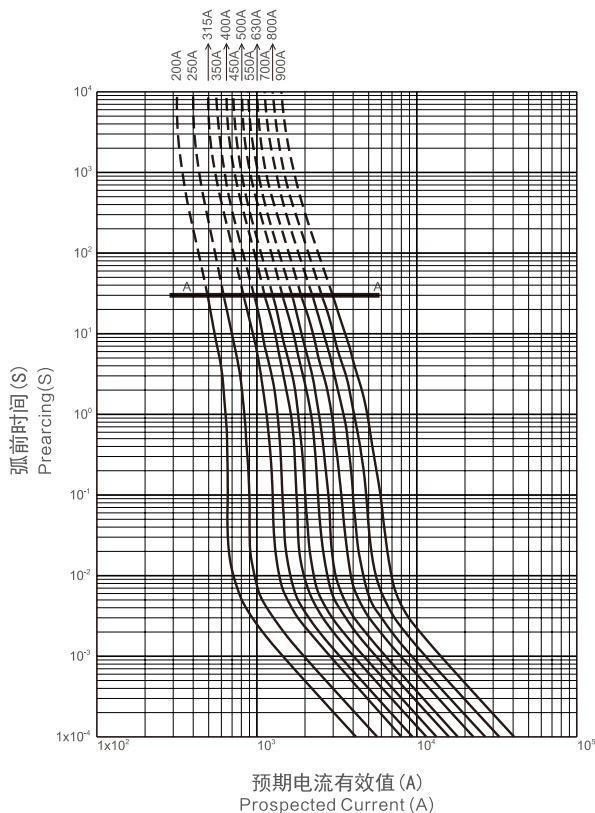
Calculation Method:

$W(\text{correction}) = W(\text{rated}) \times Kp$

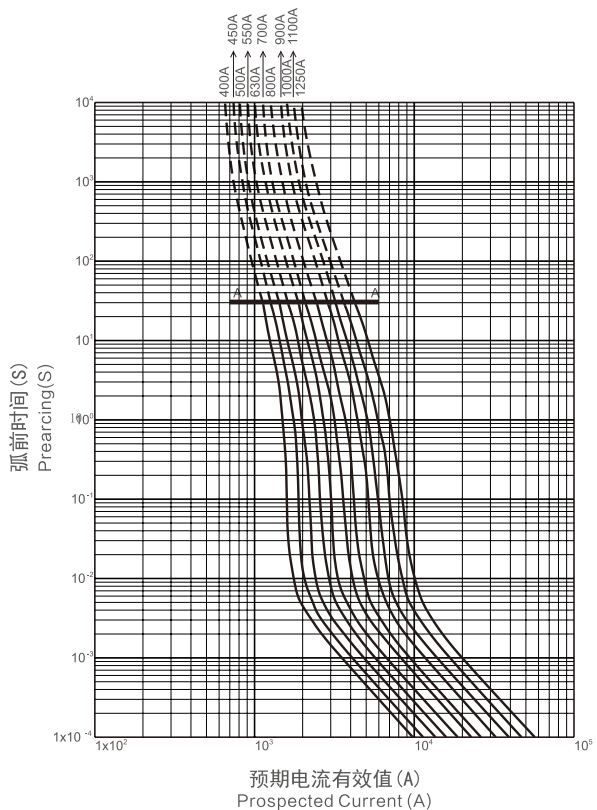
4.5 时间-电流曲线 Time-current characteristics curves



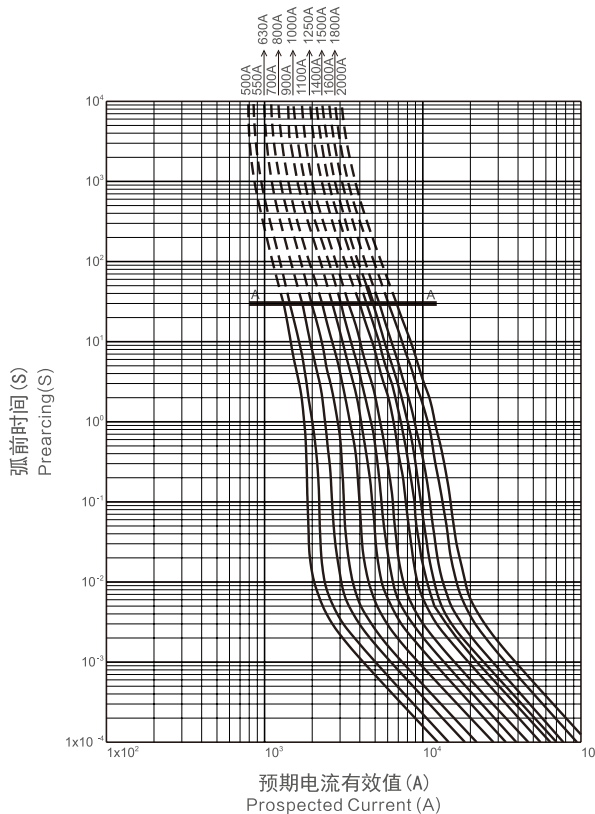
图Figure 1



图Figure 2

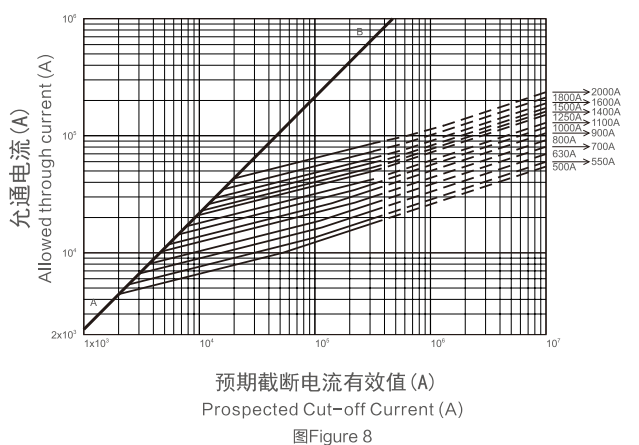
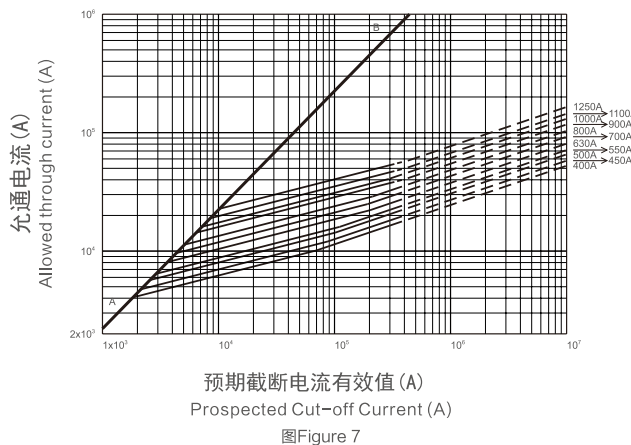
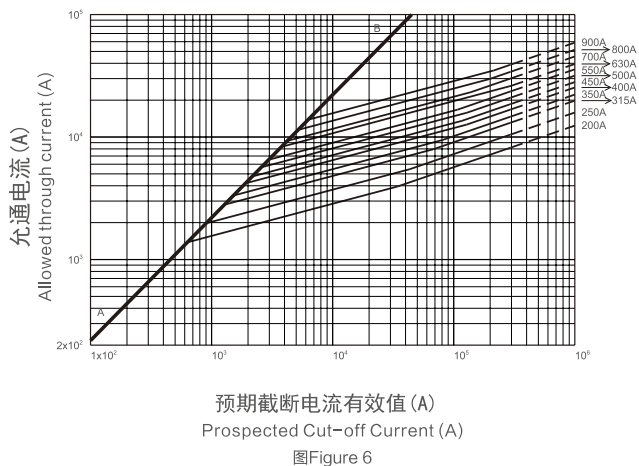
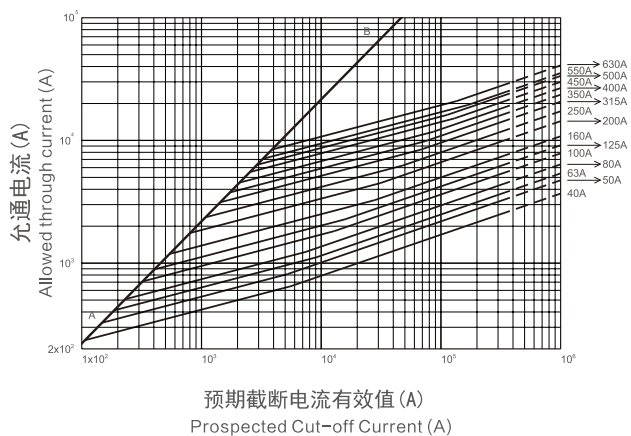


图Figure 3



图Figure 4

4.6 截断电流特性 Cut-off current characteristics



样本所述的产品资料以实物为准，若有变更本公司恕不另行通知，欢迎致电咨询。

The product information stated in the sample shall be subject to the material object.
If there is any change without prior notice, please call us for consultation.

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