



## 半导体保护熔断器



FUSE-LINKS FOR SEMI CONDUCTOR PROTECTION



## 半导体保护熔断器 *Fuse-links for semiconductor protection*



功率半导体设备如二极管、晶闸管对温度相当敏感，因为它们较为有限的焦耳热效应能力，特别是长时间过流和短路的情形下会导致内部物理损坏，因此需要有效的保护设备限制短路和过载情形下的能量。

标准的NH系列熔断器如gG目录中的熔断器产品对半导体设备的保护来说动作特性太慢了，金米勒半导体熔断器具有相当快的动作特性可以有效而可靠的保护半导体设备。

*Power semiconductor devices, like diodes and thyristors are extremely sensitive to thermal stress due to their limited joule heat capacity. Especially long-time over-currents and short circuit loading may cause substantial damage and therefore require effective protection against short circuit and overload energy.*

*Standard NH fuse-links with utilization category gG operate too slowly to protect semiconductors. JEAN MÜLLER fuse-links for semiconductor protection are extremely fast acting fuse-links for reliable over-current protection of sensitive semiconductor devices.*

简介

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## 半导体保护熔断器

## Fuse-links for semiconductor protection

### 产品定义

半导体设备保护熔断器遵照标准ICE60269-4德国标准DIN EN60269-4。

它们在目录中的aR、gR、gS适用不同的触头、不同电压、电流等级以及不同应用情形

### 应用领域

半导体熔断器目录中的500V、690V和1000V的产品主要用于保护半导体元件以及系统和设备。

- aR专用于短路保护，过载需其他设备保护，该系列产品有相当低的焦耳积分值
- gR既适用于短路保护也适用于过载保护，而且是全范围的电流保护适用UPS回路中的电池保护。
- gS系列融aR和gG特性于一体，兼有半导体保护和线路保护的双重特性，应用于调速系统和软启动。

### 产品优势

金米勒半导体熔断器有相当强的短路限流能力和低允通能量，此外还有很高的分断能力和低导通压降。

安装后的熔断器的电气特性参数是不能调整的，因此可以有效避免误动作和误匹配，功能和特性已经超过10年保持未变。

### Product definition

Fuse-links for the protection of semiconductors conform to the international standard IEC 60269-4 respectively the german standard DIN EN 60269-4.

They are available in utilization categories aR, gR and gS. Various contact types, different rated voltages and rated currents adapted to the semiconductor devices allow for selection according to the specific application.

### Field of application

Semiconductor fuse-links with utilization categories aR, gR and gS for AC500V, AC690V and AC1000V are mainly applied for the protection of semiconductors as well as systems and devices.

- Utilization category aR (series üf0) serves as sole protection against short circuits. Overload protection has to be covered by separate measures. The series is optimized to especially low operating Joule integrals.
- Utilization category gR (series üf2) is suitable for overload as well as short circuit protection. Besides full-range semiconductor protection they can be applied as battery fuses in UPS circuits.
- gS fuse-links merge the characteristics of utilization categories aR and gG and therefore combine protection of semiconductors as well as cables and lines. Amongst other applications they protect variable speed drives and soft starters.

### Product advantages

JEAN MÜLLER fuse-links for semiconductor protection offer an extensive limitation of short circuit current and low let-through energy values when interrupting currents. In addition they have a high breaking capacity and low switching voltages.

Performance data of installed fuses cannot be altered or adjusted, therefore mismatching and malfunctioning is prevented. Function and characteristics remain unchanged over decades.



高品质的生产能力确保熔断器的高可靠性，高等级的原料确保技术特性的长期一致性，熔体抗老化，镀银表面，功率耗散等问题熔体优化时长期研发的结果。额定电流适用半导体设备。

### 产品设计

刀型熔断器的尺寸符合VDE0636-2和60269-2，栓接熔断器符合60269-4。其它如圆柱型熔断器，D型熔断器，熔体采用纯银打制，石英砂用于熄弧，aR型熔断器石英砂交叉固化。

绝缘体采用高等级的氧化铝陶瓷耐受高温。

触刀镀银提供良好的导电特性。

顶部简易的信号指示装置，适用熔断器的熔断指示，中央或端盖双弹簧指示撞击器。

*High production quality guarantee reliability of the fuse-link, high-grade materials ensure consistent technical characteristics over a long period of time. Non-Ageing materials are used for melting elements accordingly. Semiconductor fuse-links offer increased protection against corrosion through a special surface treatment, contact surfaces are silver plated. Power dissipation values of the melting elements have been optimised during long-time research and development. Rated current are adapted to those of semiconductor devices.*

### Product design

*Dimensions of the fuse-links with blade contacts are according DIN VDE 0636-2 respectively IEC 60269-2 and for screw and thread contacts DIN EN 60269-4 respectively IEC 60269-4 apply. In addition cylindrical and D-types are available. Melting elements are produced from fine silver strips. Quartz sand of high purity is used as extinguishing agent, for aR-types the sand is cross-linked.*

*The isolating body consists of high-grade aluminium oxide ceramics which is especially resistant against alternating thermal loads.*

*The surface of the contact blades is galvanically silver plated and therefore provides ideal contact characteristics.*

*For simple signalling of the fuse trip a top indicator (indicator spring on top cover) is available. Variants with centre respectively gripping lug indicator for size 00 screw contact fuse-links provide the possibility of monitoring the fuse trip, blade contact types optionally offer a striker.*

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护熔断器  
Fuse-links for semiconductor protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC fuse-links

附录  
Appendix

## aR熔断器 部分范围半导体保护 *Fuse-links utilization category aR for partial range semiconductor protection*

产品优势 / *Convincing advantages*



### aR熔断器应用部分分断范围

- 半导体设备的短路保护
- 不同限流等级贯穿熔体融化和燃弧全过程
- 低的焦耳积分值  $I^2t$



### 额定电压至交流1000V

- 交流690V和交流1000V可选

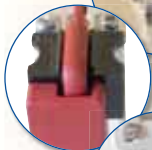
### 触刀类型

- 触刀适用NH熔断器底座
- 栓接适用特殊底座或直接母排安装
- 端子中间栓接适用母排直接安装和半导体设备直接安装



### 熔断指示设备

- 顶部弹簧指示装置
- 远程微动开关指示
- 中间顶部撞针指示



### Effective partial-range protection

- Utilization category aR guarantees short circuit protection of semiconductor devices
- Distinct current limiting through short melting and arcing times
- Low operating  $I^2t$  values (melting  $I^2t$  values + arcing  $I^2t$  values)

### Rated voltages up to AC1000V

- AC690V and AC1000V available

### Contact types

- Blade contacts for application in NH fuse-bases
- Screw contacts for application in special fuse-bases respectively direct mounting on busbars
- Thread contacts for direct mounting on busbars or semiconductor device

### Indication of fuse-tripping

- Top indicator as spring on the top cover
- Type for mounting of a gripping lug indicator for remote signalling (type designation .../L)
- Centre indicator (type designation ...Müf...) for remote signalling via adapter and microswitch



触刀型熔断器 aR, 690V / NH fuse-links aR AC690V with blade contacts

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号 / Type	顶部指示器 Indicator top
								订货号 Article-No.
690V	00	10	26	4	3,0	3	M00üf0/10A/690V	R5081700
		16	50	8	4,0		M00üf0/16A/690V	R5082200
		20	110	11	5,0		M00üf0/20A/690V	R5082400
		25	200	38	6,0		M00üf0/25A/690V	R5082600
		32	330	49	7,0		M00üf0/32A/690V	R5082900
		35	550	64	7,9		M00üf0/35A/690V	R5083100
		40	600	110	8,8		M00üf0/40A/690V	R5083400
		50	1.200	175	10,0		M00üf0/50A/690V	R5083500
		63	1.700	300	13,0		M00üf0/63A/690V	R5083800
		80	2.900	490	17,0		M00üf0/80A/690V	R5084100
		100	5.500	800	20,0		M00üf0/100A/690V	R5084300
		125	10.500	1.400	27,5		M00üf0/125A/690V	R5084600
		160	18.000	3.200	32,0		M00üf0/160A/690V	R5084900
		200	22.000	4.200	46,0		M00üf0/200A/690V	R5085200
	250	44.500	8.300	49,0	M00üf0/250A/690V	R5085600		
	1	3	63	1.200	200	16,0	M1üf0/63A/690V	R1383800
			80	1.800	350	21,0	M1üf0/80A/690V	R1384100
			100	2.500	450	27,0	M1üf0/100A/690V	R1384300
			125	4.600	830	32,0	M1üf0/125A/690V	R1384600
			160	8.400	1.550	36,0	M1üf0/160A/690V	R1384900
			200	14.000	2.600	46,0	M1üf0/200A/690V	R1385200
			250	26.000	4.800	51,0	M1üf0/250A/690V	R1385600
			315	42.000	7.600	66,0	M1üf0/315A/690V	R1385900
			350	54.000	11.000	69,0	M1üf0/350A/690V	R1386000
			400	98.000	18.500	80,0	M1üf0/400A/690V	R1386200
	2	1	250	21.500	4.000	53,0	M2üf0/250A/690V	R2385600
			315	33.800	6.300	68,0	M2üf0/315A/690V	R2385900
			350	48.900	9.100	71,0	M2üf0/350A/690V	R2386000
			400	85.000	15.500	75,0	M2üf0/400A/690V	R2386200
			450	120.000	21.500	80,0	M2üf0/450A/690V	R2386400
			500	150.000	28.500	91,0	M2üf0/500A/690V	R2386600
	3	3	630	305.000	56.000	120,0	M2üf0/630A/690V	R2386900
			400	69.000	12.800	81,0	M3üf0/400A/690V	R3386200
			450	96.000	17.800	89,0	M3üf0/450A/690V	R3386400
			500	127.000	23.500	110,0	M3üf0/500A/690V	R3386600
			630	225.000	46.000	121,0	M3üf0/630A/690V	R3386900
710			320.000	53.000	130,0	M3üf0/710A/690V	R3387000	
800			525.000	90.000	145,0	M3üf0/800A/690V	R3387200	

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

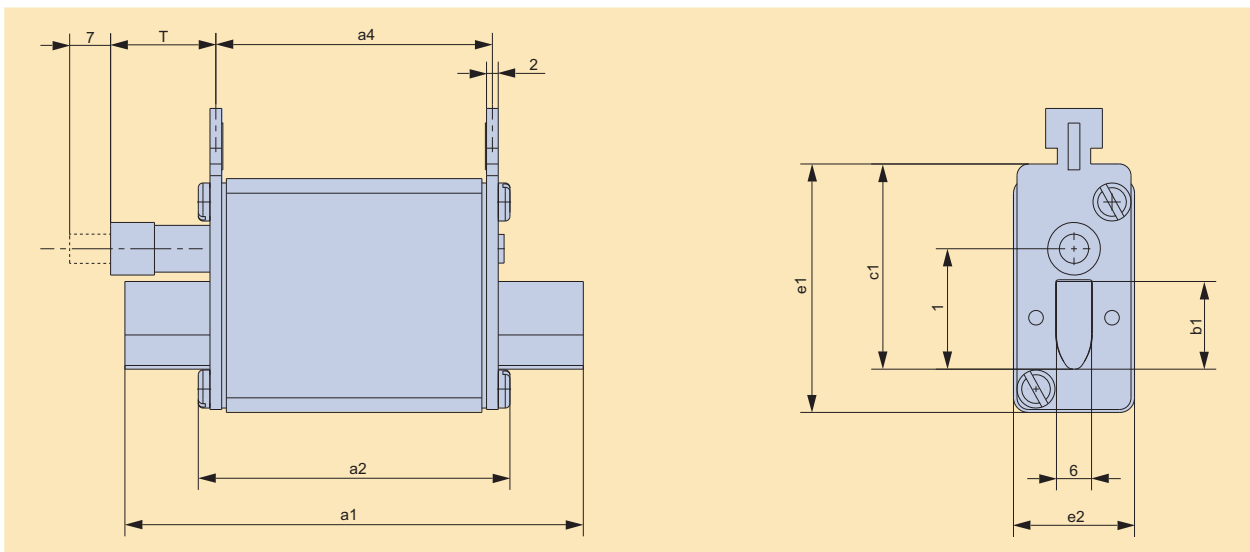
高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix



技术参数 / *Technical data*

型号 / Type			M00üf0...
尺码 / Size	-	-	NH00
额定电压 / Rated voltage	$U_n$	V	AC690
额定电流 / Rated current	$I_n$	A	10-250
额定分断能力 / Rated breaking capacity	-	kA	100
使用类别 / Utilization category	-	-	aR
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2
尺寸 / Dimensions	a1	mm	78,5
	a2		53
	a4		49
	b1		15
	c1		35
	e1		49
	e2		30
重量 / Weight	-	g	140



技术参数 / *Technical data*

型号 / Type			M1üf0.../690V	M2üf0.../690V	M3üf0.../690V
尺码 / Size	-	-	NH1	NH2	NH3
额定电压 / Rated voltage	$U_n$	V	AC690	AC690	AC690
额定电流 / Rated current	$I_n$	A	63-400	250-630	400-800
额定分断能力 / Rated breaking capacity	-	kA	100		
使用类别 / Utilization category	-	-	aR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
尺寸 / Dimensions	a1	mm	135	150	150
	a2		72	72	72
	a4		67	67	67
	b1		24	30	37
	c1		40	48	60
	e1		55	63	69
	e2		46	54	64
重量 / Weight	-	g	500	650	850

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

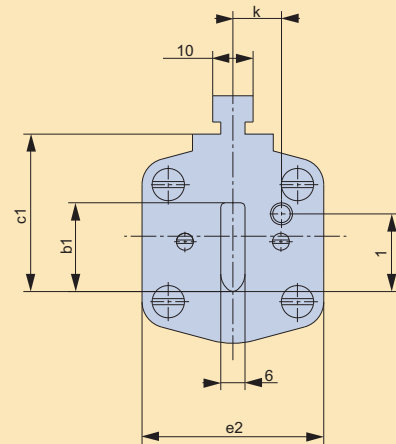
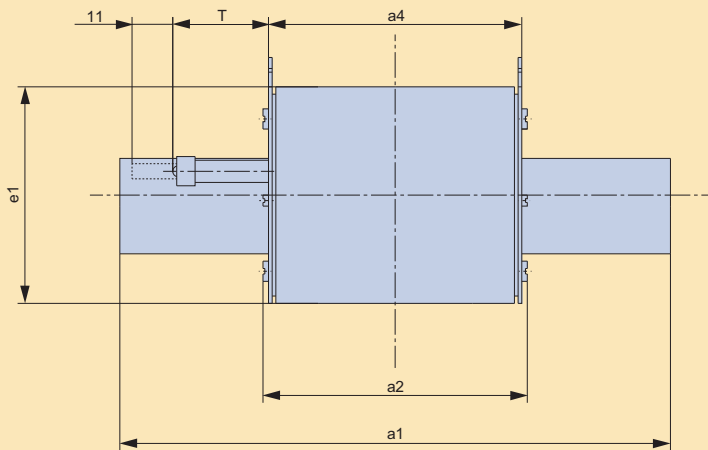
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

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NH熔断器aR, AC690V, 螺栓连接, 尺码 00 / NH fuse-links aR AC690V with screw contacts; size 00

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号 / Type	指示器 / Indicator	
								顶部 / top	端盖指示弹片 Gripping lug indicator .../L
								订货号 Article-No.	订货号 Article-No.
690V	00	10	26	4	3,0	3	S00C+/üf0/10A/690V	R5081753	R5081726
		16	50	8	4,0		S00C+/üf0/16A/690V	R5082253	R5082226
		20	110	11	5,0		S00C+/üf0/20A/690V	R5082453	R5082426
		25	200	38	6,0		S00C+/üf0/25A/690V	R5082653	R5082626
		32	330	49	7,0		S00C+/üf0/32A/690V	R5082953	R5082926
		35	550	64	7,9		S00C+/üf0/35A/690V	R5083153	R5083126
		40	600	110	8,8		S00C+/üf0/40A/690V	R5083453	R5083426
		50	1.200	175	10,0		S00C+/üf0/50A/690V	R5083553	R5083526
		63	1.700	300	13,0		S00C+/üf0/63A/690V	R5083853	R5083826
		80	2.900	490	17,0		S00C+/üf0/80A/690V	R5084153	R5084126
		100	5.500	800	20,0		S00C+/üf0/100A/690V	R5084353	R5084326
		125	10.500	1.400	27,5		S00C+/üf0/125A/690V	R5084653	R5084626
		160	18.000	3.200	32,0		S00C+/üf0/160A/690V	R5084953	R5084926
		200	31.000	4.000	38,0		S00C+/üf0/200A/690V	R5085253	R5085226
		250	57.000	7.800	43,0		S00C+/üf0/250A/690V	R5085653	R5085626
		315	81.000	10.800	54,0		S00C+/üf0/315A/690V	R5085953	R5085926
		350	90.000	11.300	60,0		S00üf0/350A/690V	R5086023	R5086026
500V		400	125.000	20.000	70,0	S00üf0/400A/500V	R5016223	R5016026	

NH熔断器aR, AC690V, 螺栓连接, 尺码 1-3, 80mm / NH fuse-links aR AC690V with screw contacts; size 1-3; 80mm

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号 / Type	指示器 / Indicator	
								顶部 / top	中间指示器 Centre indicator ...Müf...
								订货号 Article-No.	订货号 Article-No.
690V	1	80	2.400	390	16,0	1	S1üf0/80/80A/690V	R1084123	R1084124
		100	4.600	700	20,0		S1üf0/80/100A/690V	R1084323	R1084324
		125	6.800	1.000	25,0		S1üf0/80/125A/690V	R1084623	R1084624
		160	10.500	1.700	32,0		S1üf0/80/160A/660V	R1084923	R1084924
		200	18.500	2.700	40,0		S1üf0/80/200A/690V	R1085223	R1085224
		250	31.000	5.000	50,0		S1üf0/80/250A/690V	R1085623	R1085624
		315	54.000	8.000	60,0		S1üf0/80/315A/690V	R1085923	R1085924
		350	72.000	11.000	63,0		S1üf0/80/350A/690V	R1086023	R1086024
		400	105.000	16.000	67,0		S1üf0/80/400A/690V	R1086223	R1086224
		450	155.000	22.000	71,0		S1üf0/80/450A/690V	R1086423	R1086424
		500	205.000	31.000	74,0		S1üf0/80/500A/690V	R1086623	R1086624
		550	190.000	36.000	86,0		S1üf0/80/550A/690V	R1086723	R1086724
		630	345.000	50.000	88,0		S1üf0/80/630A/690V	R1086923	R1086924
		710	480.000	63.000	91,0		S1üf0/80/710A/690V	R1087023	R1087024
	2	400	82.000	11.000	70,0	1	S2üf0/80/400A/690V	R2086223	R2086224
		450	125.000	17.500	74,0		S2üf0/80/450A/690V	R2086423	R2086424
		500	170.000	22.000	80,0		S2üf0/80/500A/690V	R2086623	R2086624
		550	190.000	36.000	86,0		S2üf0/80/550A/690V	R2086723	R2086724
		630	305.000	44.000	85,0		S2üf0/80/630A/690V	R2086923	R2086924
		710	480.000	63.000	91,0		S2üf0/80/710A/690V	R2087023	R2087024
		800	710.000	98.000	95,0		S2üf0/80/800A/690V	R2087223	R2087224
		900	920.000	178.000	115,0		S2üf0/80/900A/690V	R2087423	R2087424
	3	1000	1.300.000	235.000	124,0	3	S2üf0/80/1000A/690V	R2087623	R2087624
		630	240.000	33.000	101,0		S3üf0/80/630A/690V	R3086923	R3086924
		710	340.000	50.000	112,0		S3üf0/80/710A/690V	R3087023	R3087024
		800	510.000	71.000	118,0		S3üf0/80/800A/690V	R3087223	R3087224
		900	710.000	130.000	118,0		S3üf0/80/900A/690V	R3087423	R3087424
		1000	1.100.000	150.000	127,0		S3üf0/80/1000A/690V	R3087623	R3087624
1250		2.300.000	310.000	150,0	S3üf0/80/1250A/690V		R3087923	R3087924	
1400		2.600.000	455.000	156,0	S3üf0/80/1400A/690V		R3088123	R3088124	



NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix

NH熔断器aR, AC690V, 螺栓连接, 尺码 1-3, 110mm / NH fuse-links aR AC690V with screw contacts; size 1-3; 110mm

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号 / Type	指示器 / Indicator	
								顶部 / top	中间指示器 Centre indicator ...Müf...
								订货号 Article-No.	订货号 Article-No.
690V	1	80	2.400	390	16,0	1	S1üf0/110/80A/690V	R1084121	R1084122
		100	4.600	700	20,0		S1üf0/110/100A/690V	R1084321	R1084322
		125	6.800	1.000	25,0		S1üf0/110/125A/690V	R1084621	R1084622
		160	10.500	1.700	32,0		S1üf0/110/160A/660V	R1084921	R1084922
		200	18.500	2.700	40,0		S1üf0/110/200A/690V	R1085221	R1085222
		250	31.000	5.000	50,0		S1üf0/110/250A/690V	R1085621	R1085622
		315	54.000	8.000	60,0		S1üf0/110/315A/690V	R1085921	R1085922
		350	72.000	11.000	63,0		S1üf0/110/350A/690V	R1086021	R1086022
		400	105.000	16.000	67,0		S1üf0/110/400A/690V	R1086221	R1086222
		450	155.000	22.000	71,0		S1üf0/110/450A/690V	R1086421	R1086422
		500	205.000	31.000	74,0		S1üf0/110/500A/690V	R1086621	R1086622
		550	286.000	54.000	77,0		S1üf0/110/550A/690V	R1086721	R1086722
		630	345.000	50.000	88,0		S1üf0/110/630A/690V	R1086921	R1086922
		710	470.000	96.000	92,0		S1üf0/110/710A/690V	R1087021	R1087022
	2	400	82.000	11.000	70,0	1	S2üf0/110/400A/690V	R2086221	R2086222
		450	125.000	17.500	74,0		S2üf0/110/450A/690V	R2086421	R2086422
		500	170.000	22.000	80,0		S2üf0/110/500A/690V	R2086621	R2086622
		550	190.000	36.000	86,0		S2üf0/110/550A/690V	R2086721	R2086722
		630	305.000	44.000	85,0		S2üf0/110/630A/690V	R2086921	R2086922
		710	480.000	63.000	91,0		S2üf0/110/710A/690V	R2087021	R2087022
		800	710.000	98.000	95,0		S2üf0/110/800A/690V	R2087221	R2087222
		900	920.000	178.000	115,0		S2üf0/110/900A/690V	R2087421	R2087422
	3	1000	1.300.000	235.000	124,0	3	S2üf0/110/1000A/690V	R2087621	R2087622
		630	240.000	33.000	101,0		S3üf0/110/630A/690V	R3086921	R3086922
		710	340.000	50.000	112,0		S3üf0/110/710A/690V	R3087021	R3087022
		800	510.000	71.000	118,0		S3üf0/110/800A/690V	R3087221	R3087222
		900	710.000	130.000	118,0		S3üf0/110/900A/690V	R3087421	R3087422
		1000	1.100.000	150.000	127,0		S3üf0/110/1000A/690V	R3087621	R3087622
1250		2.300.000	310.000	150,0	S3üf0/110/1250A/690V		R3087921	R3087922	
1400		2.600.000	455.000	156,0	S3üf0/110/1400A/690V		R3088121	R3088122	

技术参数 / *Technical data*

型号 / Type			S00C+üf0.../690V(L*)	S00üf0.../690V(L)	
尺码 / Size	-	-	NH00		
额定电压 / Rated voltage	$U_n$	V	AC690	AC500	
额定电流 / Rated current	$I_n$	A	10-315	350	400
额定分断能力 / Rated breaking capacity	-	kA	100		
使用类别 / Utilization category	-	-	aR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
螺栓间距 / Hole centres	S		80	80	
尺寸 / Dimensions	a1	mm	101	105	
	a2		54	56	
	e1		21	29	
	e2		40	47	
	i		8,5	11	
重量 / Weight	-	g	150	250	

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

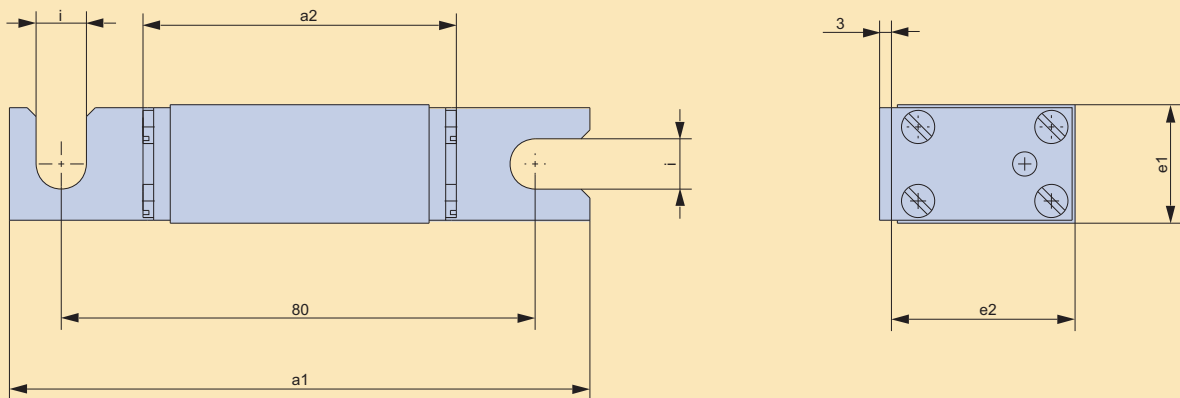
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

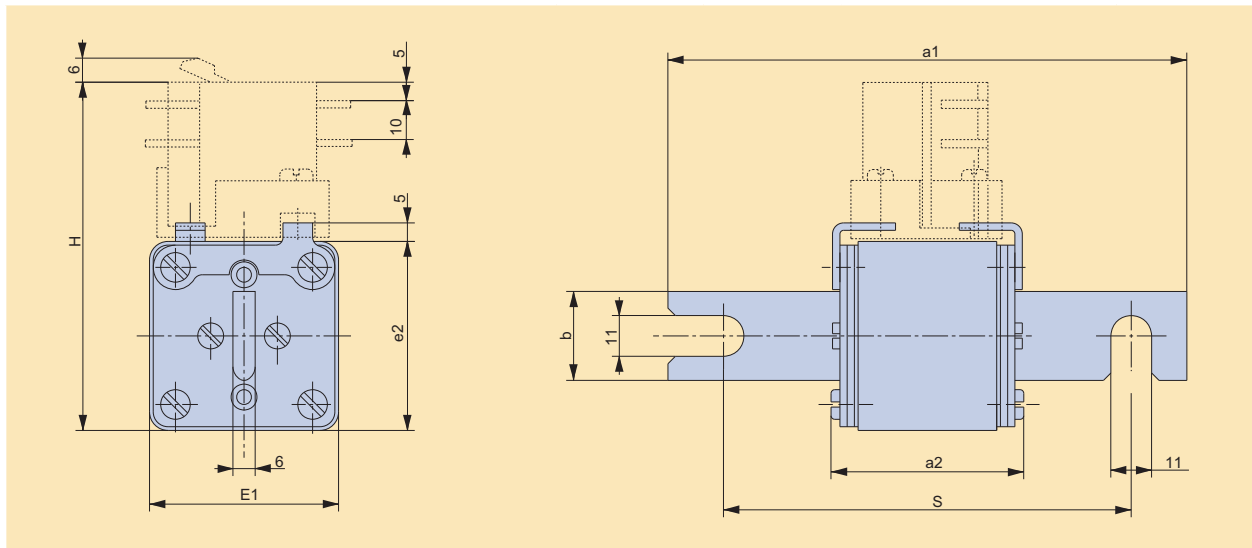
附录  
Appendix



\*型号 ".../L" 指示弹片可用在大尺码上 / Type ".../L" for gripping lug indicator is only available in the larger size

技术参数 / Technical data

型号 / Type		S1(M) üf0/80/... /690V	S1(M) üf0/110/... /690V	S2(M) üf0/80/.../ 690V	S2(M) üf0/110/... /690V
尺码 / Size	-	NH1		NH2	
额定电压 / Rated voltage	$U_n$	AC690		AC690	
额定电流 / Rated current	$I_n$	80-710		400-1000	
额定分断能力 / Rated breaking capacity	-	100			
使用类别 / Utilization category	-	aR			
标准 / Standards	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2			
螺栓间距 / Hole centres	S	80	110	80	110
尺寸 / Dimensions	a1	110	140	110	140
	a2	52		52	
	e1	51		60	
	e2	24		30	
	H*	90		99	
	重量 / Weight	-	g		500



型号 / Type			S3(M)üf0/80/.../690V	S3(M)üf0/110/.../690V
尺码 / Size	-	-	NH3	
额定电压 / Rated voltage	$U_n$	V	AC690	
额定电流 / Rated current	$I_n$	A	630-1400	
额定分断能力 / Rated breaking capacity	-	kA	100	
使用类别 / Utilization category	-	-	aR	
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2	
螺栓间距 / Hole centres	S	mm	80	110
尺寸 / Dimensions	a1	mm	110	140
	a2		52	
	e1 e2		75	
	b		37	
	H*		114	
	重量 / Weight		-	g

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

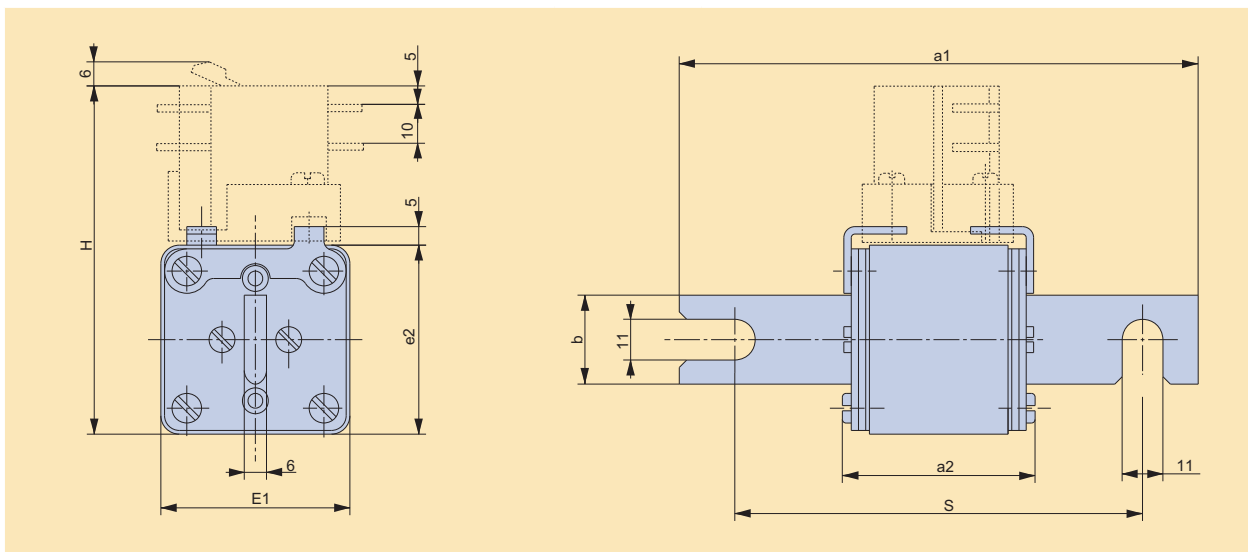
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix



\* 带适配器AMK和微动开关MK / With adapter AMK and microswitch MK



NH熔断器aR, AC690V, 螺纹式 / NH fuse-links aR AC690V with thread contacts



U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号/ Type	指示器 / Indicator	
								顶部/ top	中间指示器 Centre indicator ...Müf...
								订货号 Article-No.	订货号 Article-No.
690V	1	80	2.400	390	16,0	2	G1üf0/80A/690V	R1084140	R1084141
		100	4.600	700	20,0		G1üf0/100A/690V	R1084340	R1084341
		125	6.800	1.000	25,0		G1üf0/125A/690V	R1084640	R1084641
		160	10.500	1.700	32,0		G1üf0/160A/690V	R1084940	R1084941
		200	18.500	2.700	40,0		G1üf0/200A/690V	R1085240	R1085241
		250	31.000	5.000	50,0		G1üf0/250A/690V	R1085640	R1085641
		315	54.000	8.000	60,0		G1üf0/315A/690V	R1085940	R1085941
		350	72.000	11.000	63,0		G1üf0/350A/690V	R1086040	R1086041
		400	105.000	16.000	67,0		G1üf0/400A/690V	R1086240	R1086241
		450	155.000	22.000	71,0		G1üf0/450A/690V	R1086440	R1086441
		500	205.000	31.000	74,0		G1üf0/500A/690V	R1086640	R1086641
		550	286.000	54.000	74,0		G1üf0/550A/690V	R1086740	R1086741
		630	345.000	50.000	88,0		G1üf0/630A/690V	R1086940	R1086941
		710	470.000	96.000	84,0		G1üf0/710A/690V	R1087040	R1087041
	2	400	82.000	11.000	70,0	2	G2üf0/400A/690V	R2086240	R2086241
		450	125.000	17.500	74,0		G2üf0/450A/690V	R2086440	R2086441
		500	170.000	22.000	80,0		G2üf0/500A/690V	R2086640	R2086641
		550	190.000	36.000	92,0		G2üf0/550A/690V	R2086740	R2086741
		630	305.000	44.000	85,0		G2üf0/630A/690V	R2086940	R2086941
		710	480.000	63.000	91,0		G2üf0/710A/690V	R2087040	R2087041
		800	710.000	98.000	95,0		G2üf0/800A/690V	R2087240	R2087241
		900	920.000	178.000	116,0		G2üf0/900A/690V	R2087440	R2087441
	3	1000	1.300.000	235.000	121,0	2	G2üf0/1000A/690V	R2087640	R2087641
		630	240.000	33.000	101,0		G3üf0/630A/690V	R3086940	R3086941
		710	340.000	50.000	112,0		G3üf0/710A/690V	R3087040	R3087041
		800	510.000	71.000	118,0		G3üf0/800A/690V	R3087240	R3087241
		900	710.000	130.000	128,0		G3üf0/900A/690V	R3087440	R3087441
		1000	1.100.000	150.000	127,0		G3üf0/1000A/690V	R3087640	R3087641
1250		2.300.000	310.000	150,0	G3üf0/1250A/690V		R3087940	R3087941	
1400		2.600.000	455.000	162,0	G3üf0/1400A/690V		R3088140	R3088141	

技术参数 / *Technical data*

型号 / Type			G1(M)üf0.../690V	G2(M)üf0.../690V	G3(M)üf0.../690V
尺码 / Size	-	-	NH1	NH2	NH3
额定电压 / Rated voltage	$U_n$	V	AC690	AC690	AC690
额定电流 / Rated current	$I_n$	A	80-710	400-1000	630-1400
额定分断能力 / Rated breaking capacity	-	kA	100		
使用类别 / Utilization category	-	-	aR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
尺寸 / Dimensions	L	mm	53	53	53
	e1		51	60	75
	e2		8	10	12
	M		90	99	114
H*					
重量 / Weight	-	g	500	650	850

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

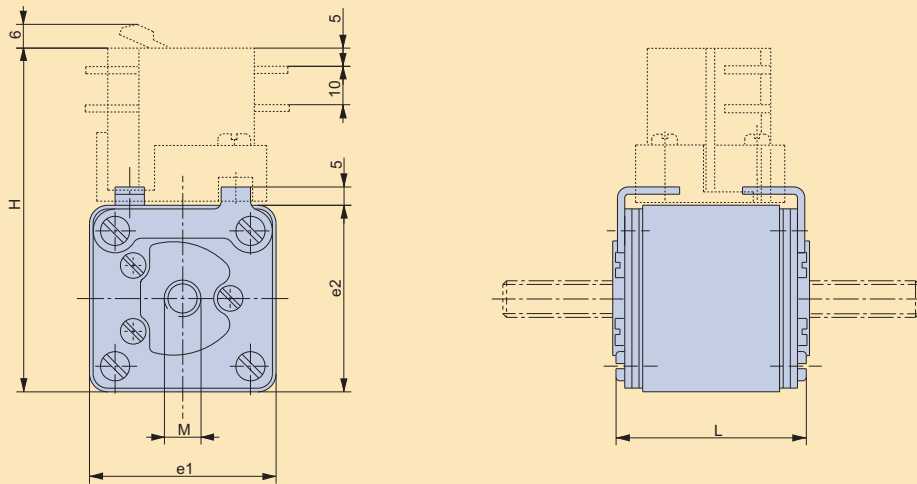
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix



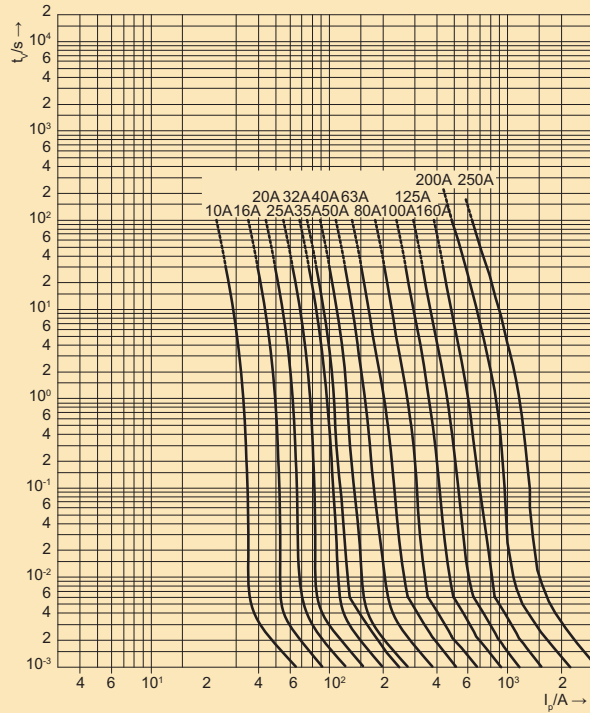
\* 带适配器AMK和微动开关MK / With adapter AMK and microswitch MK



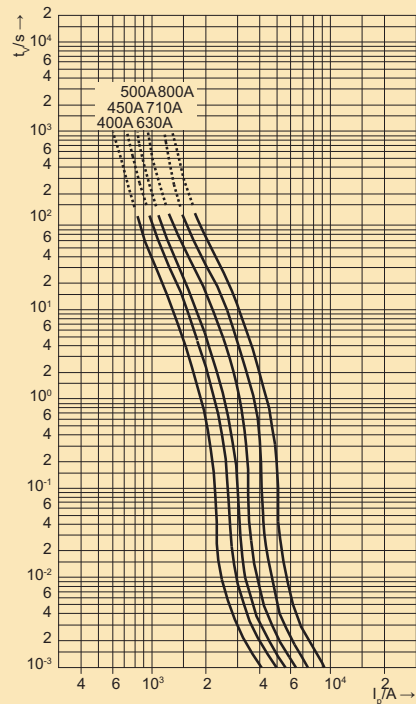
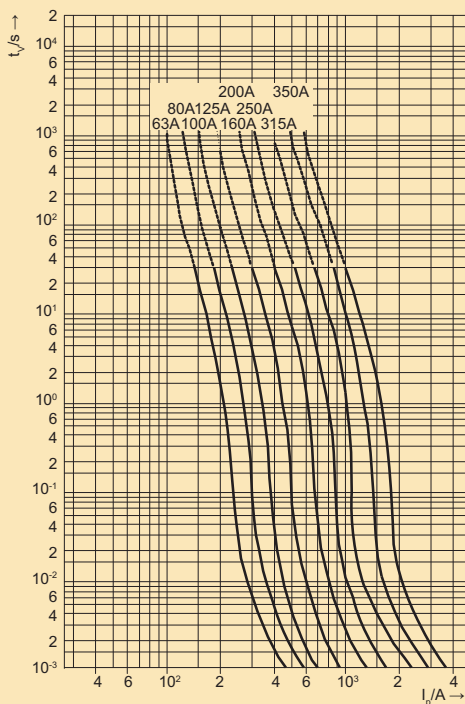
特性aR AC690V / Characteristics aR AC690V

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page
M00üf0/.../690V	R508...00	R-5



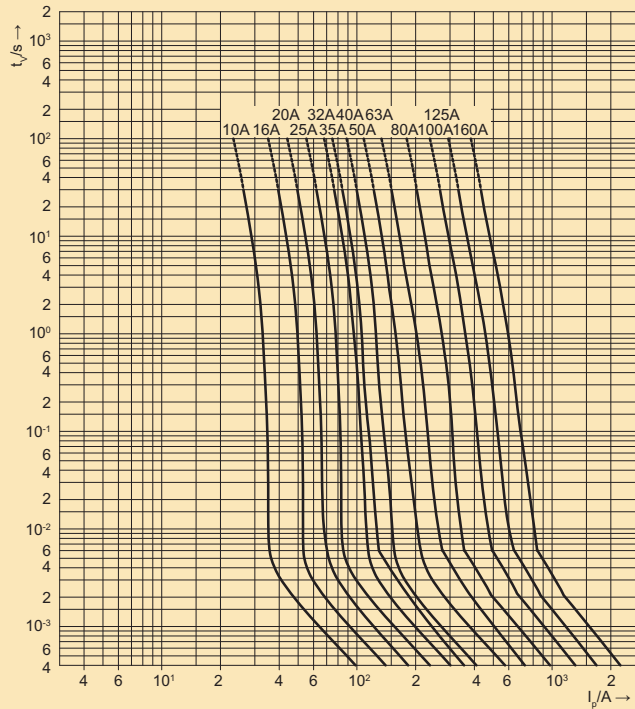
型号 / Type	订货号 / Article-No.	页码 / Page
M...üf0/.../690V	R138...00, R238...00, R338...00	R-5



特性aR AC690V / Characteristics aR AC690V

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page
S00C+üf0/.../690V(L) - (10-160A)	R508...53, R508...26	R-8

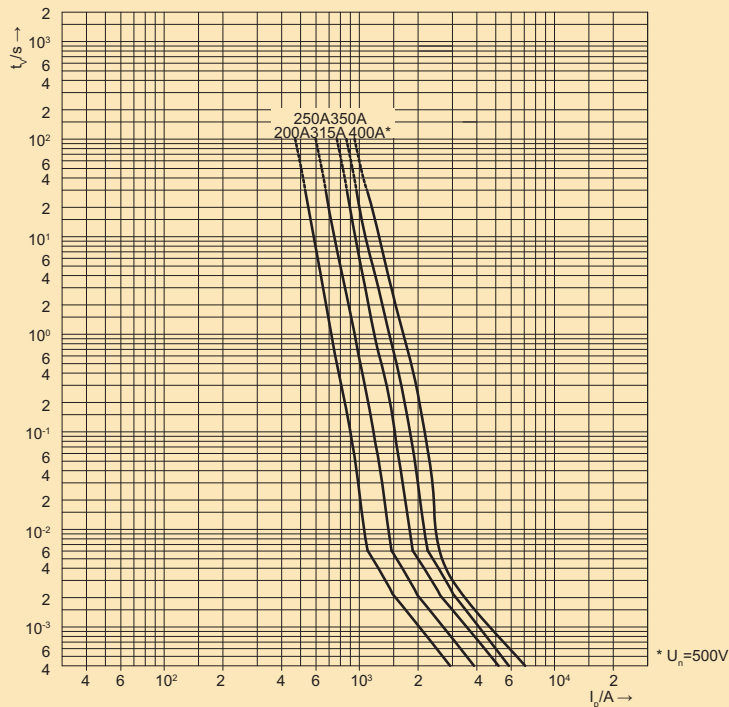


NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护熔断器  
Fuse-links for semiconductor protection

型号 / Type	订货号 / Article-No.	页码 / Page
S00(C+)üf0/.../690V(L) - (200-400A)	R508...53, R508...23, R508...26	R-8



NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

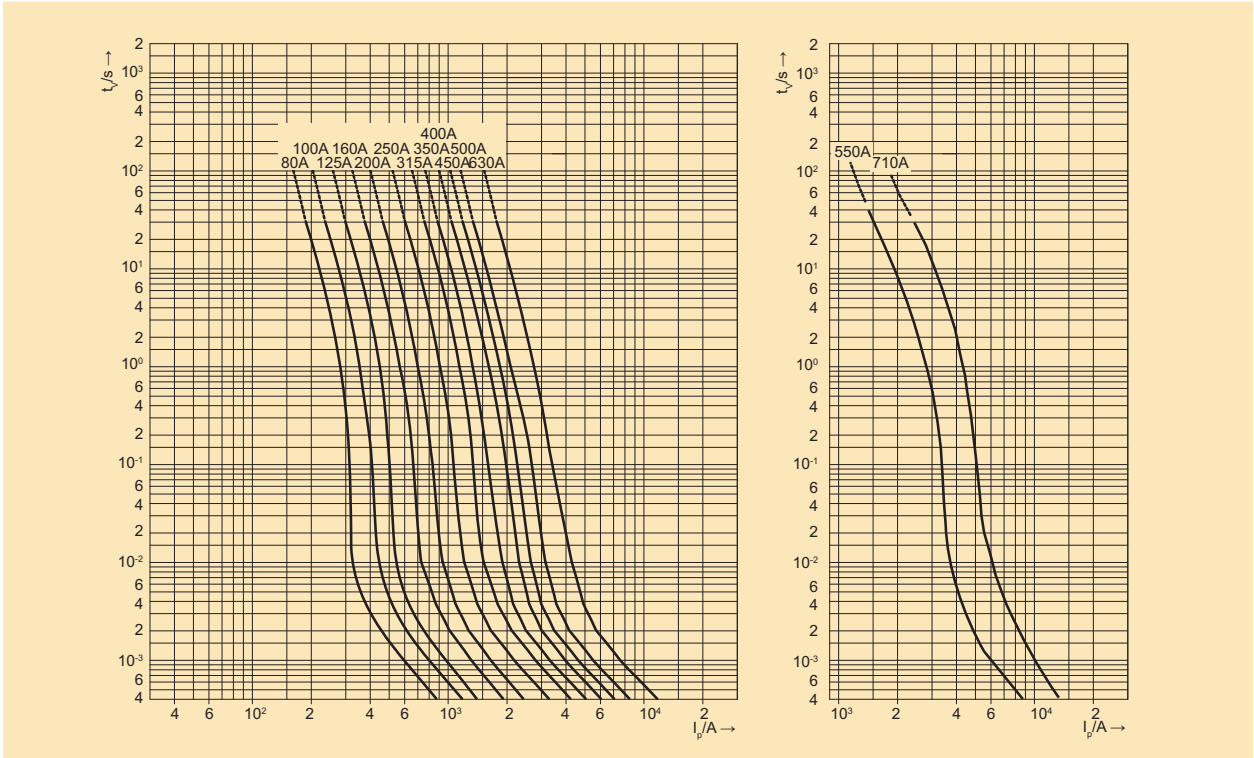
高压熔断器  
IKUS HV HRC fuse-links

附录  
Appendix

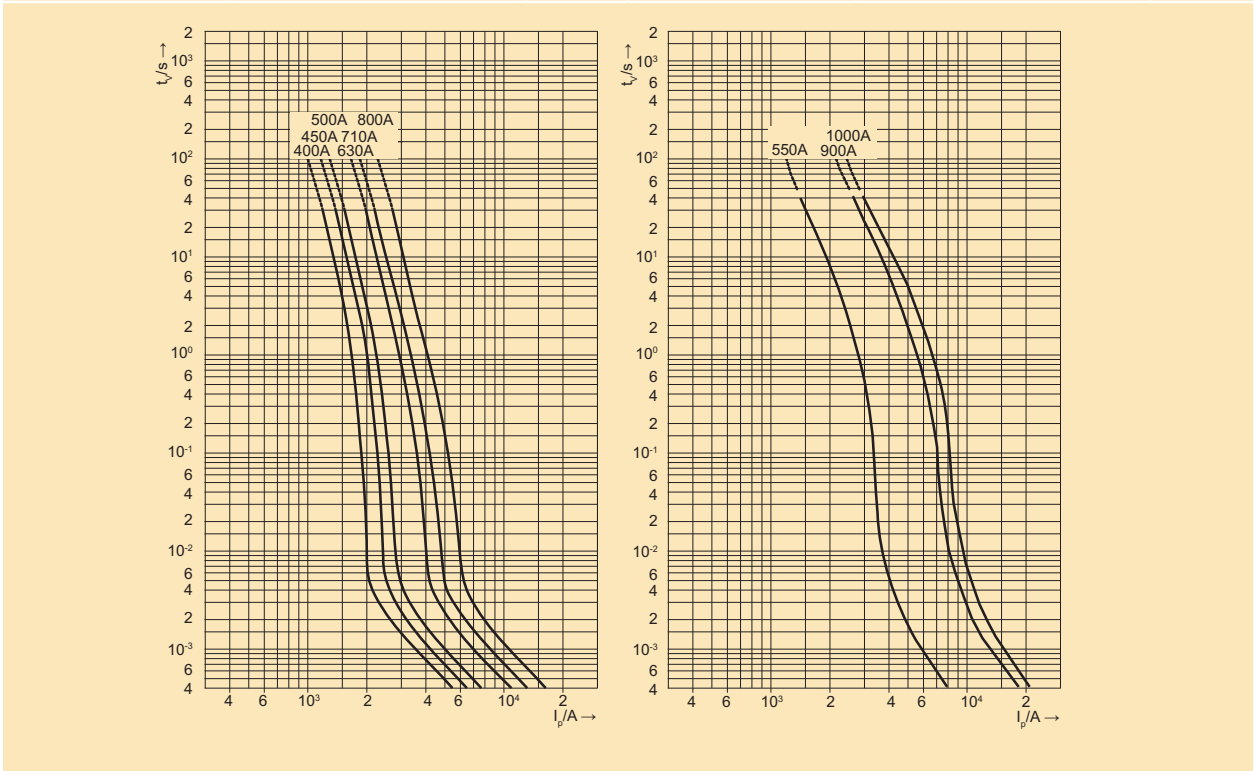
特性aR AC690V / Characteristics aR AC690V

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S1(M)üf0/.../690V	R108...23, R108...24, R108...21, R108...22	R-9f	G1(M)üf0/.../690V	R108...40, R108...41	R-14



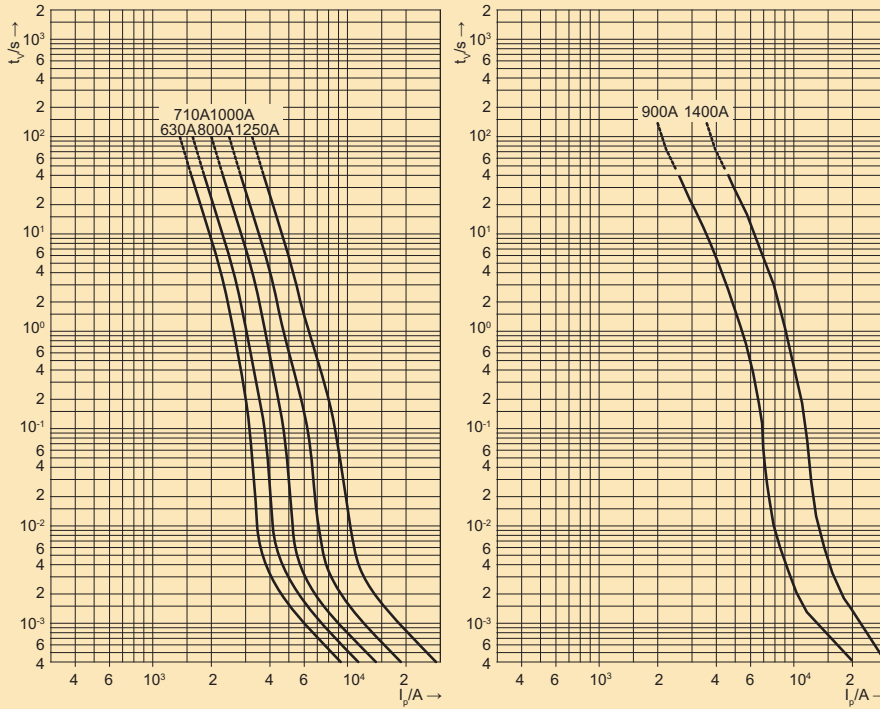
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S2(M)üf0/.../690V	R208...23, R208...24, R208...21, R208...22	R-9f	G2(M)üf0/.../690V	R208...40, R208...41	R-14



特性aR AC690V / *Characteristics aR AC690V*

时间电流特性 / *Time current characteristics*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S3(M)üf0/.../690V	R308...23, R308...24, R308...21, R308...22	R-9f	G3(M)üf0/.../690V	R308...40, R308...41	R-14



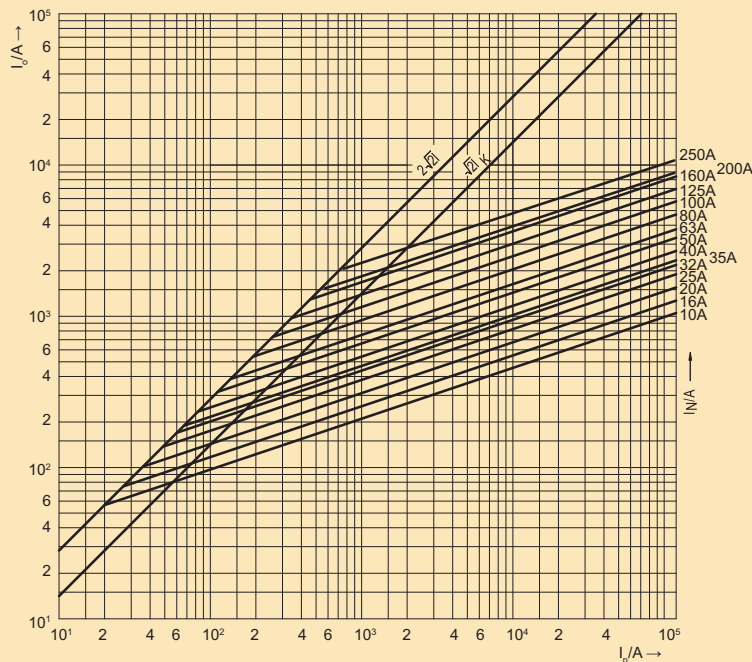
NH熔断器  
*NH fuse-links*

光伏熔断器  
*Fuses for photovoltaic applications*

半导体保护熔断器  
*Fuse-links for semiconductor protection*

截断电流图 / *Peak let-through current chart*

型号 / Type	订货号 / Article-No.	页码 / Page
M00üf0/.../690V	R508...00	R-5

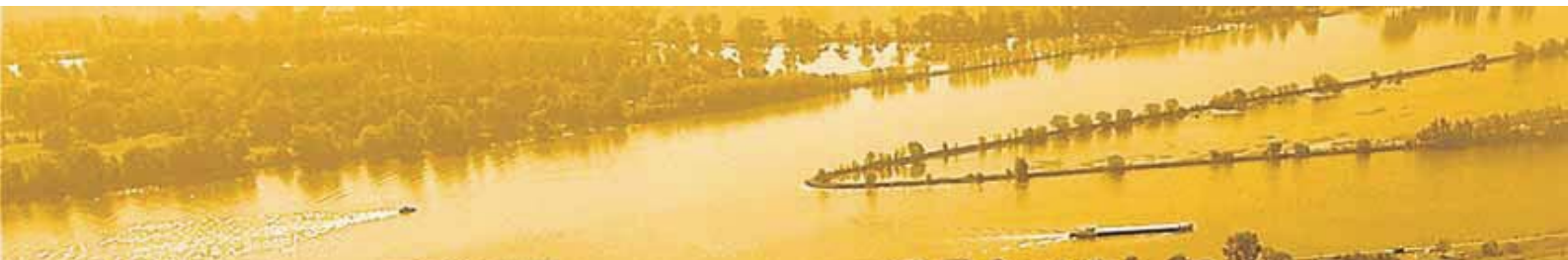


NH熔断器底座  
*NH fuse-bases*

D型熔断器  
*D-type fuses*

高压熔断器  
*IKUS HV HRC fuse-links*

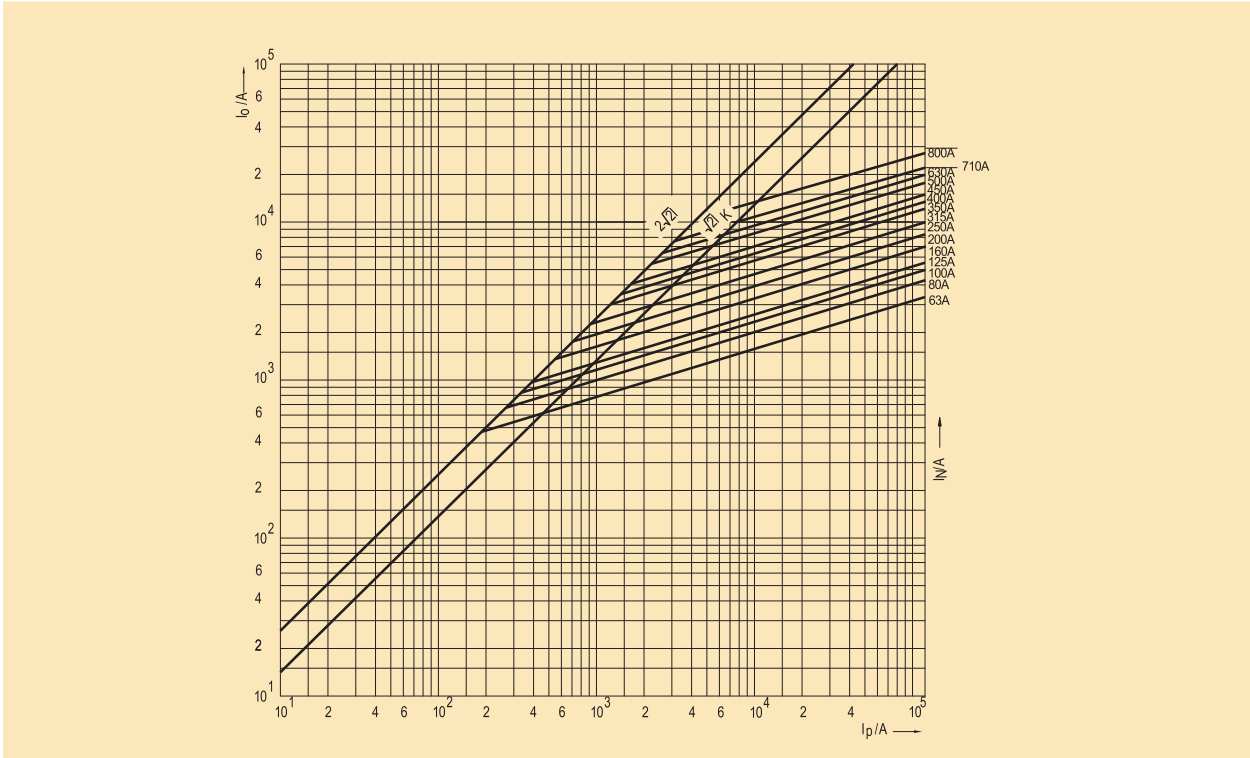
附录  
*Appendix*



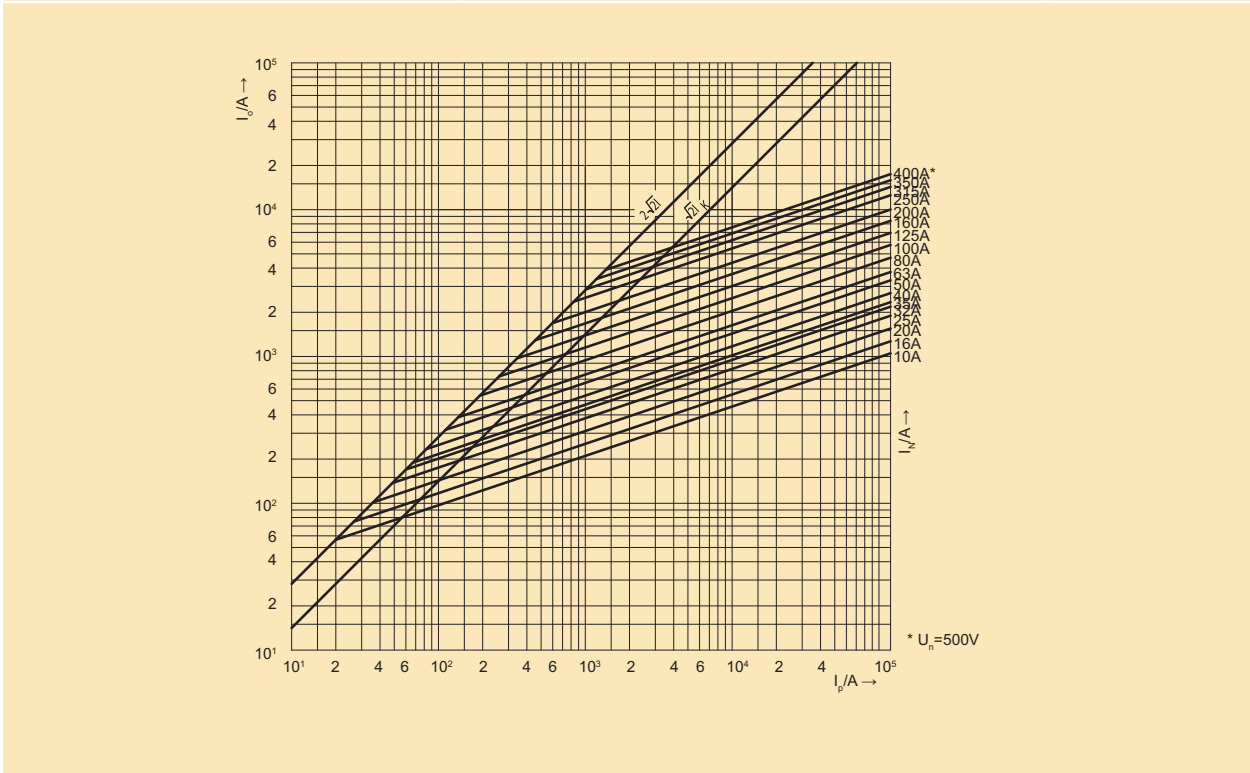
特性aR AC690V / Characteristics aR AC690V

截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page
M...üf0.../690V	R138...00, R238...00, R338...00	R-5



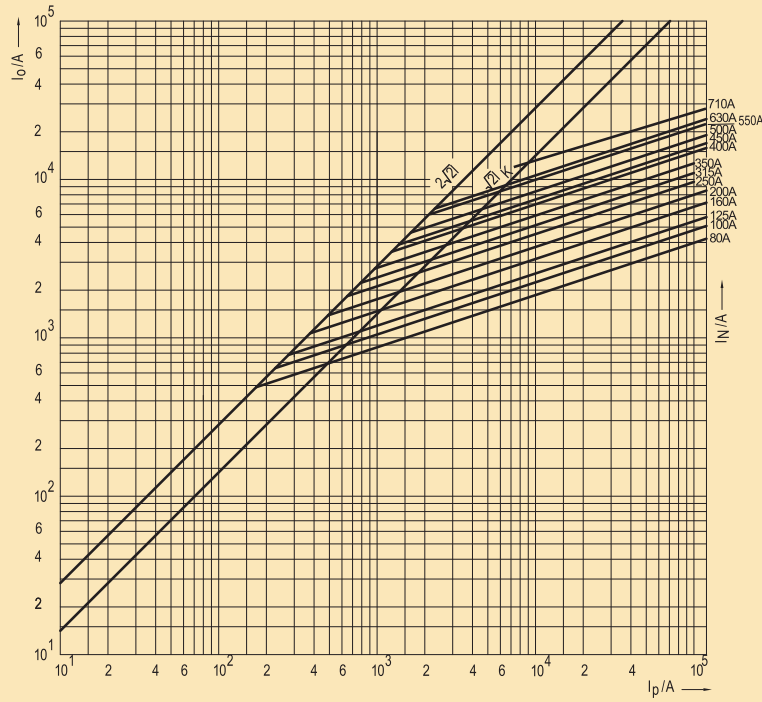
型号 / Type	订货号 / Article-No.	页码 / Page
S00(C+)üf0.../690V(L)	R508...53, R508...23, R508...26	R-8



特性aR AC690V / *Characteristics aR AC690V*

截断电流图 / *Peak let-through current chart*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S1(M)üf0/.../690V	R108...23, R108...24, R108...21, R108...22	R-9f	G1(M)üf0/.../690V	R108...40, R108...41	R-14

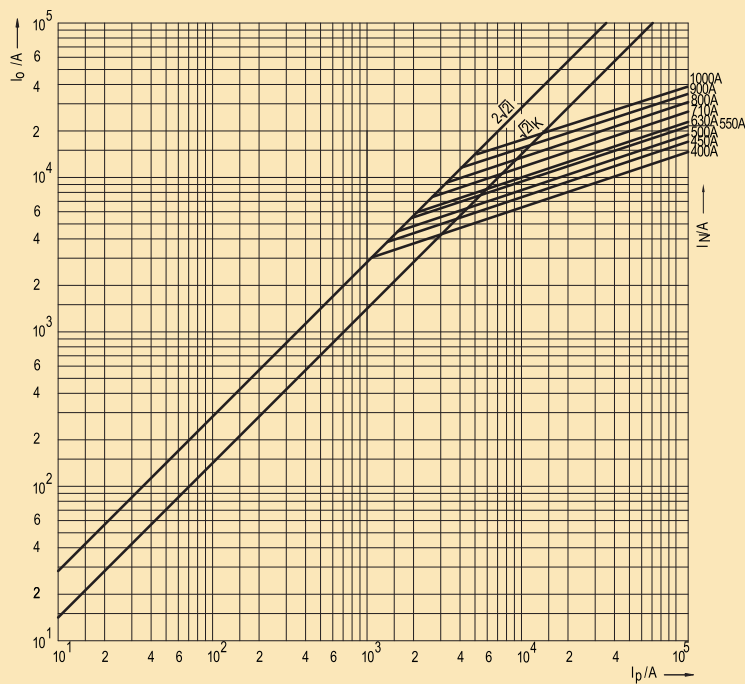


NH熔断器  
*NH fuse-links*

光伏熔断器  
*Fuses for photovoltaic applications*

半导体保护  
熔断器  
*Fuse-links for semiconductor protection*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S2(M)üf0/.../690V	R208...23, R208...24, R208...21, R208...22	R-9f	G2(M)üf0/.../690V	R208...40, R208...41	R-14



NH熔断器底座  
*NH fuse-bases*

D型熔断器  
*D-type fuses*

高压熔断器  
*IKUS HV HRC fuse-links*

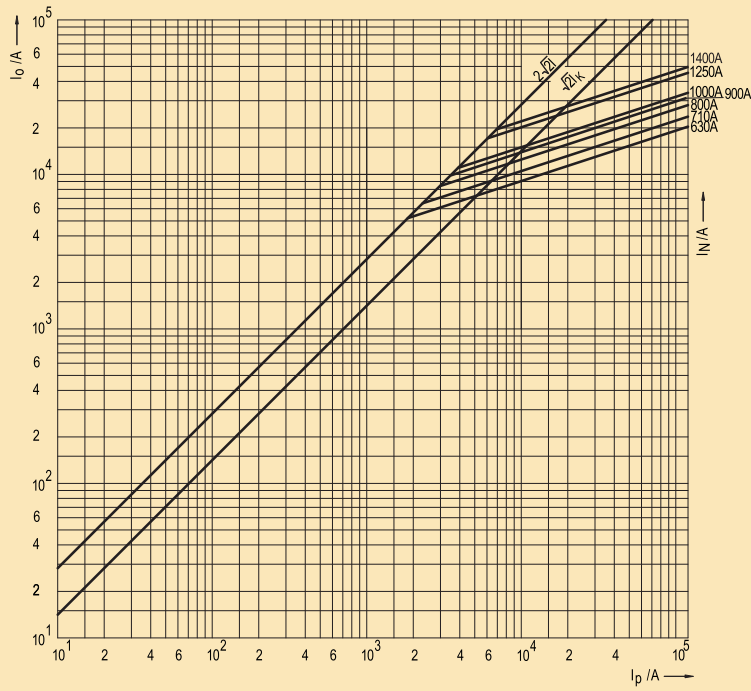
附录  
*Appendix*



特性aR AC690V / Characteristics aR AC690V

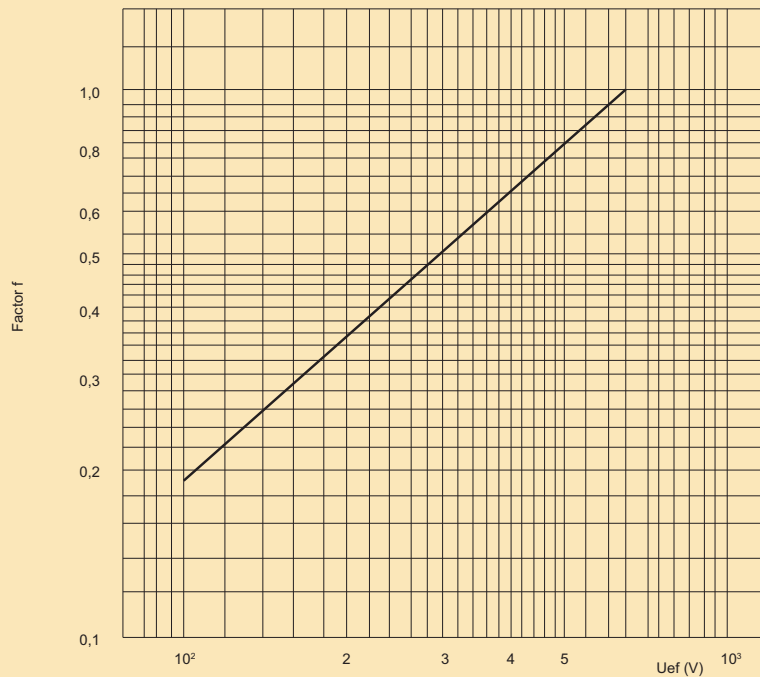
截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S3(M)üf0/.../690V	R308...23, R308...24, R308...21, R308...22	R-9f	G3(M)üf0/.../690V	R308...40, R308...41	R-9f



熔化的I²t校正系数 / Conversion factor Operating I²t

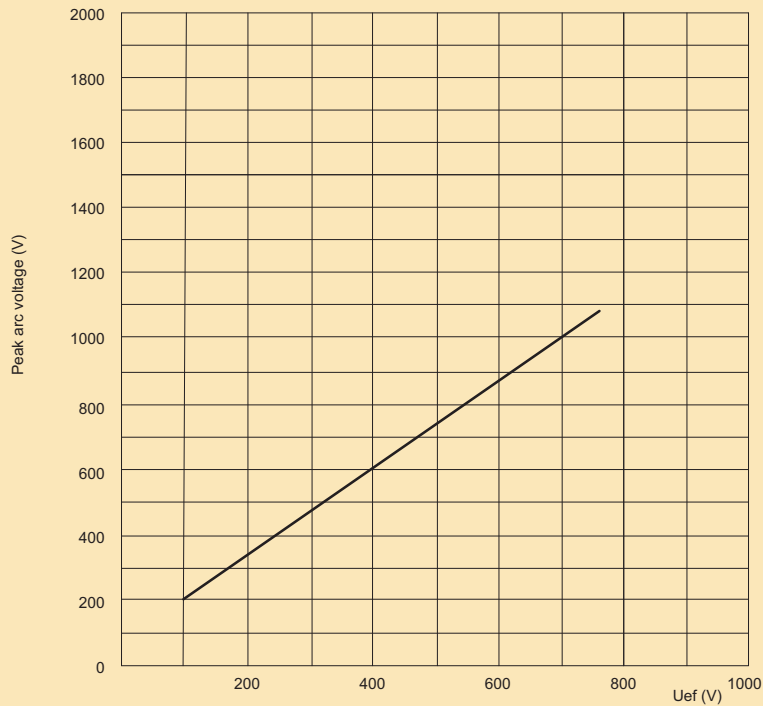
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf0/.../690V	-	-	S00(C+)üf0/.../690V(/L)	-	-
S...(M)üf0/.../690V	-	-	G...(M)üf0/.../690V	-	-



特性aR AC690V / *Characteristics aR AC690V*

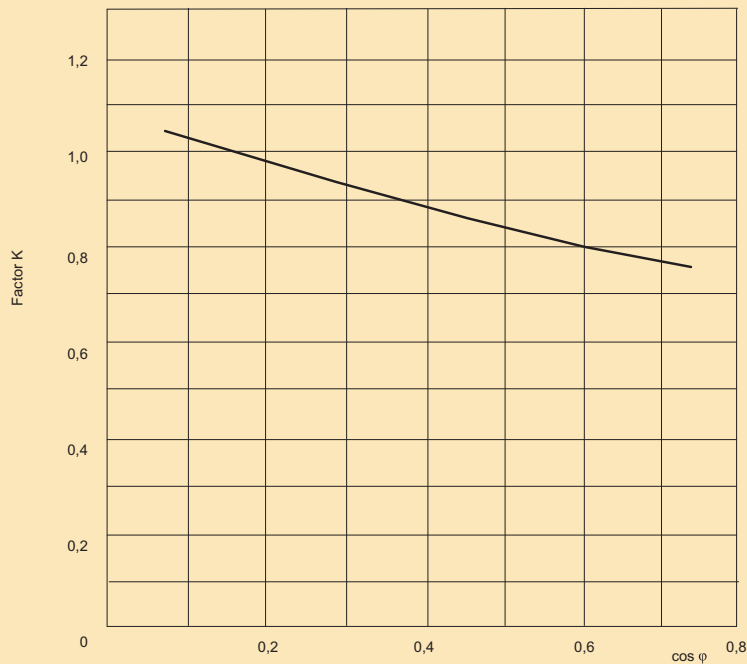
最大的燃弧电压 / *Maximum arc voltage occurring*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf0/.../690V	-	-	S00(C+)üf0/.../690V(/L)	-	-
S...(M)üf0/.../690V	-	-	G...(M)üf0/.../690V	-	-



功率因数的校正系数 / *Correction factor for power factor*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf0/.../690V	-	-	S00(C+)üf0/.../690V(/L)	-	-
S...(M)üf0/.../690V	-	-	G...(M)üf0/.../690V	-	-



NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护熔断器  
Fuse-links for semiconductor protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC fuse-links

附录  
Appendix

特性aR AC690V / Characteristics aR AC690V

部分负载的功耗校正系数 / Conversion power dissipation for partial load

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf0/.../690V	-		S00(C+)üf0/.../690V(L)	-	-
S...(M)üf0/.../690V	-		G...(M)üf0/.../690V	-	-

校正系数 C / Correction factor C	0,005	0,025	0,063	0,122	0,204	0,31	0,442	0,6	0,785	1
负载 % / Load %	10	20	30	40	50	60	70	80	90	100

NH熔断器aR, AC1000V, 螺栓连接, size 00 / NH fuse-links aR AC1000V with screw contacts; size 00

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号 / Type	指示器 / Indicator	
								顶部 / top	搭扣指示 Gripping lug indicator .../L
								订货号 Article-No.	订货号 Article-No.
1000V	00	32	190	27	15,0	3	S00üf0/80/32A/1000V	R5042923	R5042926
		35	270	35	16,0		S00üf0/80/35A/1000V	R5043123	R5043126
		40	330	48	18,0		S00üf0/80/40A/1000V	R5043423	R5043426
		50	680	95	20,0		S00üf0/80/50A/1000V	R5043523	R5043526
		63	1.250	170	23,0		S00üf0/80/63A/1000V	R5043823	R5043826
		80	2.500	350	27,0		S00üf0/80/80A/1000V	R5044123	R5044126
		100	5.000	680	30,0		S00üf0/80/100A/1000V	R5044323	R5044326
		125	10.000	1.400	37,0		S00üf0/80/125A/1000V	R5044623	R5044626
		160	16.000	2.200	46,0		S00üf0/80/160A/1000V	R5044923	R5044926
		200	30.000	4.200	55,0		S00üf0/80/200A/1000V	R5045223	R5045226
900V		250	55.000	7.400	65,0	S00üf0/80/250A/1000V	R5045623	R5045626	
		315	100.000	14.800	75,0	S00üf0/80/315A/900V	R5045923	R5045926	
		350	125.000	17.500	81,0	S00üf0/80/350A/900V	R5046023	R5046026	

NH熔断器aR, AC690V, 螺栓连接, 尺码 1-3, 110mm  
NH fuse-links aR AC1000V with screw contacts; size 1-3; 110mm

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号/ Type	指示器 / Indicator	
								顶部/ top	中间指示器 Centre indicator ...Müf...
								订货号 Article-No.	订货号 Article-No.
1000V	1	63	2.000	310	15,0	1	S1üf0/110/63A/1000V	R1043821	R1043822
		80	3.500	580	20,0		S1üf0/110/80A/1000V	R1044121	R1044122
		100	6.300	1.000	25,0		S1üf0/110/100A/1000V	R1044321	R1044322
		125	11.000	1.750	30,0		S1üf0/110/125A/1000V	R1044621	R1044622
		160	17.500	2.750	35,0		S1üf0/110/160A/1000V	R1044921	R1044922
		200	31.000	5.000	44,0		S1üf0/110/200A/1000V	R1045221	R1045222
		250	51.500	8.100	54,0		S1üf0/110/250A/1000V	R1045621	R1045622
		315	110.000	18.000	60,0		S1üf0/110/315A/1000V	R1045921	R1045922
		350	149.000	22.000	65,0		S1üf0/110/350A/1000V	R1046021	R1046022
		400	201.000	33.000	70,0		S1üf0/110/400A/1000V	R1046221	R1046222
	450	302.000	51.000	74,0	S1üf0/110/450A/1000V	R1046421	R1046422		
	500	402.000	65.000	79,0	S1üf0/110/500A/1000V	R1046621	R1046622		
	2	315	88.000	15.000	65,0	1	S2üf0/110/315A/1000V	R2045921	R2045922
		350	120.000	19.000	70,0		S2üf0/110/350A/1000V	R2046021	R2046022
		400	175.000	27.000	80,0		S2üf0/110/400A/1000V	R2046221	R2046222
		450	210.000	35.000	85,0		S2üf0/110/450A/1000V	R2046421	R2046422
		500	315.000	55.000	90,0		S2üf0/110/500A/1000V	R2046621	R2046622
		630	610.000	98.000	108,0		S2üf0/110/630A/1000V	R2046921	R2046922
	3	500	260.000	42.000	100,0	3	S3üf0/110/500A/1000V	R3046621	R3046622
		630	510.000	80.000	112,0		S3üf0/110/630A/1000V	R3046921	R3046922
		710	690.000	100.000	130,0		S3üf0/110/710A/1000V	R3047021	R3047022
		800	900.000	150.000	140,0		S3üf0/110/800A/1000V	R3047221	R3047222
		1000	2.100.000	310.000	156,0		S3üf0/110/1000A/1000V	R3047621	R3047622



NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

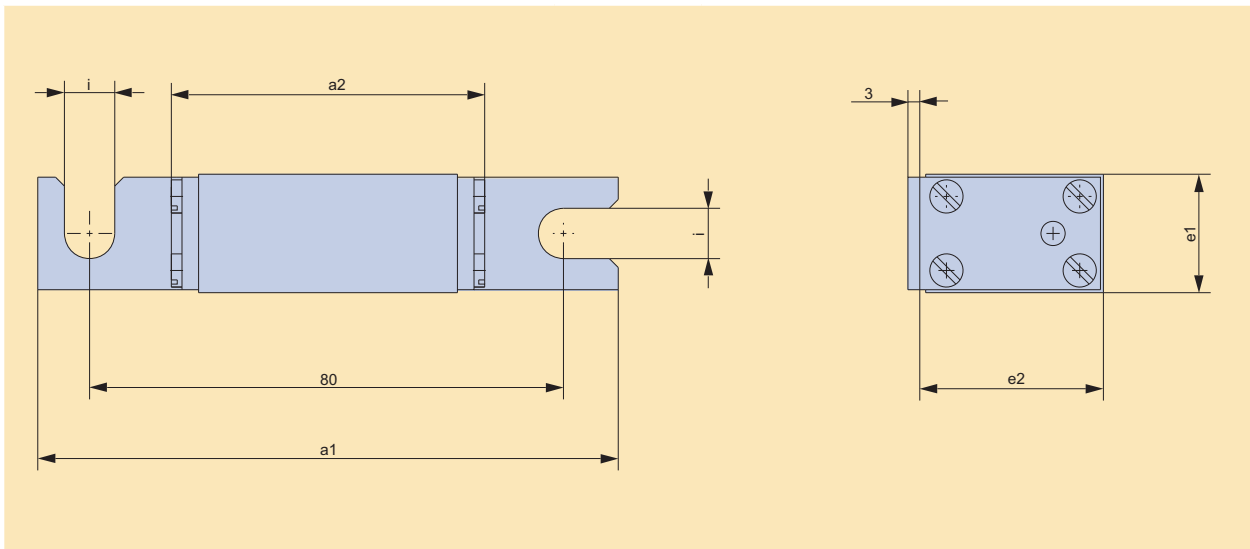
D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix

技术参数 / Technical data

型号 / Type			S00üf0.../1000V(L)	
尺码 / Size	-	-	NH00	
额定电压 / Rated voltage	$U_n$	V	AC1000	AC900
额定电流 / Rated current	$I_n$	A	32-250	315-350
额定分断能力 / Rated breaking capacity	-	kA	100	
使用类别 / Utilization category	-	-	aR	
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2	
螺栓间距 / Hole centres	S	mm	80	
尺寸 / Dimensions	a1		105	
	a2		56	
	e1		29	
	e2		47	
	i	10,3		
重量 / Weight	-	g	250	



技术参数 / *Technical data*

型号 / Type			S1(M) üf0/110/.../1000V	S2(M) üf0/110/.../1000V	S3(M) üf0/110/.../1000V
尺码 / Size	-	-	NH1	NH2	NH3
额定电压 / Rated voltage	$U_n$	V	AC1000	AC1000	AC1000
额定电流 / Rated current	$I_n$	A	63-500	315-630	500-1000
额定分断能力 / Rated breaking capacity	-	kA	100		
使用类别 / Utilization category	-	-	aR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
螺栓间距 / Hole centres	S	mm	110	110	110
尺寸 / Dimensions	a1	mm	140	140	140
	a2		74	74	74
	e1 e2		51	60	75
	b		24	30	37
	H*		90	99	114
重量 / Weight	-	g	500	650	850

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

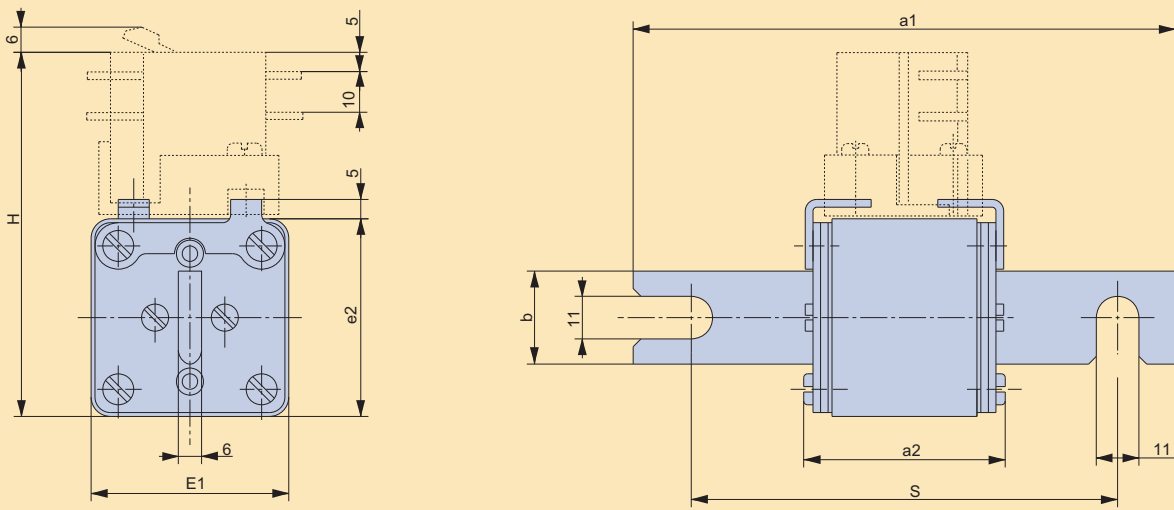
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix



\* 适用 AMK, MK 微动开关 / With adapter AMK and microswitch MK

NH熔断器aR, AC1000V, 螺纹式 / NH fuse-links aR AC1000V with thread contacts



U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号/ Type	指示器 / Indicator	
								顶部/ top	中间指示器 Centre indicator ...Müf...
								订货号 Article-No.	订货号 Article-No.
1000V	1	63	2.000	310	15,0	2	G1üf0/63A/1000V	R1043840	R1043841
		80	3.500	580	20,0		G1üf0/80A/1000V	R1044140	R1044141
		100	6.300	1.000	25,0		G1üf0/100A/1000V	R1044340	R1044341
		125	11.000	1.750	30,0		G1üf0/125A/1000V	R1044640	R1044641
		160	17.500	2.750	35,0		G1üf0/160A/1000V	R1044940	R1044941
		200	31.000	5.000	44,0		G1üf0/200A/1000V	R1045240	R1045241
		250	51.500	8.100	54,0		G1üf0/250A/1000V	R1045640	R1045641
		315	110.000	18.000	60,0		G1üf0/315A/1000V	R1045940	R1045941
		350	149.000	22.000	65,0		G1üf0/350A/1000V	R1046040	R1046041
		400	201.000	33.000	70,0		G1üf0/400A/1000V	R1046240	R1046241
	450	302.000	51.000	74,0	G1üf0/450A/1000V	R1046440	R1046441		
	500	402.000	65.000	79,0	G1üf0/500A/1000V	R1046640	R1046641		
	2	315	88.000	15.000	65,0	2	G2üf0/315A/1000V	R2045940	R2045941
		350	120.000	19.000	70,0		G2üf0/350A/1000V	R2046040	R2046041
		400	175.000	27.000	80,0		G2üf0/400A/1000V	R2046240	R2046241
		450	210.000	35.000	85,0		G2üf0/450A/1000V	R2046440	R2046441
		500	315.000	55.000	90,0		G2üf0/500A/1000V	R2046640	R2046641
	3	630	610.000	98.000	108,0	2	G2üf0/630A/1000V	R2046940	R2046941
		500	260.000	42.000	100,0		G3üf0/500A/1000V	R3046640	R3046641
		630	510.000	80.000	112,0		G3üf0/630A/1000V	R3046940	R3046941
		710	690.000	100.000	130,0		G3üf0/710A/1000V	R3047040	R3047041
		800	900.000	150.000	140,0		G3üf0/800A/1000V	R3047240	R3047241
	1000	2.100.000	310.000	156,0	G3üf0/1000A/1000V	R3047640	R3047641		

技术参数 / *Technical data*

型号 / Type			G1(M) üfo.../1000V	G2(M) üfo.../1000V	G3(M) üfo.../1000V
尺码 / Size	-	-	NH1	NH2	NH3
额定电压 / Rated voltage	$U_n$	V	AC1000	AC1000	AC1000
额定电流 / Rated current	$I_n$	A	63-500	315-630	500-1000
额定分断能力 / Rated breaking capacity	-	kA	100		
使用类别 / Utilization category	-	-	aR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
尺寸 / Dimensions	L	mm	75	75	75
	e1		51	60	75
	e2		8	10	12
	M		90	99	114
H*					
重量 / Weight	-	g	500	650	850

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

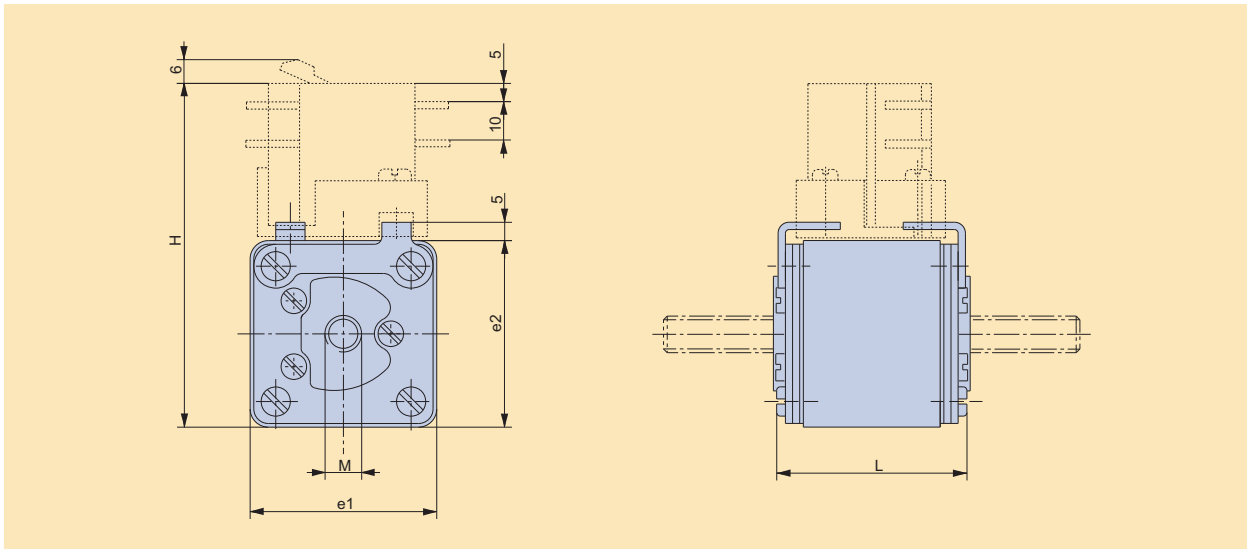
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix



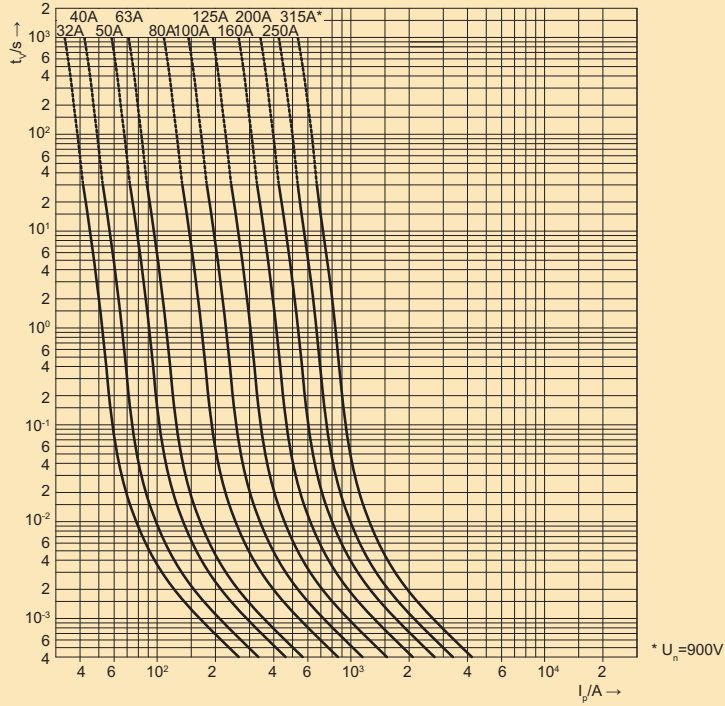
\* 适用 AMK, MK 微动开关 / With adapter AMK and microswitch MK



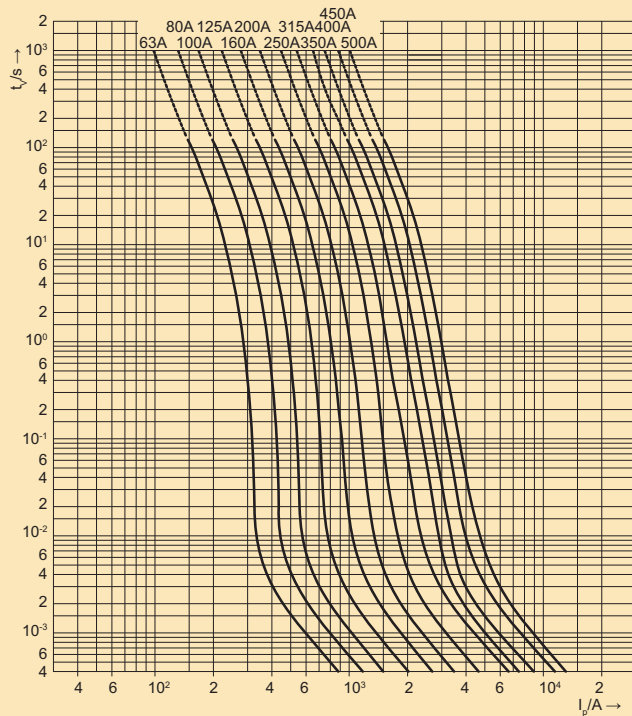
特性aR AC1000V / Characteristics aR AC1000V

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page
S00üf0/.../1000V(L)	R504...23, R504...26	R-24



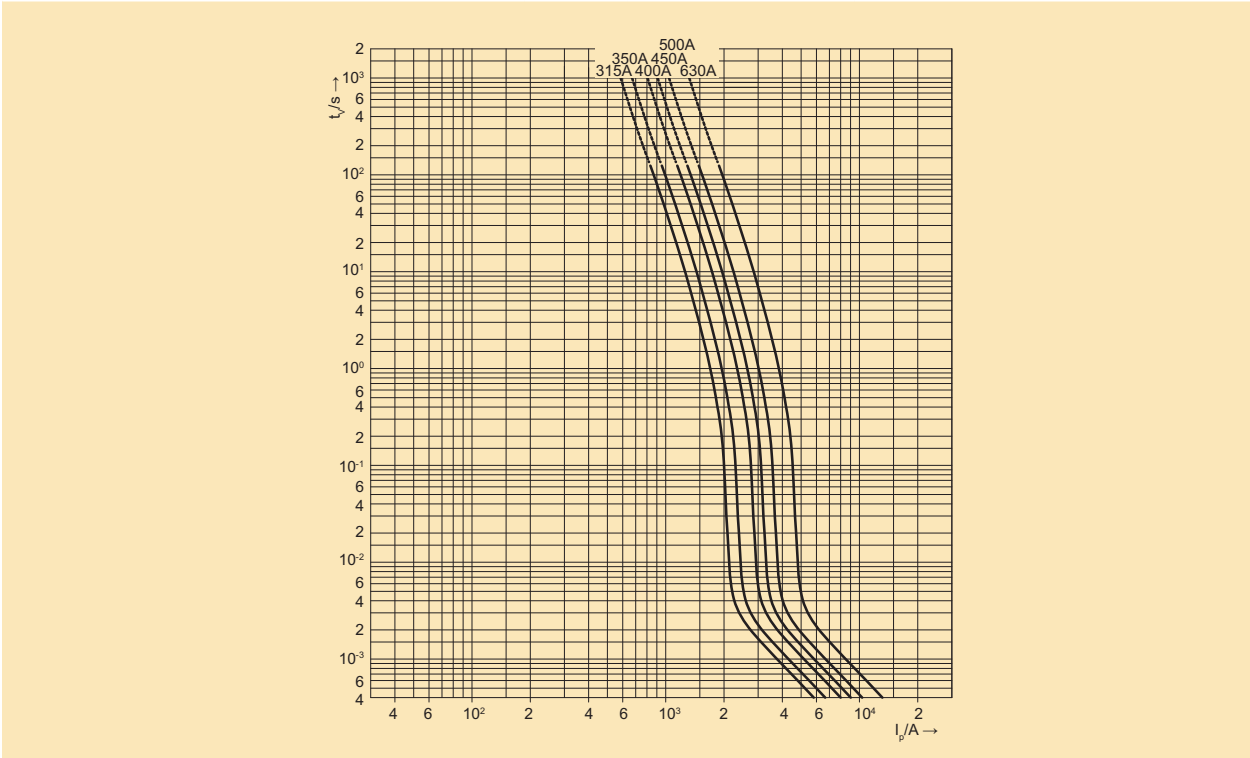
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S1(M)üf0/.../1000V	R104...21, R104...22		G1(M)üf0/.../1000V	R104...40, R104...41	R-28



特性aR AC1000V / *Characteristics aR AC1000V*

时间电流特性 / *Time current characteristics*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S2(M)üf0/.../1000V	R204...21, R204...22	R-25	G2(M)üf0/.../1000V	R204...40, R204...41	R-28

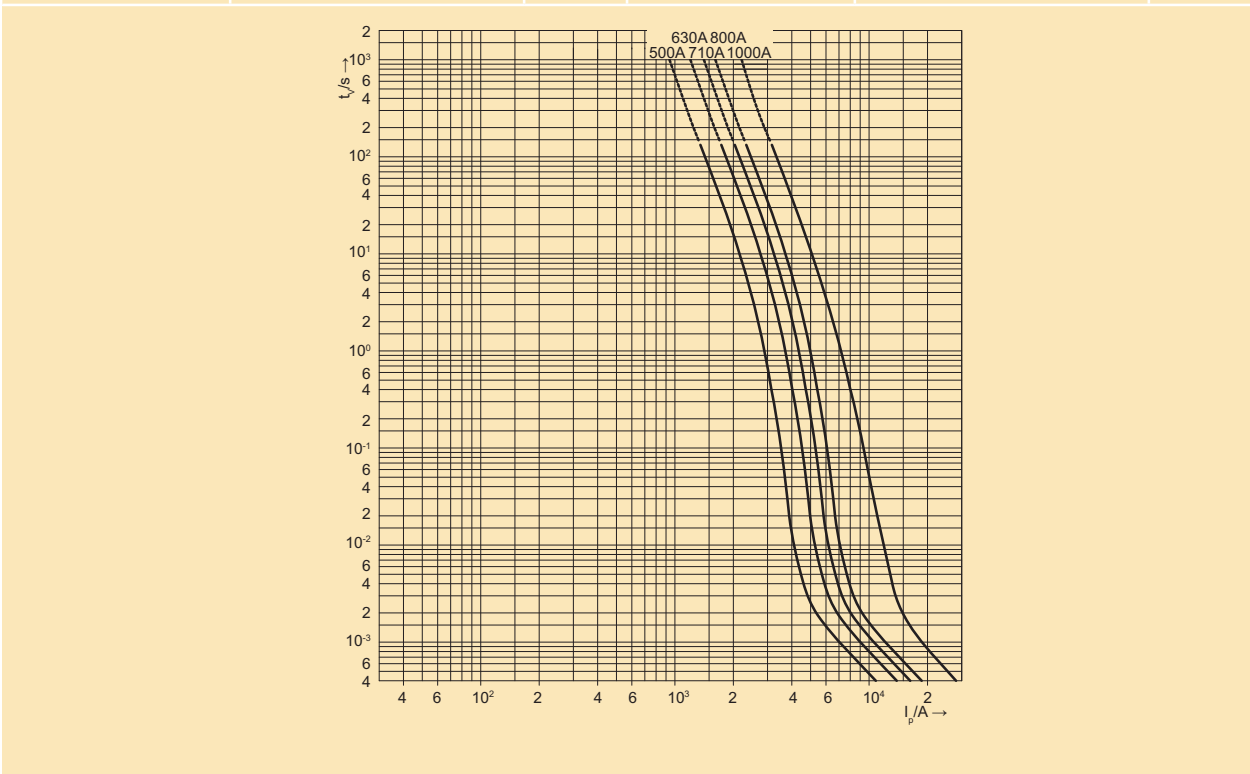


NH熔断器  
*NH fuse-links*

光伏熔断器  
*Fuses for photovoltaic applications*

半导体保护  
熔断器  
*Fuse-links for semiconductor protection*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S3(M)üf0/.../1000V	R304...21, R304...22	R-25	G3(M)üf0/.../1000V	R304...40, R304...41	R-28



NH熔断器底座  
*NH fuse-bases*

D型熔断器  
*D-type fuses*

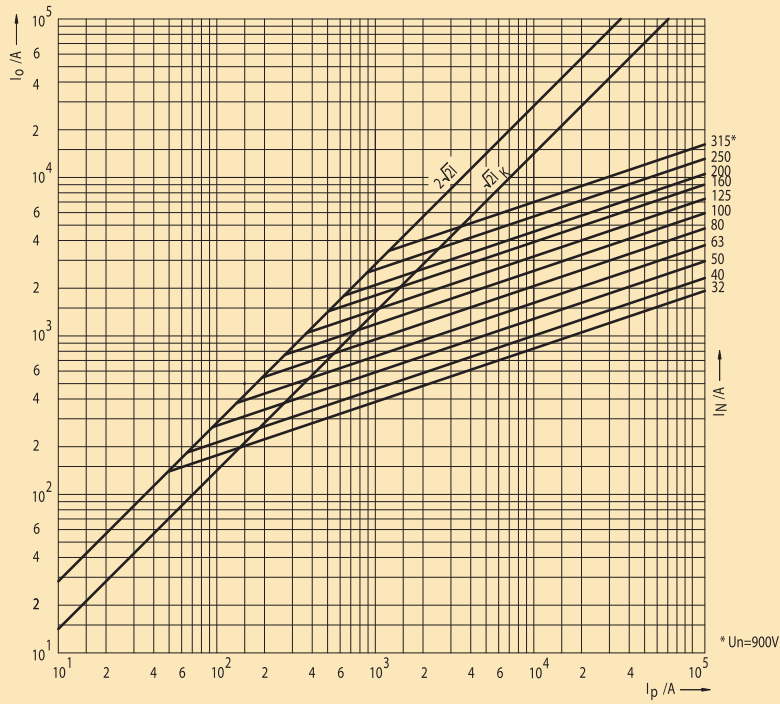
高压熔断器  
*IKUS HV HRC fuse-links*

附录  
*Appendix*

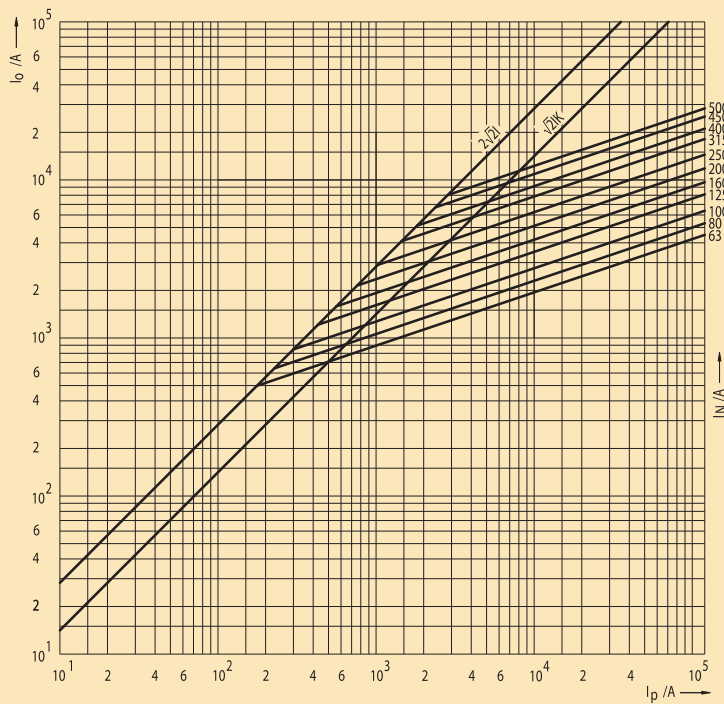
特性aR AC1000V / Characteristics aR AC1000V

截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page
S00üf0/.../1000V(L)	R504...23, R504...26	R-24



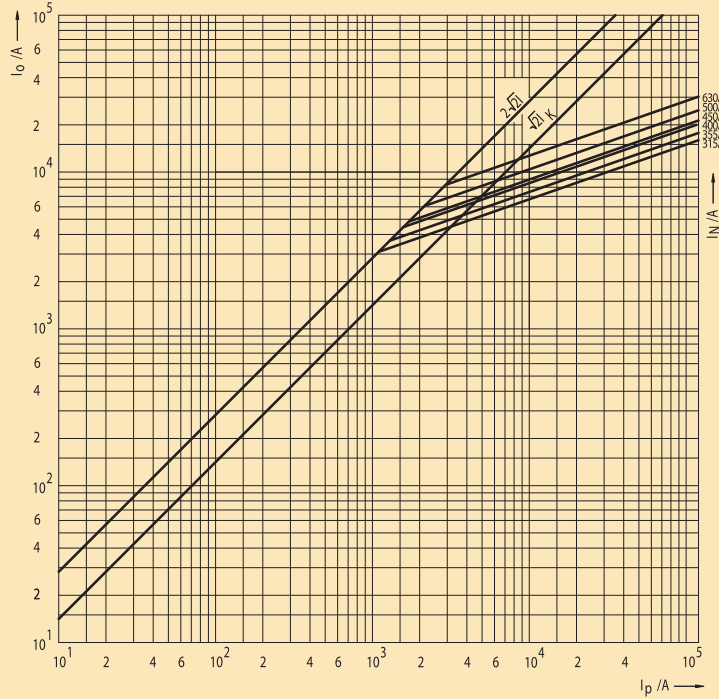
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S1(M)üf0/.../1000V	R104...21, R104...22	R-25	G1(M)üf0/.../1000V	R104...40, R104...41	R-28



特性aR AC1000V / *Characteristics aR AC1000V*

截断电流图 / *Peak let-through current chart*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S2(M)üf0/.../1000V	R204...21, R204...22	R-25	G2(M)üf0/.../1000V	R204...40, R204...41	R-28

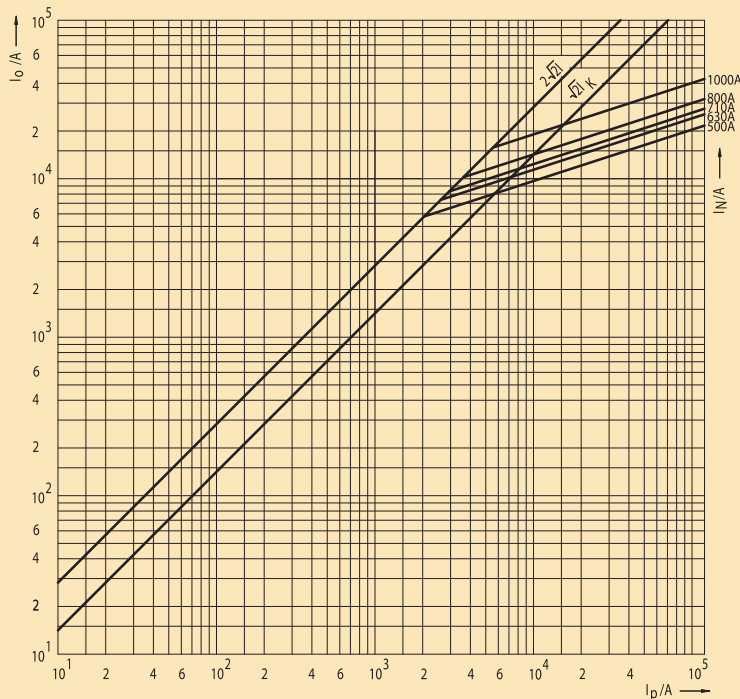


NH熔断器  
*NH fuse-links*

光伏熔断器  
*Fuses for photovoltaic applications*

半导体保护熔断器  
*Fuse-links for semiconductor protection*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S3(M)üf0/.../1000V	R304...21, R304...22	R-25	G3(M)üf0/.../1000V	R304...40, R304...41	R-28



NH熔断器底座  
*NH fuse-bases*

D型熔断器  
*D-type fuses*

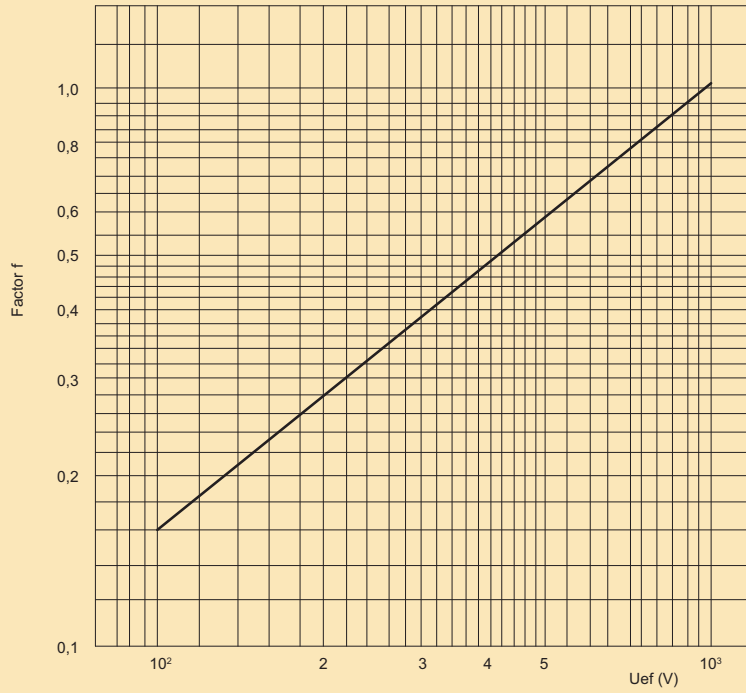
高压熔断器  
*IKUS HV HRC fuse-links*

附录  
*Appendix*

特性aR AC1000V / Characteristics aR AC1000V

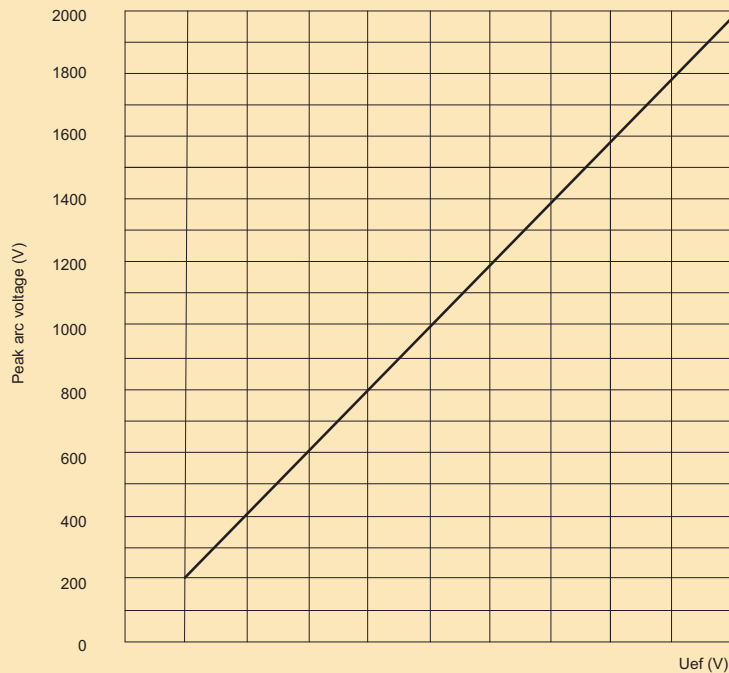
熔化的 $I^2t$ 校正系数 / Conversion factor Operating  $I^2t$

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S00üf0/.../1000V(L)	-	-	S...(M)üf0/.../1000V	-	-
G...(M)üf0/.../1000V	-	-	-	-	-



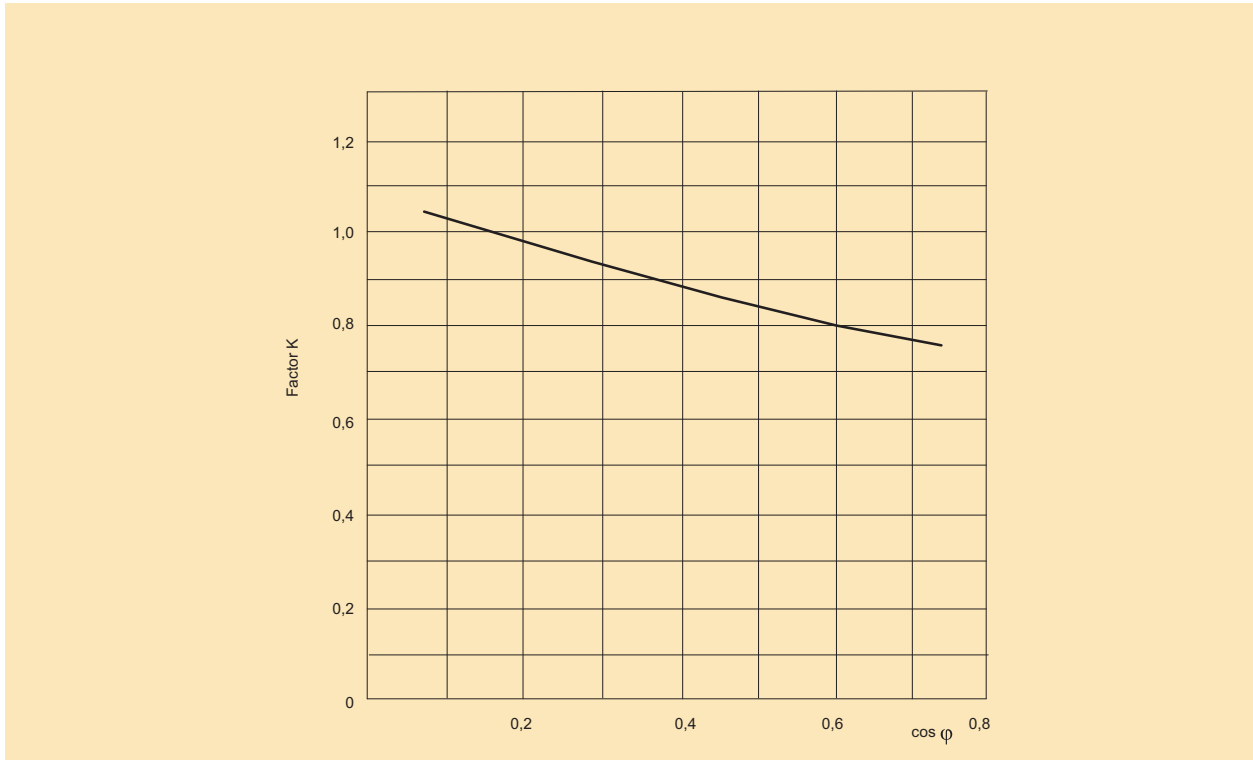
最大燃弧电压 / Maximum arc voltage occuring

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S00üf0/.../1000V(L)	-	-	S...(M)üf0/.../1000V	-	-
G...(M)üf0/.../1000V	-	-	-	-	-



特性aR AC1000V / *Characteristics aR AC1000V*

功率因数的校正系数 / *Correction factor for power factor*



部分负载的功耗校正系数 / *Conversion power dissipation for partial load*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
S00üf0/.../1000V(L)	-	-	S...(M)üf0/.../1000V	-	-
G...(M)üf0/.../1000V	-	-	-	-	-

校正系数 C / Correction factor C	0,005	0,025	0,063	0,122	0,204	0,31	0,442	0,6	0,785	1
负载 % / Load %	10	20	30	40	50	60	70	80	90	100

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护  
熔断器  
Fuse-links for semiconductor protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

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Appendix

圆柱型熔断器 aR AC500V–AC690V / Cylindrical fuse-links aR AC500V – AC690V

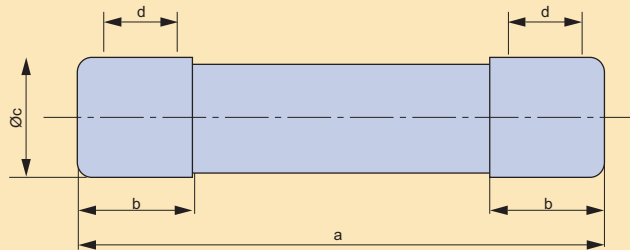


U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号/ Type	指示器 / Indicator	
								顶部/ top	撞击器 Striker ...K
								订货号 Article-No.	订货号 Article-No.
600V	10x38	6	30	4	1,5	10	Z10AR6	D7721400	–
		8	50	6	2,0		Z10AR8	D7721600	–
		10	70	9	2,5		Z10AR10	D7721700	–
		12	120	15	3,0		Z10AR12	D7721900	–
		16	150	25	3,5		Z10AR16	D7722200	–
		20	260	34	4,8		Z10AR20	D7722400	–
		25	290	60	6,0		Z10AR25	D7722600	–
		32	600	95	7,5		Z10AR32	D7722900	–
690V	14x51	10	22	4	4,0	10	Z14AR10/69	D7781710	D7781711
		12	50	6	5,0		Z14AR12/69	D7781910	D7781911
		16	75	10	5,5		Z14AR16/69	D7782210	D7782211
		20	180	26	6,0		Z14AR20/69	D7782410	D7782411
		25	320	44	7,0		Z14AR25/69	D7782610	D7782611
		32	600	68	7,6		Z14AR32/69	D7782910	D7782911
690V (600V*)		40	750	84	8,0		Z14AR40/69	D7783410	D7723411
690V (500V*)		50	1800	200	9,0		Z14AR50/69	D7783510	D7713511
690V	22x58	25	410	37	5,6	10	Z22AR25/69	D7782620	D7782621
		32	605	55	7,0		Z22AR32/69	D7782920	D7782921
		40	750	68	8,5		Z22AR40/69	D7783420	D7783421
		50	1600	155	9,5		Z22AR50/69	D7783520	D7783521
		63	3080	280	11,0		Z22AR63/69	D7783820	D7783821
690V (600V*)		80	6600	600	13,5		Z22AR80/69	D7784120	D7724121
AC500		100	12500	1100	16,0		Z22AR100	D7714320	D7714321

\*撞击器 / Striker-Version

技术参数 / *Technical data*

型号 / Type			Z10AR...	Z14AR...	Z14AR...K			
尺码 / Size	-	-	10x38		14x51			
额定电压 / Rated voltage	$U_n$	V	AC600 DC700	AC600 DC400	AC690 DC700	AC690 DC700	AC600 DC700	AC500 DC700
额定电流	$I_n$	A	6-25	32	10-50	10-32	40	50
额定分断能力 / Rated breaking capacity	-	kA	AC200 DC50					
使用类别 / Utilization class	-	-	aR					
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4					
尺寸 / Dimensions	a	mm	38		51			
	b (max.)		10,5		13,8			
	c		10,3		14,3			
	d (min.)		6		7,5			
Schlagstift-Weg / Striker travel	-	-	-	-	7			
重量 / Weight	-	g	10		22,5			



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Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

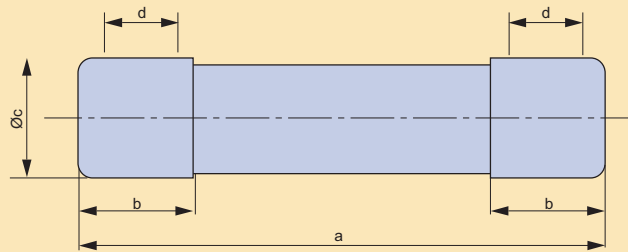
高压熔断器  
IKUS HV HRC  
fuse-links

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技术参数 / *Technical data*

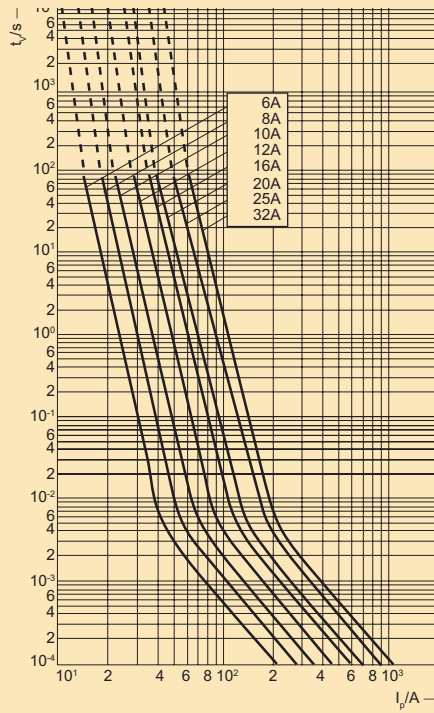
型号 / Type			Z22AR...		Z22AR...K		
尺码 / Size	-	-	22x58				
额定电压 / Rated voltage	$U_n$	V	AC690 DC500	AC500 DC500	AC690 DC500	AC600 DC500	AC500 DC500
额定电流	$I_n$	A	25-80	100	25-63	80	100
额定分断能力 / Rated breaking capacity	-	kA	AC200 DC50				
使用类别 / Utilization class	-	-	aR				
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4				
尺寸 / Dimensions	a	mm	58				
	b (max.)		16,2				
	c		22,2				
	d (min.)		11				
Schlagstift-Weg / Striker travel	-	-	-	-	7		
重量 / Weight	-	g	45				



圆柱型熔断器特性aR / *Characteristics aR cylindrical fuse-links*

时间电流特性 / *Time current characteristics*

型号 / Type	订货号 / Article-No.	页码 / Page
Z10AR....	D77...00	R-36

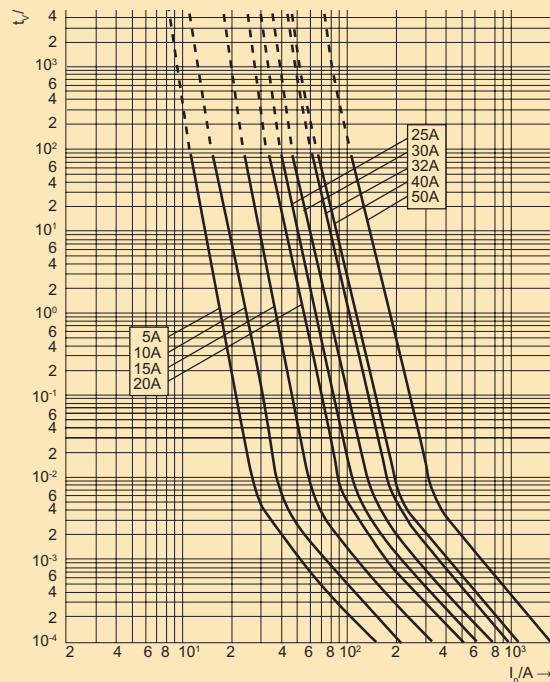


NH熔断器  
*NH fuse-links*

光伏熔断器  
*Fuses for photovoltaic applications*

半导体保护  
熔断器  
*Fuse-links for semiconductor protection*

型号 / Type	订货号 / Article-No.	页码 / Page
Z14AR...(K)	D77...10, D77...11	R-36



NH熔断器底座  
*NH fuse-bases*

D型熔断器  
*D-type fuses*

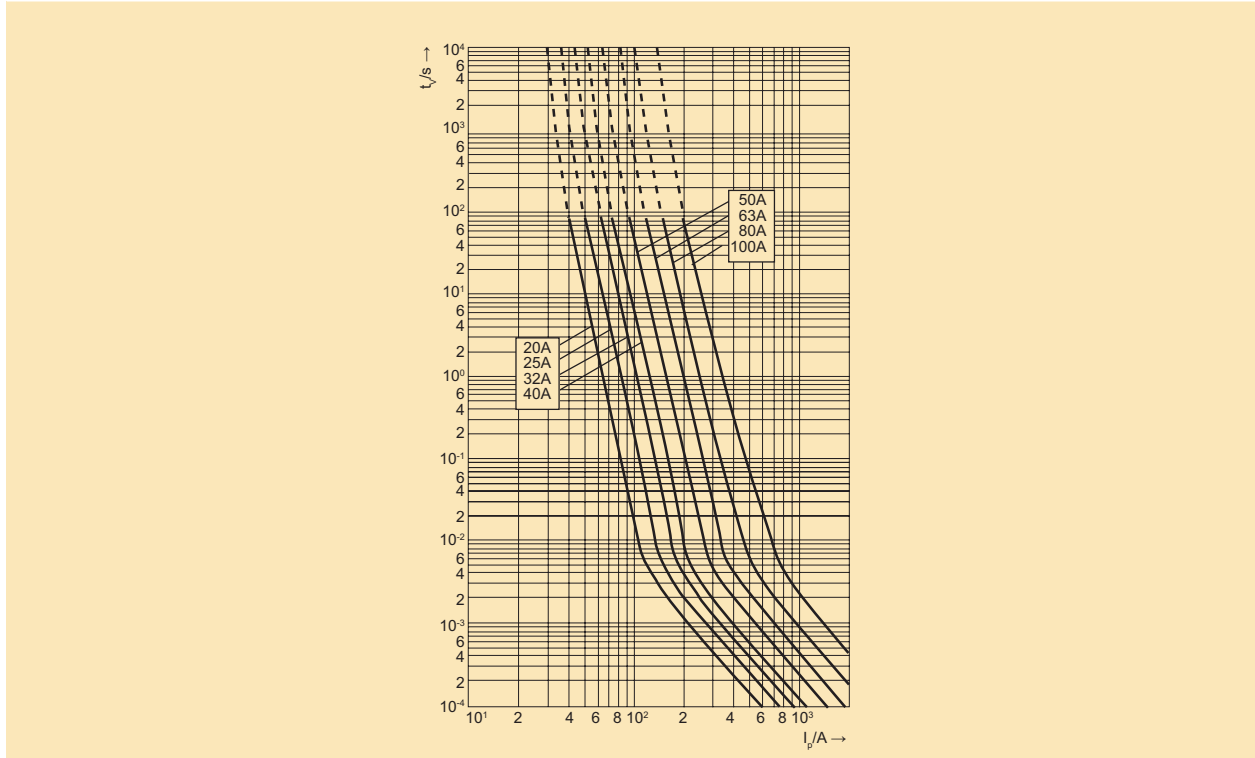
高压熔断器  
*IKUS HV HRC fuse-links*

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圆柱型熔断器特性aR / Characteristics aR cylindrical fuse-links

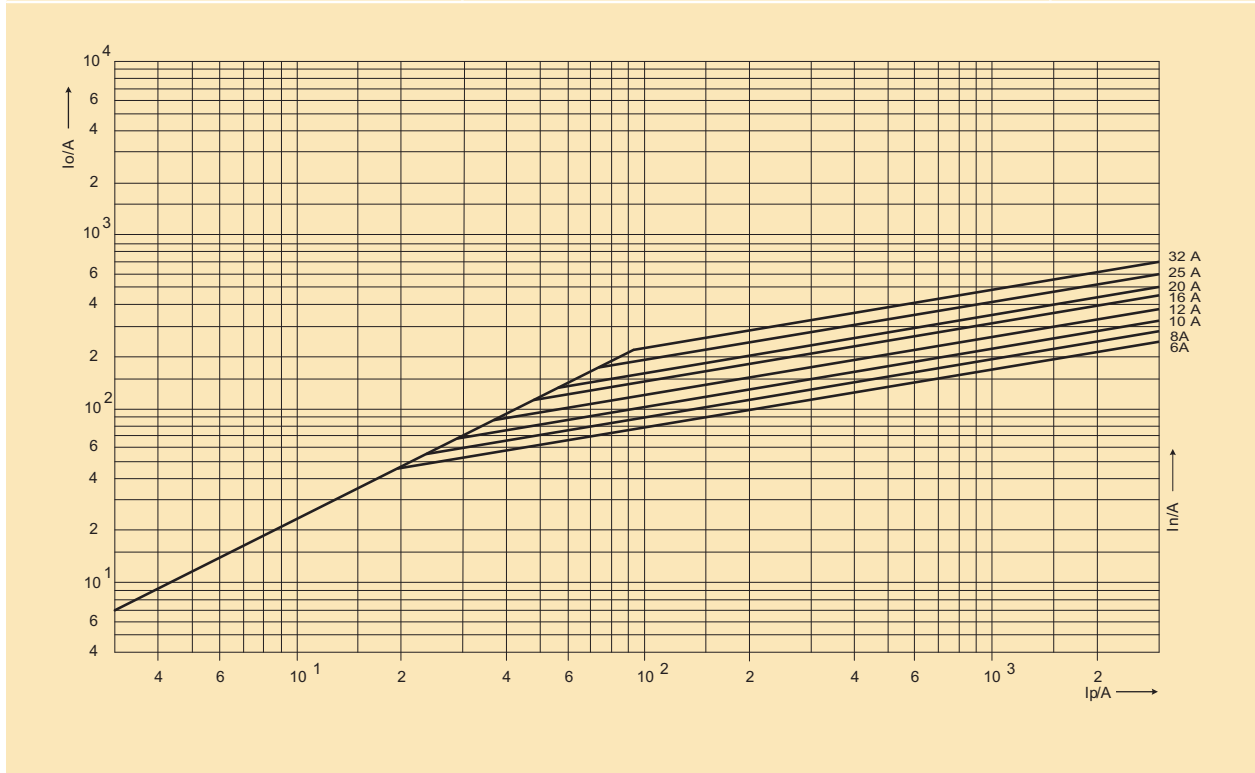
时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page
Z22AR...(K)	D77...20, D77...21	R-36



截断电流图 / Peak let-through current chart

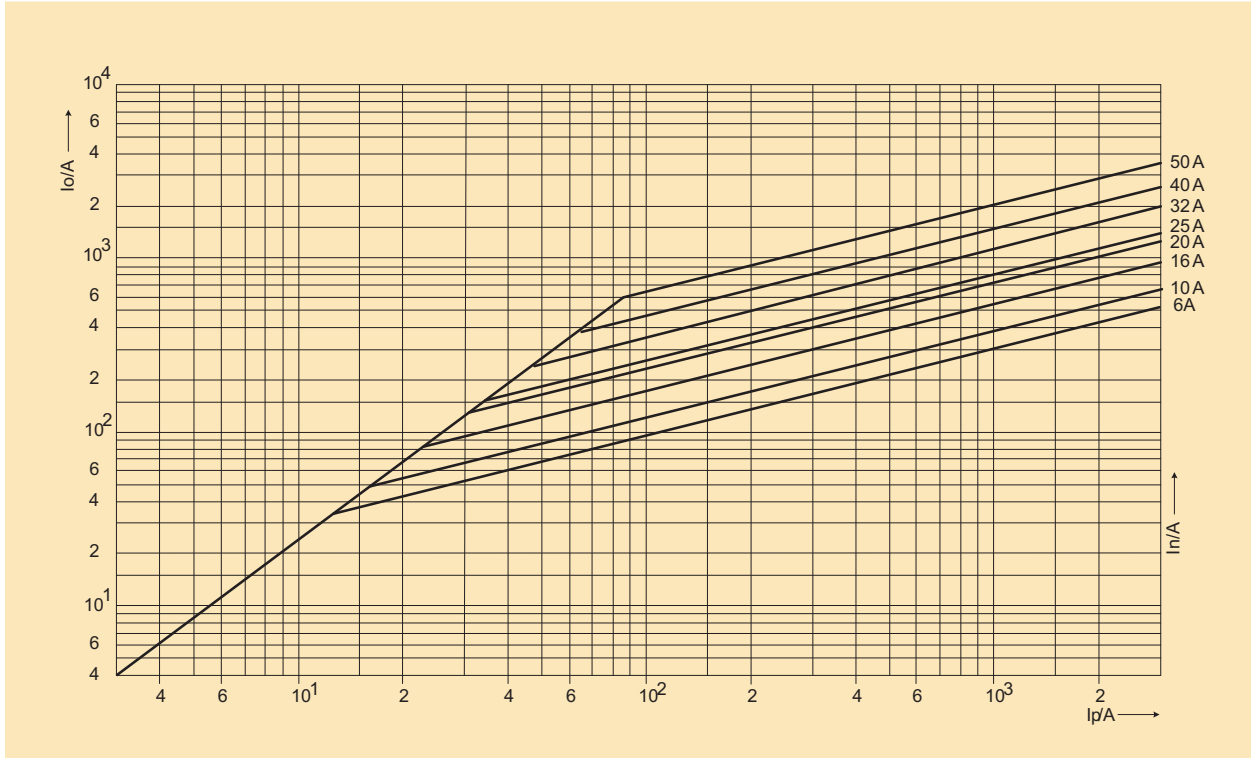
型号 / Type	订货号 / Article-No.	页码 / Page
Z10AR....	D77...00	R-36



圆柱型熔断器特性aR / Characteristics aR cylindrical fuse-links

截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page
Z14AR...(K)	D77...10, D77...11	R-36

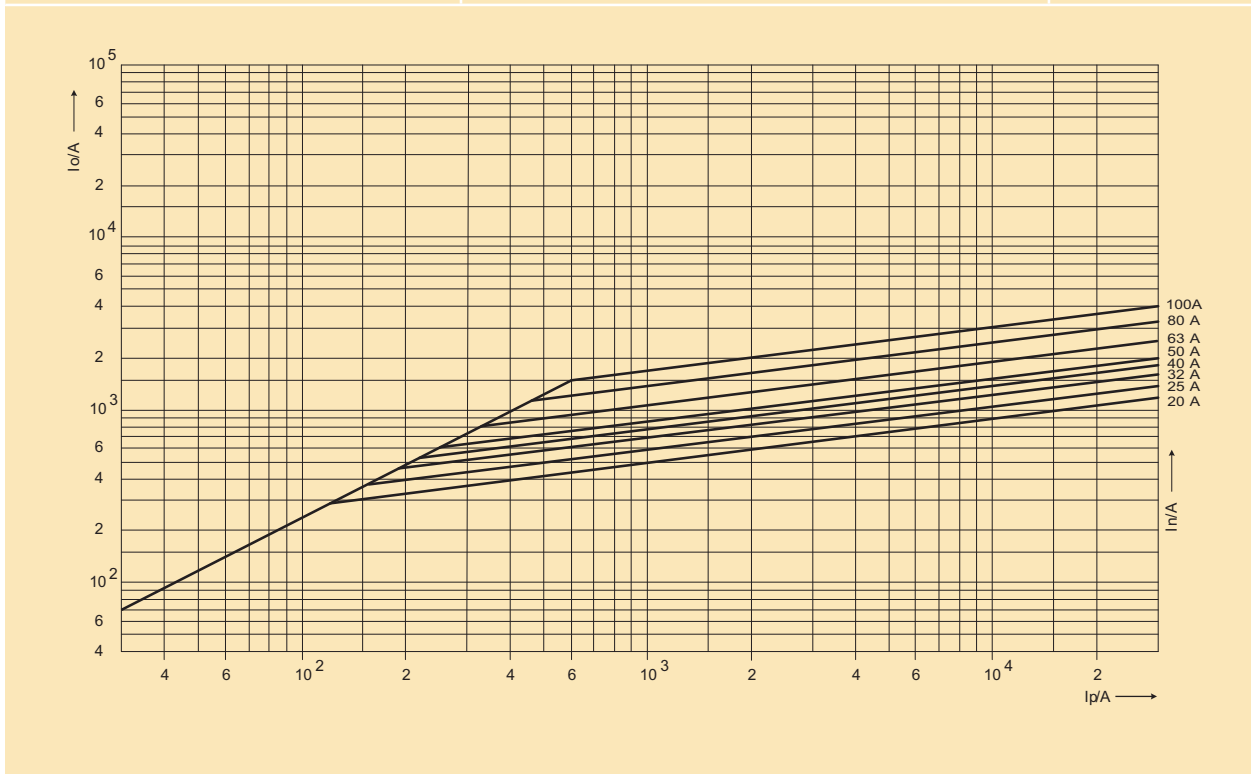


NH熔断器  
NH fuse-links

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Fuses for  
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applications

半导体保护  
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Fuse-links for  
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型号 / Type	订货号 / Article-No.	页码 / Page
Z22AR...(K)	D77...20, D77...21	R-36



NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

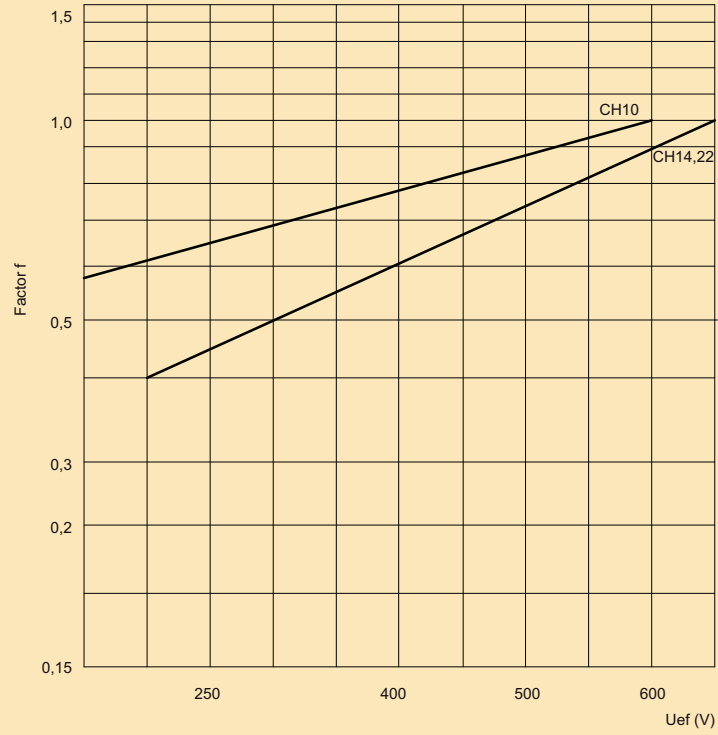
高压熔断器  
IKUS HV HRC  
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圆柱型熔断器特性aR / Characteristics aR cylindrical fuse-links

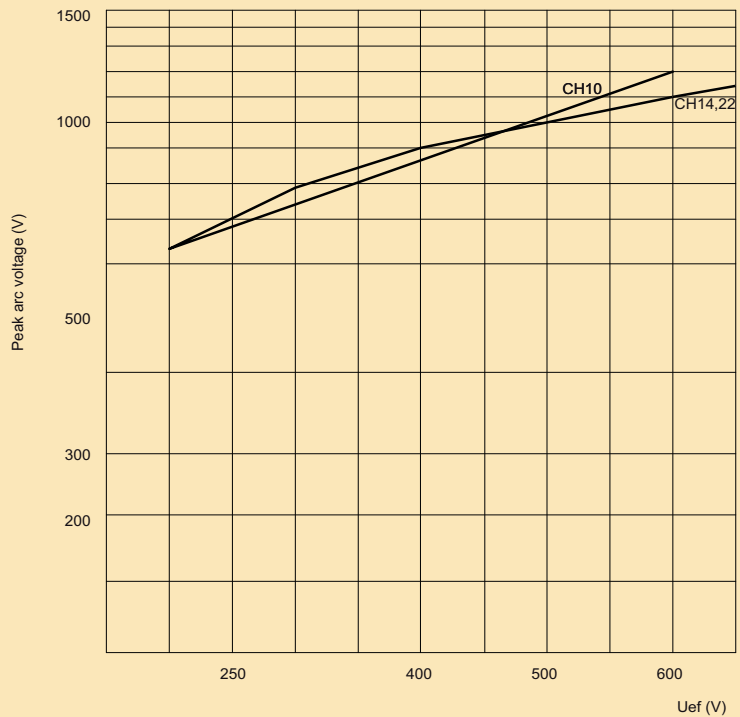
熔化的 $I^2t$ 校正系数 / Conversion factor Operating  $I^2t$

型号 / Type	订货号 / Article-No.	页码 / Page
Z...AR...(K)	-	R-36



最大燃弧电压 / Maximum arc voltage occuring

型号 / Type	订货号 / Article-No.	页码 / Page
Z...AR...(K)	-	R-36



圆柱型熔断器特性 **aR** / *Characteristics aR cylindrical fuse-links*

部分负载的功耗校正系数 / *Conversion power dissipation for partial load*

型号 / Type	订货号 / Article-No.	页码 / Page
Z...AR...(K)	-	-

校正系数 C / Correction factor C	0,005	0,025	0,063	0,122	0,204	0,31	0,442	0,6	0,785	1
负载% / Load %	10	20	30	40	50	60	70	80	90	100

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*D-type fuses*

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*IKUS HV HRC fuse-links*

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## gR熔断器全范围半导体保护 *Fuse-links utilization category gR for full range semiconductor protection*

### 产品优势 / *Convincing advantages*

#### 全范围分断半导体保护设备gR熔断器

- 半导体的过载和短路双重保护
- 短路熔断到燃弧不同的限流能力
- 低的焦耳积分值 $I^2t$

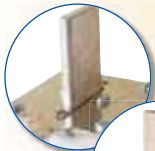


#### 额定电压直至690V

- 交流500V和690V可选

#### 触头类型

- 刀型触头适用NH熔断器底座
- 栓接触头适用母排直接安装
- 中间内螺栓接熔断器适用母排和半导体设备直接安装



#### 熔断器熔断指示

- 顶端弹簧指示
- 端盖弹簧指示
- 撞击器信号适用远程微动开关指示基于熔断器底座或熔断器隔离开关



#### *Effective full-range protection*

- *Utilization category gR guarantees overload and short circuit protection of semiconductor devices*
- *Distinct current limiting through short melting and arcing times*
- *Low operating  $I^2t$  values (melting  $I^2t$  values + arcing  $I^2t$  values)*

#### *Rated voltages up to AC690V*

- *AC500V and AC690V available*

#### *Contact types*

- *Blade contacts for application in NH fuse-bases*
- *Screw contacts for application in special fuse-bases respectively direct mounting on busbars*
- *Thread contacts for direct mounting on busbars or semiconductor device*

#### *Indication of fuse-tripping*

- *Top indicator as spring on the top cover*
- *Type for mounting of a gripping lug indicator for remote signalling (type designation .../L)*
- *Blade contact fuse-links with striker (type designation ...K). Remote signalling of fuse-tripping via mechanical fuse monitor in fuse-base or -switch-disconnector*



触刀型熔断器gR AC500V / NH fuse-links gR AC500V with blade contacts



U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包 装 PU	型号/ Type	指示器 / Indicator	
								顶部/ top	Kraftmelder Striker ...K
								订货号 Article-No.	订货号 Article-No.
500V	000	6	18	5	5,0	3	M000üf2/ 6A/500V	R5211450	R5211413
		10	55	15	7,0		M000üf2/10A/500V	R5211750	R5211713
		16	90	23	9,0		M000üf2/16A/500V	R5212250	R5212213
		20	170	45	11,0		M000üf2/20A/500V	R5212450	R5212413
		25	300	80	13,0		M000üf2/25A/500V	R5212650	R5212613
		32	450	130	14,0		M000üf2/32A/500V	R5212950	R5212913
		35	700	180	15,0		M000üf2/35A/500V	R5213150	R5213113
		40	1.000	260	16,0		M000üf2/40A/500V	R5213450	R5213413
		50	1.500	400	18,0		M000üf2/50A/500V	R5213550	R5213513
		63	2.300	620	20,0		M000üf2/63A/500V	R5213850	R5213813
		80	3.400	900	23,0		M000üf2/80A/500V	R5214150	R5214113
		100	5.700	1.500	26,0		M000üf2/100A/500V	R5214350	R5214313
		125	10.000	2.700	34,0		M000üf2/125A/500V	R5214650	R5214613
		160	21.000	6.000	39,0		M000üf2/160A/500V	R5214950	R5214913
	1	3	63	2.100	580	20,0	M1üf2/63A/500V	R1213800	R1213804
			80	3.500	900	23,0	M1üf2/80A/500V	R1214100	R1214104
			100	6.100	1.600	26,0	M1üf2/100A/500V	R1214300	R1214304
			125	10.000	2.400	34,0	M1üf2/125A/500V	R1214600	R1214604
			160	20.000	5.100	39,0	M1üf2/160A/500V	R1214900	R1214904
			200	30.000	7.800	42,0	M1üf2/200A/500V	R1215200	R1215204
			224	41.000	10.000	48,0	M1üf2/224A/500V	R1215300	R1215304
		3	250	52.000	14.000	51,0	M1üf2/250A/500V	R1215600	R1215604
			125	10.000	2.400	34,0	M2üf2/125A/500V	R2214600	R2214604
			160	20.000	5.100	39,0	M2üf2/160A/500V	R2214900	R2214904
			200	30.000	7.800	42,0	M2üf2/200A/500V	R2215200	R2215204
			224	41.000	10.000	48,0	M2üf2/224A/500V	R2215300	R2215304
			250	52.000	14.000	51,0	M2üf2/250A/500V	R2215600	R2215604
			315	80.000	20.000	61,0	M2üf2/315A/500V	R2215900	R2215904
	2	350	110.000	28.000	65,0	M2üf2/350A/500V	R2216000	R2216004	
		400	160.000	40.000	68,0	M2üf2/400A/500V	R2216200	R2216204	
		250	52.000	14.000	51,0	M3üf2/250A/500V	R3215600	R3215604	
		315	80.000	20.000	61,0	M3üf2/315A/500V	R3215900	R3215904	
		350	110.000	28.000	65,0	M3üf2/350A/500V	R3216000	R3216004	
		400	160.000	40.000	69,0	M3üf2/400A/500V	R3216200	R3216204	
		425	200.000	52.000	73,0	M3üf2/425A/500V	R3216300	R3216304	
	3	500	270.000	70.000	93,0	M3üf2/500A/500V	R3216600	R3216604	
		630	360.000	90.000	135,0	M3üf2/630A/500V	R3216900	R3216904	
		800	600.000	260.000	155,0	M4aüf2/800A/500V	R4217200	R4217204	
		1000	1.200.000	580.000	180,0	M4aüf2/1000A/500V	R4217600	R4217604	
		1250	2.000.000	900.000	230,0	M4aüf2/1250A/500V	R4217900	R4217904	
		1500	3.000.000	1.300.000	255,0	M4aüf2/1500A/500V	R4218200	R4218204	
	4a	1							

NH熔断器  
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D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

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Appendix



触刀型熔断器gR AC690V / NH fuse-links gR AC690V with blade contacts

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号/ Type	指示器 / Indicator			
								顶部/ top	撞击器 Striker ...K		
								订货号 Article-No.	订货号 Article-No.		
690V	000	16	220	45	8,0	3	M000üf2/16A/690V	R5282250	R5282213		
		20	320	64	9,4		M000üf2/20A/690V	R5282450	R5282413		
		25	600	110	11,5		M000üf2/25A/690V	R5282650	R5282613		
		32	800	170	12,5		M000üf2/32A/690V	R5282950	R5282913		
		35	900	190	13,5		M000üf2/35A/690V	R5283150	R5283113		
		40	1.400	260	14,0		M000üf2/40A/690V	R5283450	R5283413		
		50	2.300	450	15,5		M000üf2/50A/690V	R5283550	R5283513		
		63	3.900	700	17,5		M000üf2/63A/690V	R5283850	R5283813		
		80	6.000	1.200	20,5		M000üf2/80A/690V	R5284150	R5284113		
		100	10.000	2.000	23,0		M000üf2/100A/690V	R5284350	R5284313		
		125	13.000	2.600	30,0		M000üf2/125A/690V	R5284650	R5284613		
		160	24.000	5.000	34,0		M000üf2/160A/690V	R5284950	R5284913		
		1	35	900	190		15,0	3	M1üf2/35A/690V	R1283100	R1283104
			40	1.400	260		16,0		M1üf2/40A/690V	R1283400	R1283404
	50		2.300	450	18,0	M1üf2/50A/690V	R1283500		R1283504		
	63		3.900	700	20,0	M1üf2/63A/690V	R1283800		R1283804		
	80		6.100	1.200	23,0	M1üf2/80A/690V	R1284100		R1284104		
	100		9.800	1.800	26,0	M1üf2/100A/690V	R1284300		R1284304		
	125		14.000	2.500	34,0	M1üf2/125A/690V	R1284600		R1284604		
	160		25.000	5.000	39,0	M1üf2/160A/690V	R1284900		R1284904		
	200		48.000	9.000	42,0	M1üf2/200A/690V	R1285200		R1285204		
	224		58.000	10.000	48,0	M1üf2/224A/690V	R1285300		R1285304		
	2	250	70.000	14.500	51,0	3	M2üf2/250A/690V	R1285600	R1285604		
		125	14.000	2.500	34,0		M2üf2/125A/690V	R2284600	R2284604		
		160	25.000	5.000	39,0		M2üf2/160A/690V	R2284900	R2284904		
		200	48.000	9.000	42,0		M2üf2/200A/690V	R2285200	R2285204		
		224	58.000	10.000	48,0		M2üf2/224A/690V	R2285300	R2285304		
		250	70.000	14.500	51,0		M2üf2/250A/690V	R2285600	R2285604		
		315	100.000	20.000	55,0		M2üf2/315A/690V	R2285900	R2285904		
		350	150.000	28.000	65,0		M2üf2/350A/690V	R2286000	R2286004		
	3	400	180.000	35.000	72,0	3	M2üf2/400A/690V	R2286200	R2286204		
		250	70.000	14.500	51,0		M3üf2/250A/690V	R3285600	R3285604		
		315	100.000	20.000	55,0		M3üf2/315A/690V	R3285900	R3285904		
		350	150.000	28.000	65,0		M3üf2/350A/690V	R3286000	R3286004		
		400	180.000	35.000	72,0		M3üf2/400A/690V	R3286200	R3286204		
		425	200.000	40.000	80,0		M3üf2/425A/690V	R3286300	R3286304		
		500	260.000	50.000	100,0		M3üf2/500A/690V	R3286600	R3286604		
	630	410.000	80.000	130,0	M3üf2/630A/690V	R3286900	R3286904				

技术参数 / *Technical data*

型号 / Type			M000üf2.../500V(/K)	M000üf2.../690V(/K)
尺码 / Size	-	-	NH000	
额定电压 / Rated voltage	$U_n$	V	AC500 DC440	AC690 DC550
额定电流 / Rated current	$I_n$	A	6-160	16-160
额定分断能力 / Rated breaking capacity	-	kA	AC120 DC25	AC100 DC25
Zeitkonstante / Time constant	L/R	ms	15	
使用类别 / Utilization category	-	-	gR	
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2	
尺寸 / Dimensions	a1	mm	78,5	
	a2		53	
	a4		49	
	b1		15	
	c1		35	
	e1		43	
	e2		21	
撞击器尺寸 / Dimensions striker	T	-	17	
	k	-	-	
	l	-	20,5	
重量 / Weight	-	g	140	

NH熔断器  
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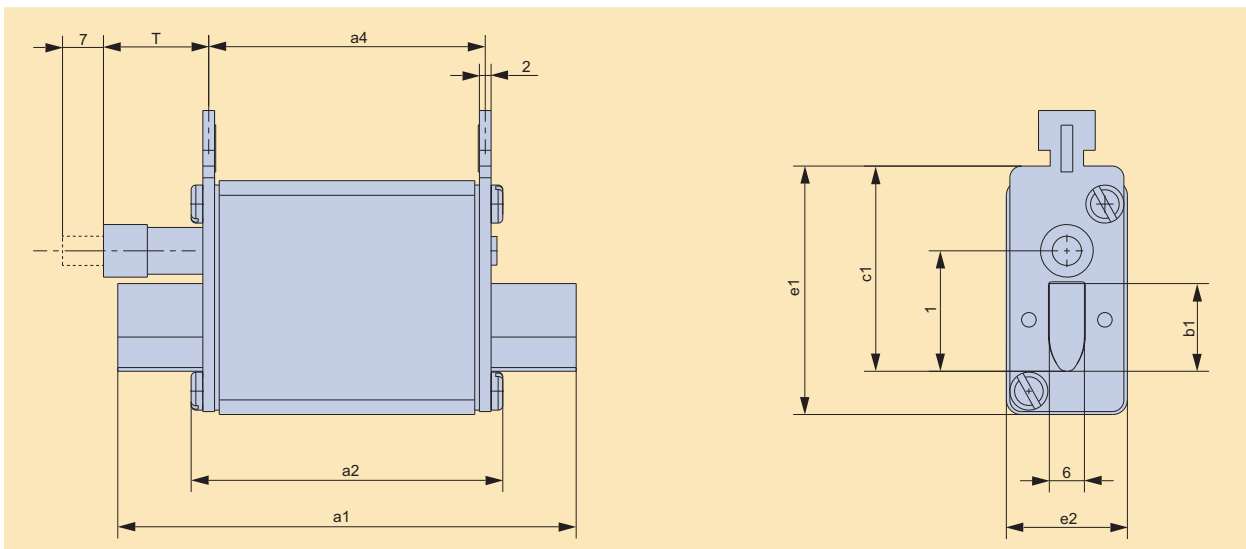
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D-type fuses

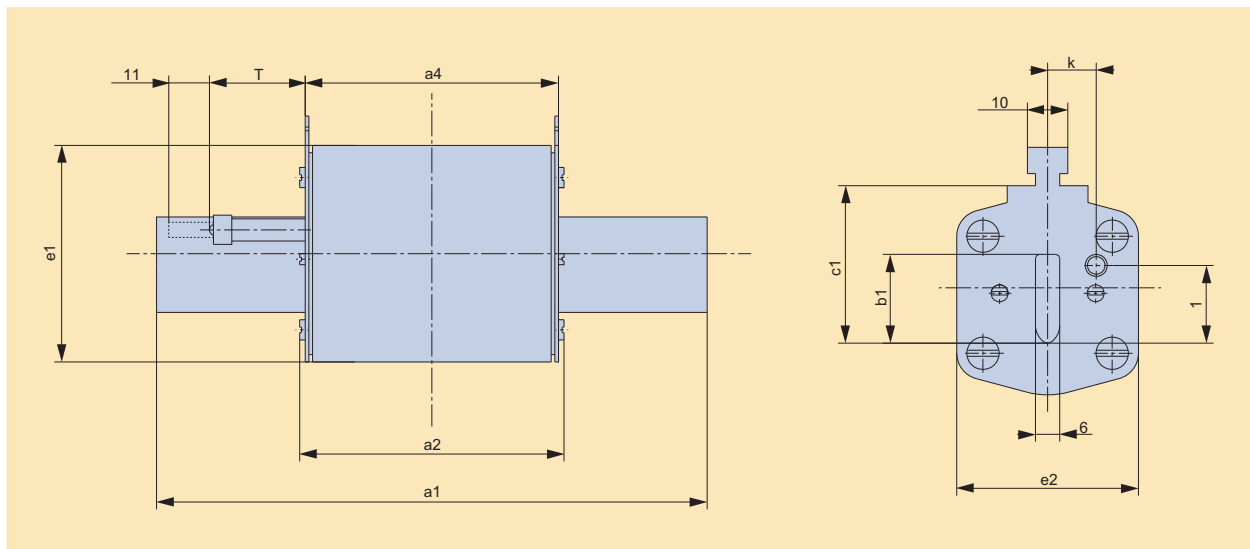
高压熔断器  
IKUS HV HRC  
fuse-links

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Appendix



## 技术参数 / Technical data

型号 / Type			M1üf2.../ 500V(/K)	M1üf2.../ 690V(/K)	M2üf2.../ 500V(/K)	M2üf2.../ 690V(/K)
尺码 / Size	-	-	NH1		NH2	
额定电压 / Rated voltage	$U_n$	V	AC500 DC440	AC690 DC550	AC500 DC440	AC690 DC550
额定电流 / Rated current	$I_n$	A	63-250	35-250	125-400	125-400
额定分断能力 / Rated breaking capacity	-	kA	AC120 DC25	AC100 DC25	AC120 DC25	AC100 DC25
时间常数 / Time constant	L/R	ms	15		15	
使用类别 / Utilization category	-	-	gR		gR	
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2	
尺寸 / Dimensions	a1	mm	135		150	
	a2		72		72	
	a4		67		67	
	b1		24		30	
	c1		40		48	
	e1		55		63	
	e2		46		54	
撞击器尺寸 / Dimensions striker	T	-	26		26	
	k	-	13,7		16,2	
	l	-	20,5		27,3	
重量 / Weight	-	g	420		660	

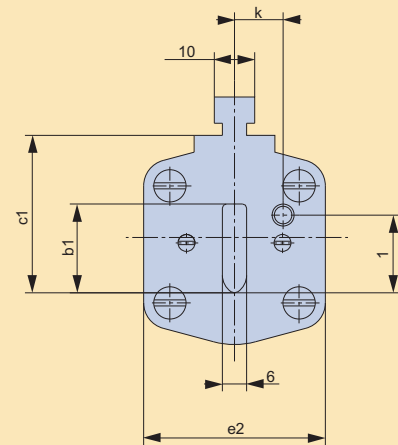
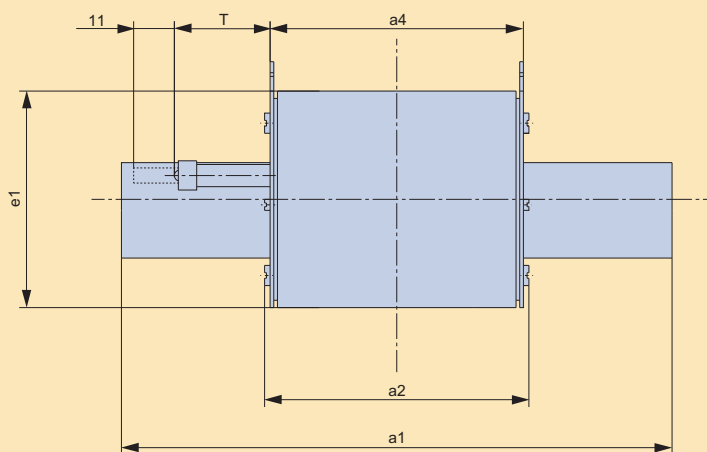


## 技术参数 / Technical data

型号 / Type			M3üf2.../ 500V(/K)	M3üf2.../ 690V(/K)	M4aüf2.../ 500V(/K)
尺码 / Size	-	-	NH3		NH4a
额定电压 / Rated voltage	$U_n$	V	AC500 DC440	AC690 DC550	AC500 DC440
额定电流 / Rated current	$I_n$	A	250-630	250-630	800-1500
额定分断能力 / Rated breaking capacity	-	kA	AC120 DC25	AC100 DC25	AC120 DC25
时间常数 / Time constant	L/R	ms	15		15
使用类别 / Utilization category	-	-	gR		gR
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2
尺寸 / Dimensions	a1	mm	150		200
	a2		72		98
	a4		67		90
	b1		37		50
	c1		60		85
	e1		74		112
	e2		64		96
撞击器尺寸 / Dimensions striker	T	-	26		26
	k	-	17		24
	l	-	35,6		49
重量 / Weight	-	g	870		2700

 NH熔断器  
 NH fuse-links

 光伏熔断器  
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 熔断器  
 Fuse-links for  
 semiconductor  
 protection

 NH熔断器底座  
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 D型熔断器  
 D-type fuses

 高压熔断器  
 IKUS HV HRC  
 fuse-links

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NH熔断器gR, AC690V, 螺栓连接, 尺码 00 / NH fuse-links gR AC690V with screw contacts size 00

U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号 / Type	指示器 / Indicator	
								顶部 / top	端板指示弹片 Gripping lug indicator .../L
								订货号 Article-No.	订货号 Article-No.
690V	00	16	220	45	8,0	3	S00C+/üf2/16A/690V	R5282253	R5282226
		20	320	64	9,4		S00C+/üf2/20A/690V	R5282453	R5282426
		25	600	110	11,5		S00C+/üf2/25A/690V	R5282653	R5282626
		32	800	170	12,5		S00C+/üf2/32A/690V	R5282953	R5282926
		35	900	190	13,5		S00C+/üf2/35A/690V	R5283153	R5283126
		40	1.400	260	14,0		S00C+/üf2/40A/690V	R5283453	R5283426
		50	2.300	450	15,5		S00C+/üf2/50A/690V	R5283553	R5283526
		63	3.900	700	17,5		S00C+/üf2/63A/690V	R5283853	R5283826
		80	6.000	1.200	20,5		S00C+/üf2/80A/690V	R5284153	R5284126
		100	10.000	2.000	23,0		S00C+/üf2/100A/690V	R5284353	R5284326
		125	13.000	2.600	30,0		S00C+/üf2/125A/690V	R5284653	R5284626
		160	24.000	5.000	34,0		S00C+/üf2/160A/690V	R5284953	R5284926

NH熔断器gR, AC690V, 螺栓连接, 尺码 1-3, 110mm / NH fuse-links gR AC690V with screw contacts size 1-3 110mm



U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号 / Type	指示器 Indicator
								顶部 / top
								订货号 Article-No.
690V	1	80	6.100	1.200	23,0	1	S1üf2/110/80A/690V	R1284121
		100	9.800	1.800	26,0		S1üf2/110/100A/690V	R1284321
		125	14.000	2.500	34,0		S1üf2/110/125A/690V	R1284621
		160	25.000	5.000	39,0		S1üf2/110/160A/690V	R1284921
		200	48.000	9.000	42,0		S1üf2/110/200A/690V	R1285221
		224	58.000	10.000	48,0		S1üf2/110/224A/690V	R1285321
		250	70.000	14.500	51,0		S1üf2/110/250A/690V	R1285621
	2	125	14.000	2.500	34,0	3	S2üf2/110/125A/690V	R2284621
		160	25.000	5.000	39,0		S2üf2/110/160A/690V	R2284921
		200	48.000	9.000	42,0		S2üf2/110/200A/690V	R2285221
		224	58.000	10.000	48,0		S2üf2/110/224A/690V	R2285321
		250	70.000	14.500	51,0		S2üf2/110/250A/690V	R2285621
		315	100.000	20.000	55,0		S2üf2/110/315A/690V	R2285921
		350	150.000	28.000	65,0		S2üf2/110/350A/690V	R2286021
	3	400	180.000	35.000	72,0	S2üf2/110/400A/690V	R2286221	
		250	70.000	14.500	51,0	3	S3üf2/110/250A/690V	R3285621
		315	100.000	20.000	55,0		S3üf2/110/315A/690V	R3285921
		350	150.000	28.000	65,0		S3üf2/110/350A/690V	R3286021
		400	180.000	35.000	72,0		S3üf2/110/400A/690V	R3286221
		425	200.000	40.000	80,0		S3üf2/110/425A/690V	R3286321
		500	260.000	50.000	100,0		S3üf2/110/500A/690V	R3286621
630	410.000	80.000	130,0	S3üf2/110/630A/690V	R3286921			

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NH fuse-bases

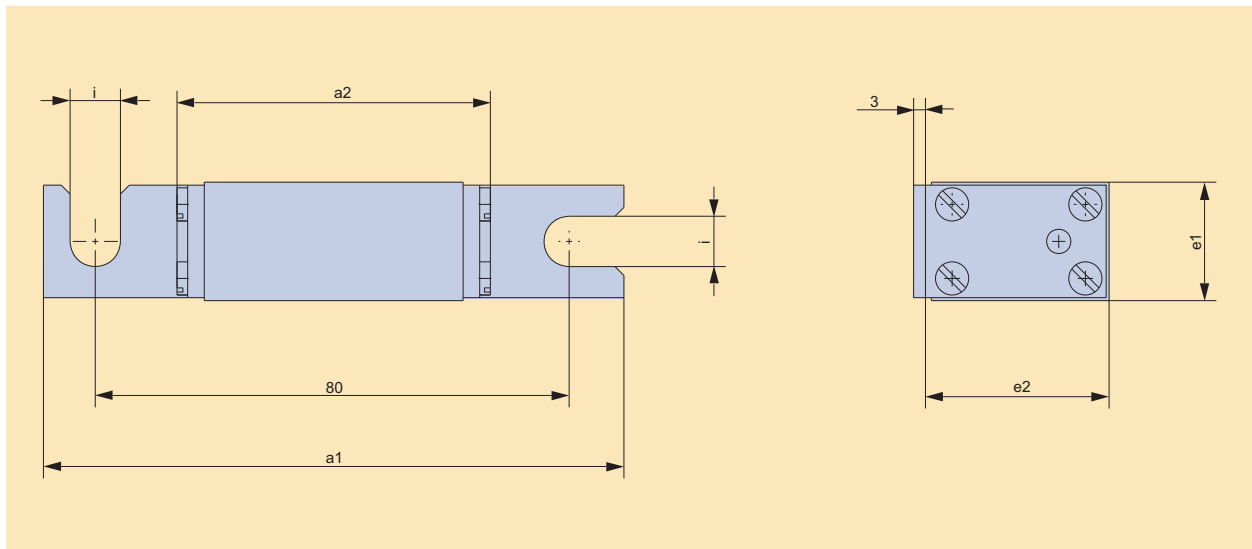
D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

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技术参数 / *Technical data*

型号 / Type			S00C+üf2.../690V(L)
尺码 / Size	-	-	NH00
额定电压 / Rated voltage	$U_n$	V	AC690
额定电流 / Rated current	$I_n$	A	16-160
额定分断能力 / Rated breaking capacity	-	kA	AC100
使用类别 / Utilization category	-	-	gR
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2
螺栓间距 / Hole centres	S		80
尺寸 / Dimensions	a1	mm	101
	a2		54
	e1		21
	e2		40
	i	-	8,5
重量 / Weight	-	g	150



技术参数 / *Technical data*

型号 / Type			S1üf2/110/.../690V	S2üf2/110/.../690V	S3üf2/.../690V	
尺码 / Size	-	-	NH1	NH2	NH3	
额定电压 / Rated voltage	$U_n$	V	AC690	AC690	AC690	
额定电流 / Rated current	$I_n$	A	80-250	125-400	250-630	
额定分断能力 / Rated breaking capacity	-	kA	100			
使用类别 / Utilization category	-	-	gR			
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2			
螺栓间距 / Hole centres	S		110	110	110	
尺寸 / Dimensions	a1	mm	140	140	140	
	a2		74	74	74	
	e1		51	60	75	
	e2					
	b		24	30	37	
重量 / Weight	-	g	390	510	830	

NH熔断器  
NH fuse-links

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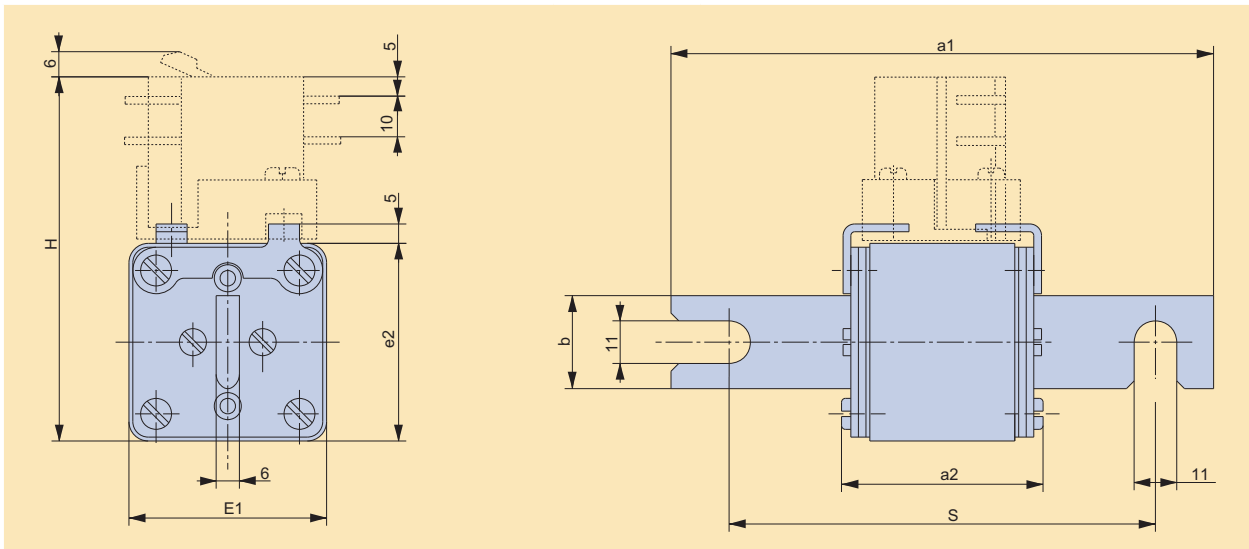
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熔断器  
Fuse-links for  
semiconductor  
protection

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NH fuse-bases

D型熔断器  
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NH熔断器gR, AC500V, 螺纹式 / NH fuse-links gR AC500V with thread contacts



U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包 装 PU	型号 / Type	指示器 Indicator
								顶部 / top
								订货号 Article-No.
500V	1	35	700	180	15,0	1	G1üf2/35A/500V	R1213140
		40	1.000	250	16,0		G1üf2/40A/500V	R1213440
		50	1.500	360	18,0		G1üf2/50A/500V	R1213540
		63	2.100	580	20,0		G1üf2/63A/500V	R1213840
		80	3.500	900	23,0		G1üf2/80A/500V	R1214140
		100	6.100	1.600	26,0		G1üf2/100A/500V	R1214340
		125	10.000	2.400	34,0		G1üf2/125A/500V	R1214640
		160	20.000	5.100	39,0		G1üf2/160A/500V	R1214940
		200	30.000	7.800	42,0		G1üf2/200A/500V	R1215240
		224	41.000	10.000	48,0		G1üf2/224A/500V	R1215340
		250	52.000	14.000	51,0		G1üf2/250A/500V	R1215640
	2	125	10.000	2.400	34,0	1	G2üf2/125A/500V	R2214640
		160	20.000	5.100	39,0		G2üf2/160A/500V	R2214940
		200	30.000	7.800	42,0		G2üf2/200A/500V	R2215240
		224	41.000	10.000	48,0		G2üf2/224A/500V	R2215340
		250	52.000	14.000	51,0		G2üf2/250A/500V	R2215640
		315	80.000	20.000	61,0		G2üf2/315A/500V	R2215940
		350	110.000	28.000	65,0		G2üf2/350A/500V	R2216040
	3	400	160.000	40.000	68,0	1	G2üf2/400A/500V	R2216240
		250	52.000	14.000	51,0		G3üf2/250A/500V	R3215640
		315	80.000	20.000	61,0		G3üf2/315A/500V	R3215940
		350	110.000	28.000	65,0		G3üf2/350A/500V	R3216040
		400	160.000	40.000	69,0		G3üf2/400A/500V	R3216240
		425	200.000	52.000	73,0		G3üf2/425A/500V	R3216340
		500	270.000	70.000	93,0		G3üf2/500A/500V	R3216640
		630	360.000	90.000	135,0		G3üf2/630A/500V	R3216940

技术参数 / *Technical data*

型号 / Type			G1üf2.../500V	G2üf2.../500V	G3üf2.../500V
尺码 / Size	-	-	NH1	NH2	NH3
额定电压 / Rated voltage	$U_n$	V	AC500	AC500	AC500
额定电流 / Rated current	$I_n$	A	35-250	125-400	250-630
额定分断能力 / Rated breaking capacity	-	kA	120		
使用类别 / Utilization category	-	-	gR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
尺寸 / Dimensions	L	mm	85	72	83
	e1		46	54	64
	e2		50	59	70
	M		10	10	10
重量 / Weight	-	g	360	520	800

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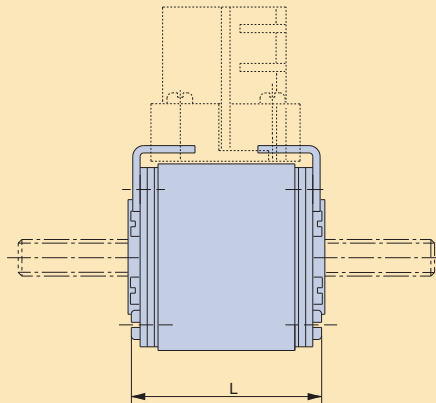
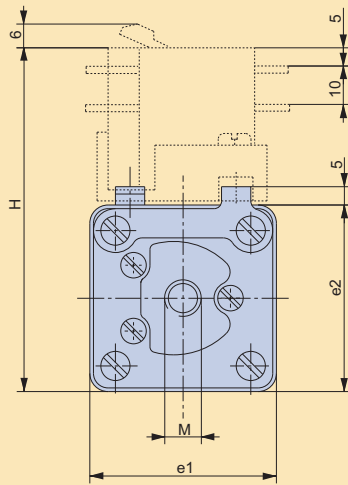
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NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
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fuse-links

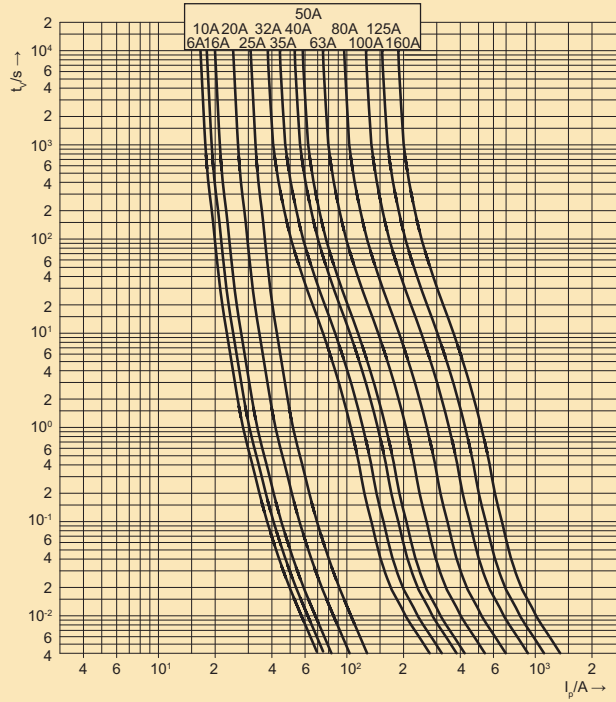
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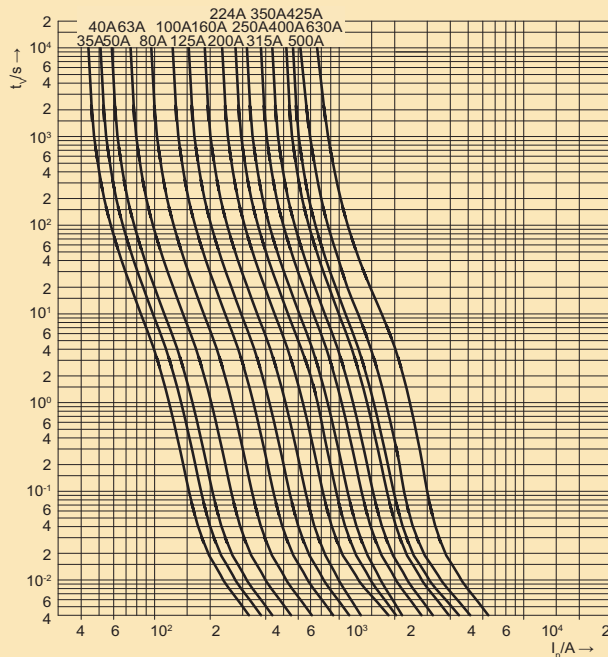
特性gR AC500V-690V / Characteristics gR AC500V-690V

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page
M000üf2.../500V(/K)	R521...50, R521...13	R-45



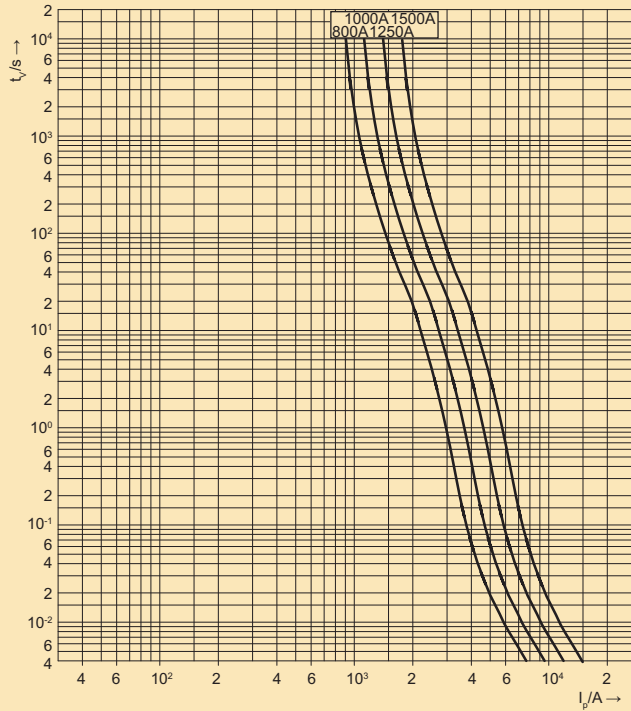
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M1üf2.../500V(/K)	R121...00, R121...04	R-45	M2üf2.../500V(/K)	R221...00, R221...04	R-45
M3üf2.../500V(/K)	R321...00, R321...04	R-45	G1üf2.../500V	R121...40	R-54
G2üf2.../500V	R221...40	R-54	G3üf2.../500V	R321...40	R-54



特性 **gR AC500V-690V** / Characteristics **gR AC500V-690V**

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page
M4aüf2.../500V(/K)	R421...00, R421...04	R-45

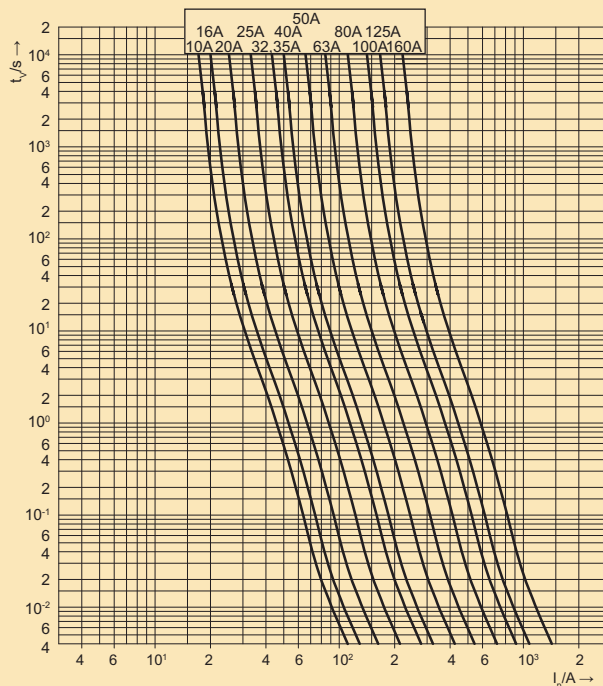


NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护熔断器  
Fuse-links for semiconductor protection

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M000üf2.../690V(/K)	R528...50, R528...13	R-46	S00C+/üf2.../690V(/L)	R528...53, R528...26	R-50



NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

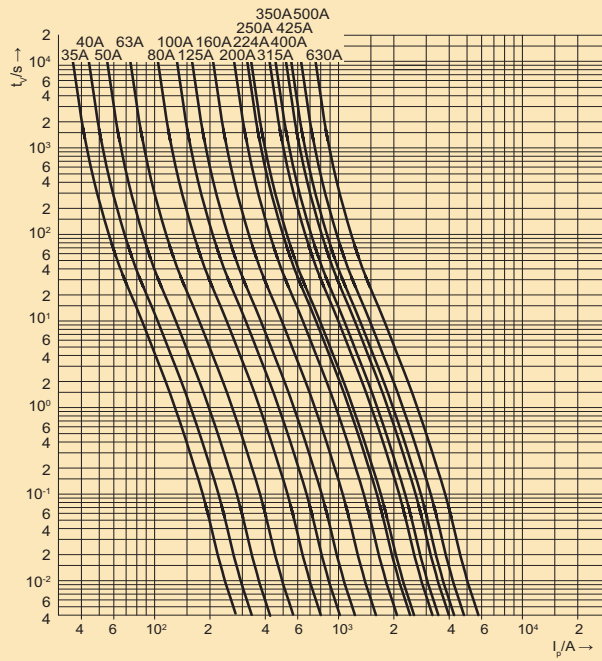
高压熔断器  
IKUS HV HRC fuse-links

附录  
Appendix

特性gR AC500V-690V / Characteristics gR AC500V-690V

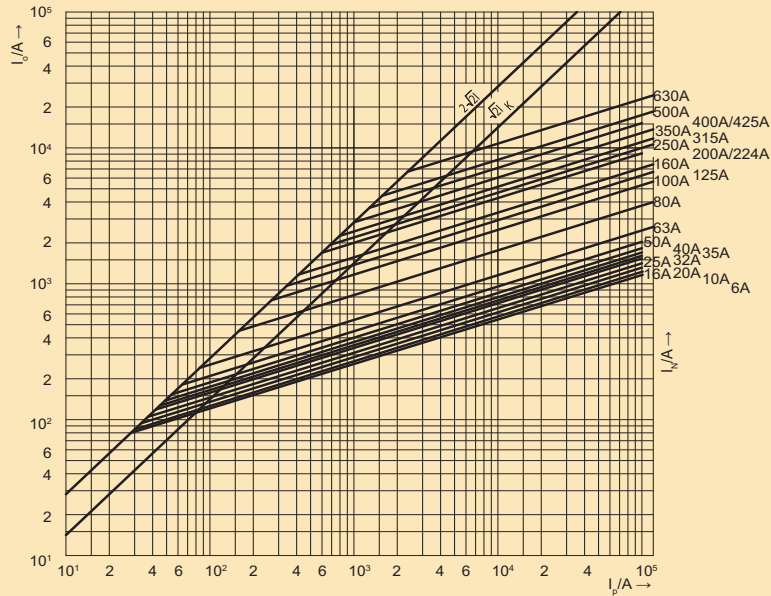
时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M1üf2.../690V(/K)	R128...00, R128...04	R-46	M2üf2.../690V(/K)	R228...00, R228...04	R-46
M3üf2.../690V(/K)	R328...00, R328...04	R-46	S1üf2.../690V	R128...21	R-51
S2üf2.../690V	R228...21	R-51	S3üf2.../690V	R328...21	R-51



截断电流图 / Peak let-through current chart

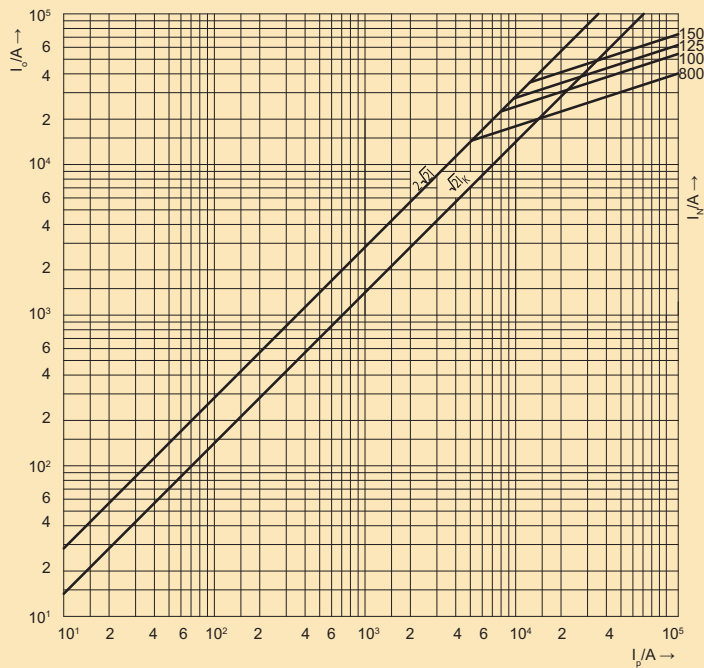
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M000üf2.../500V(/K)	R521...50, R521...13	R-45	M1üf2.../500V(/K)	R121...00, R121...04	R-45
M2üf2.../500V(/K)	R221...00, R221...04	R-45	M3üf2.../500V(/K)	R321...00, R321...04	R-45
G1üf2.../500V	R121...40	R-54	G2üf2.../500V	R221...40	R-54
G3üf2.../500V	R321...40	R-64		-	-



特性 **gR AC500V-690V** / Characteristics **gR AC500V-690V**

截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page
M4aüf2.../500V(/K)	R421...00, R421...04	R-45

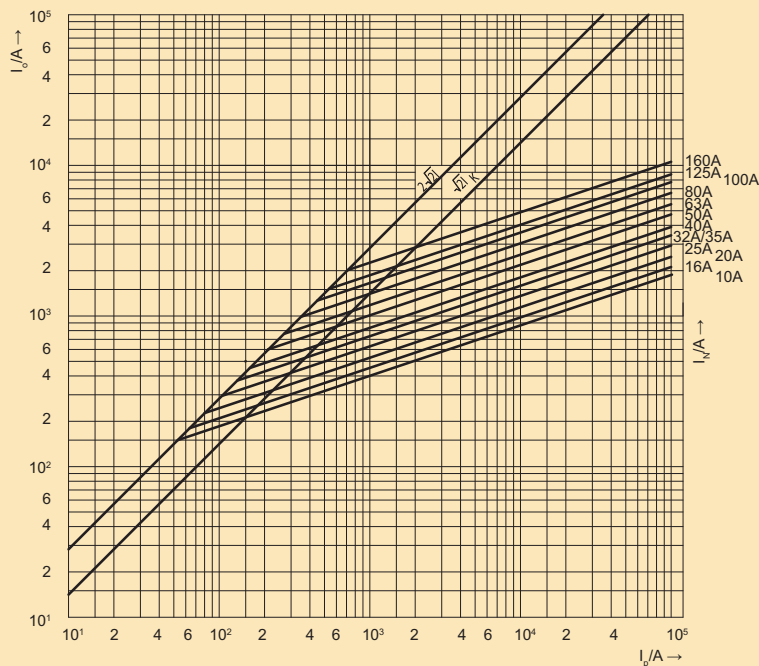


NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M000üf2.../690V(/K)	R528...50, R528...13	R-46	S00C+/üf2.../690V(/L)	R528...53, R528...26	R-50



NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

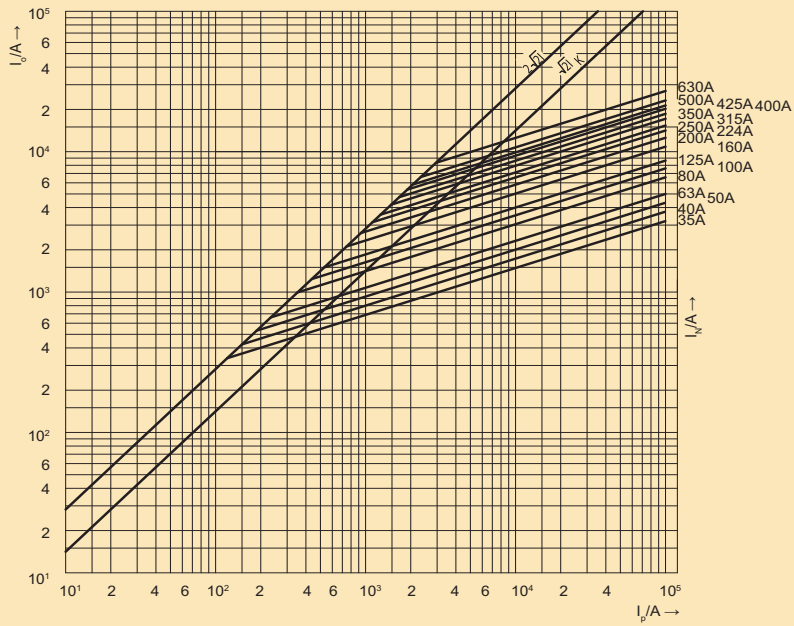
高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix

特性gR AC500V-690V / Characteristics gR AC500V-690V

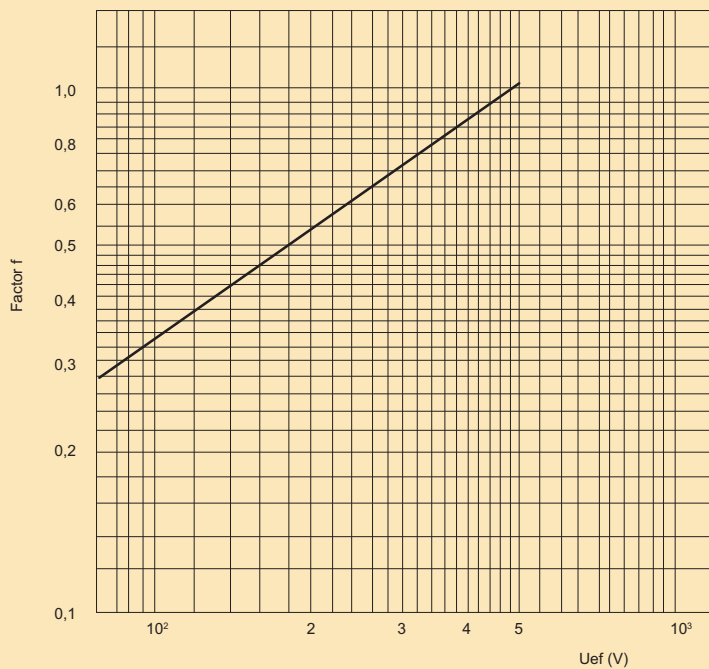
截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M1üf2.../690V(/K)	R128...00, R128...04	R-46	M2üf2.../690V(/K)	R228...00, R228...04	R-46
M3üf2.../690V(/K)	R328...00, R328...04	R-46	S1üf2.../690V	R128...21	R-51
S2üf2.../690V	R228...21	R-51	S3üf2.../690V	R328...21	R-51



熔化的I<sup>2</sup>t校正系数 / Conversion factor Operating I<sup>2</sup>t

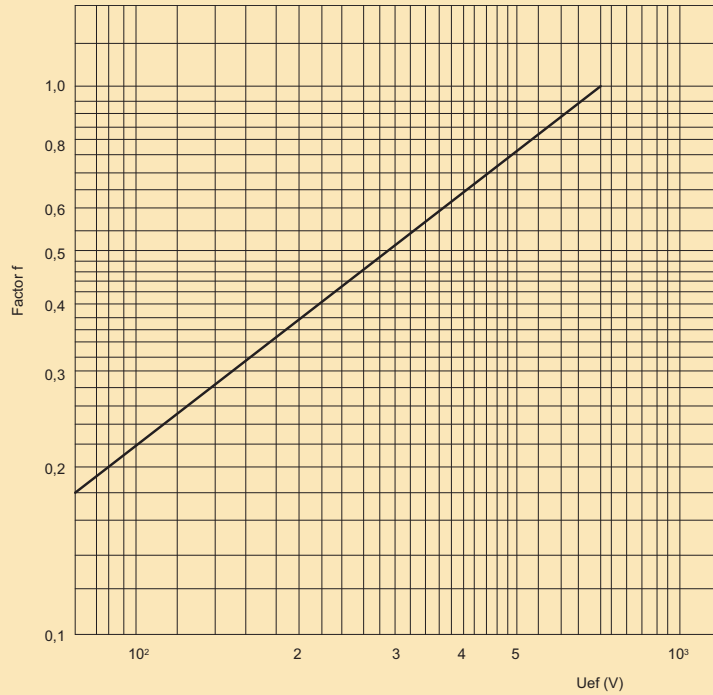
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf2.../500V(/K)	-	-	G...üf2.../500V	-	-



特性 **gR AC500V-690V** / *Characteristics gR AC500V-690V*

熔化的  $I^2t$  校正系数 / *Conversion factor Operating  $I^2t$*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf2.../690V(/K)	-	-	S...üf2.../690V	-	-



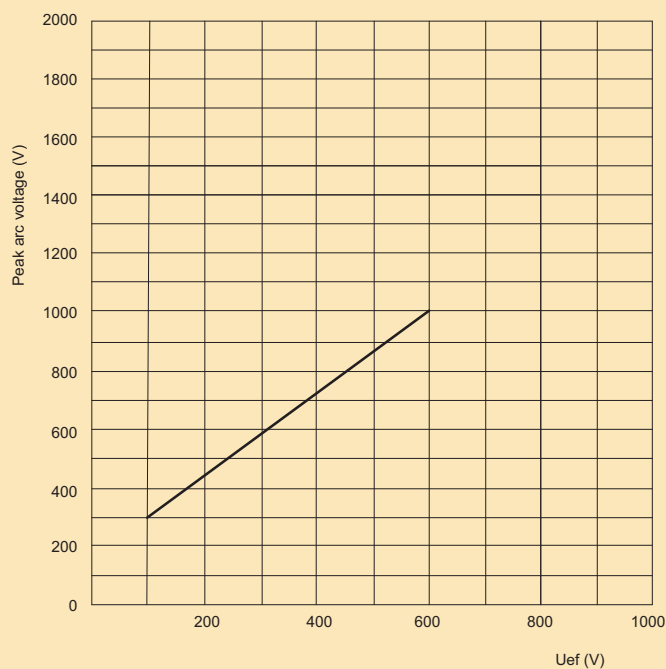
NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护熔断器  
Fuse-links for semiconductor protection

最大燃弧电压 / *Maximum arc voltage occurring*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf2.../500V(/K)	-	-	G...üf2.../500V	-	-



NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC fuse-links

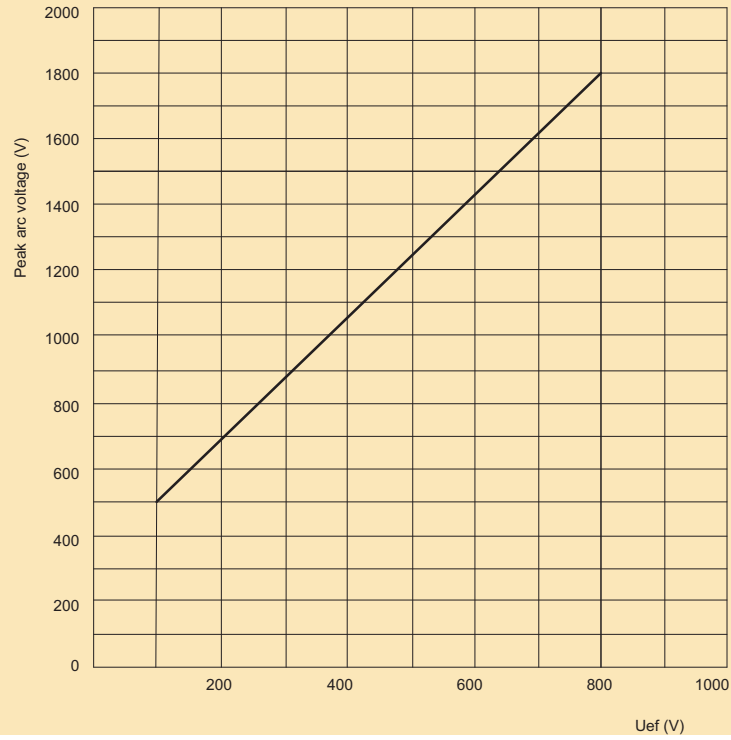
附录  
Appendix



特性gR AC500V-690V / Characteristics gR AC500V-690V

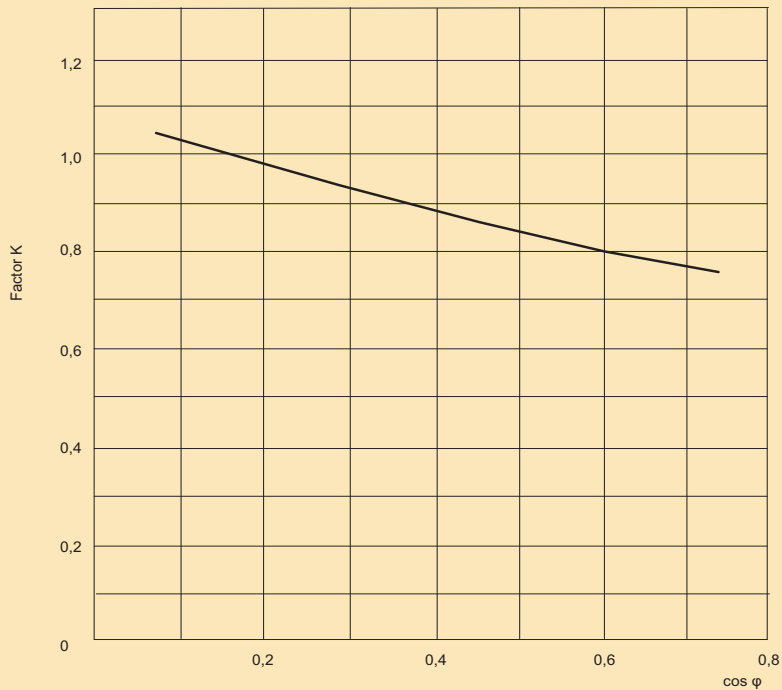
最大燃弧电压 / Maximum arc voltage occurring

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf2.../690V(/K)	-	-	S...üf2.../690V	-	-



校正系数 / Correction factor for power factor

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf2.../500V(/K)	-	-	G...üf2.../500V	-	-
M...üf2.../690V(/K)	-	-	S...üf2.../690V	-	-



特性 **gR AC500V-690V** / *Characteristics gR AC500V-690V*

部分负载的功耗校正系数 / *Conversion power dissipation for partial load*

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...üf2.../500V(/K)	-		G...üf2.../500V	-	-
M...üf2.../690V(/K)	-		S...üf2.../690V	-	-

校正系数 C / Correction factor C	0,005	0,025	0,063	0,122	0,204	0,31	0,442	0,6	0,785	1
负载 % / Load %	10	20	30	40	50	60	70	80	90	100

NH熔断器  
*NH fuse-links*

光伏熔断器  
*Fuses for photovoltaic applications*

半导体保护  
熔断器  
*Fuse-links for semiconductor protection*


NH熔断器底座  
*NH fuse-bases*

D型熔断器  
*D-type fuses*

高压熔断器  
*IKUS HV HRC fuse-links*


附录  
*Appendix*

D型熔断器 gR AC400V / D0-system fuse-links gR AC400V



$U_n$	尺码 Size	$I_n$ [A]	熔断焦耳积分 Operating $I^2t$ at $U_n$ $I^2t$ [A <sup>2</sup> s]	耗散功率 Power dissipation $P_n$ [W]	包装 PU	型号 / Type	订货号 Article-No.
400V	D01	2	6,3	2,3	10	GRD01/2	D0700901
		4	13	3,1		GRD01/4	D0701201
		6	20	4,0		GRD01/6	D0701401
		10	65	4,2		GRD01/10	D0701701
		16	200	5,3		GRD01/16	D0702201
	D02	20	275	8,0	10	GRD02/20	D0702402
		25	480	9,0		GRD02/25	D0702602
		35	1000	10,0		GRD02/35	D0703102
		50	1800	15,0		GRD02/50	D0703502
		63	2500	17,0		GRD02/63	D0703802

D型熔断器 gR AC500V / D-sytem fuse-links gR AC500V



$U_n$	尺码 Size	$I_n$ [A]	熔断焦耳积分 Operating $I^2t$ at $U_n$ $I^2t$ [A <sup>2</sup> s]	耗散功率 Power dissipation $P_n$ [W]	包装 PU	型号 / Type	订货号 Article-No.	
500V	DI	2	5,8	2,1	10	GRNDZ/2	D1710900	
		4	11	2,5		GRNDZ/4	D1711200	
		6	18	3,2		GRNDZ/6	D1711400	
		10	40	3,6		GRNDZ/10	D1711700	
		16	60	6,3		GRNDZ/16	D1712200	
		20	139	7,3		GRNDZ/20	D1712400	
		25	205	9,0		GRNDZ/25	D1712600	
	DII	2	5,8	2,1	25	GRD2/2	D2710900	
		4	11	2,5		GRD2/4	D2711200	
		6	18	3,2		GRD2/6	D2711400	
		10	40	3,6		GRD2/10	D2711700	
		16	60	6,3		GRD2/16	D2712200	
		20	139	7,3		GRD2/20	D2712400	
		25	205	9,0		GRD2/25	D2712600	
	DIII	30	310	10,0	25	GRD2/30	D2712700	
		35	539	12,0		GRD3/35	D3713100	
		50	1250	19,0		GRD3/50	D3713500	
			63	1890		25	GRD3/63	D3713800

技术参数 / *Technical data*

型号 / Type	GRD01...				
尺码 / Size	-	-	D01 (E14)		
额定电压 / Rated voltage	$U_n$	V	AC400 DC250		
额定电流 / Rated current	$I_n$	A	2-6	10	16
额定分断能力 / Rated breaking capacity	-	kA	AC50 DC8		
使用类别 / Utilization category	-	-	gR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-3		
尺寸 / Dimensions	A	mm	7,3	8,5	9,7
重量 / Weight	-	g	6	6	6

NH熔断器  
NH fuse-links

型号 / Type	GRD02...						
尺码 / Size	-	-	D02 (E18)				
额定电压 / Rated voltage	$U_n$	V	AC400 DC250				
额定电流 / Rated current	$I_n$	A	20	25	35	50	63
额定分断能力 / Rated breaking capacity	-	kA	AC50 DC8				
使用类别 / Utilization category	-	-	gR				
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-3				
尺寸 / Dimensions	A	mm	10,9	12,1	13,3	14,5	15,9
重量 / Weight	-	g	11	12	13	13	15

光伏熔断器  
Fuses for  
photovoltaic  
applications

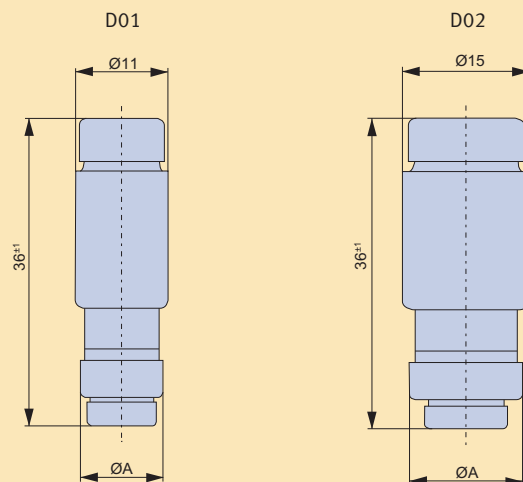
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

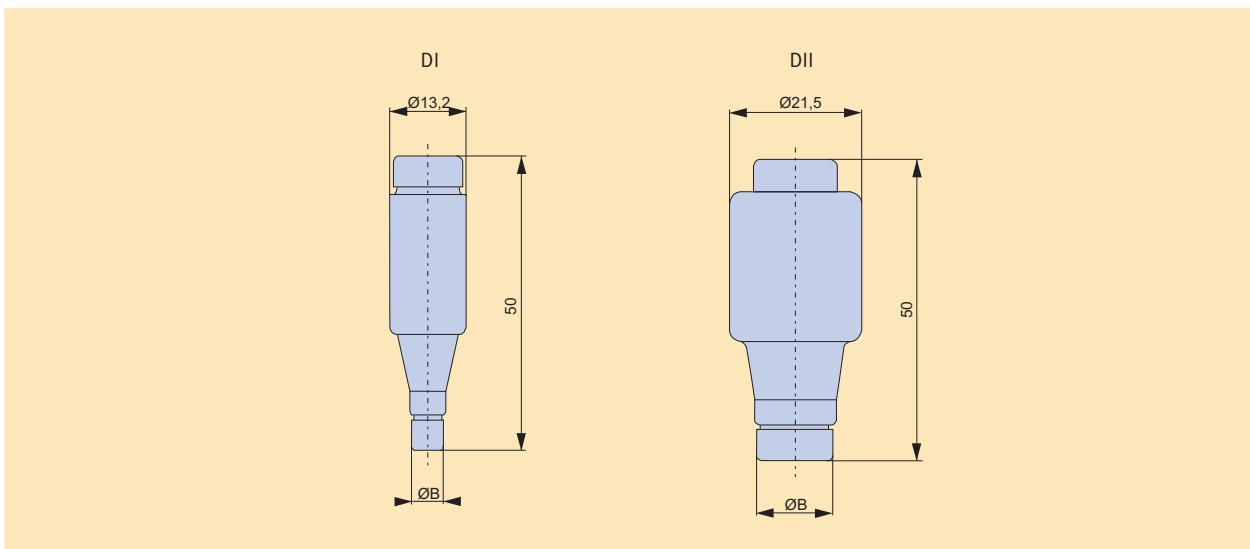
附录  
Appendix



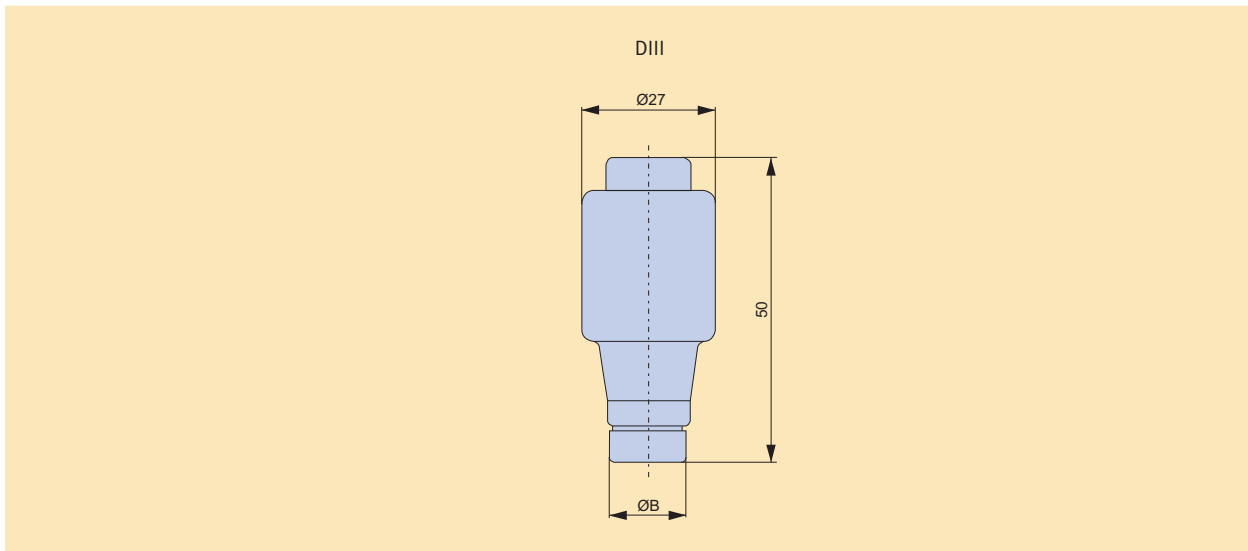
技术参数 / *Technical data*

型号 / Type	GRNDZ...						
尺码 / Size	-	-	DI (E16)				
额定电压 / Rated voltage	$U_n$	V	AC500 DC315				
额定电流 / Rated current	$I_n$	A	2-6	10	16	20	25
额定分断能力 / Rated breaking capacity	-	kA	AC50 DC8				
使用类别 / Utilization category	-	-	gR				
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-3				
尺寸 / Dimensions	B	mm	6	8	10	12	14
重量 / Weight	-	g	12	13	14	15	16

型号 / Type	GRD2...						
尺码 / Size	-	-	DII (E27)				
额定电压 / Rated voltage	$U_n$	V	AC500 DC315				
额定电流 / Rated current	$I_n$	A	2-6	10	16	20	25-30
额定分断能力 / Rated breaking capacity	-	kA	AC50 DC8				
使用类别 / Utilization category	-	-	gR				
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-3				
尺寸 / Dimensions	B	mm	6	8	10	12	14
重量 / Weight	-	g	27	27	28	29	30



型号 / Type			GRD3...		
尺码 / Size	-	-	DIII (E33)		
额定电压 / Rated voltage	$U_n$	V	AC500 DC315		
额定电流 / Rated current	$I_n$	A	35	50	63
额定分断能力 / Rated breaking capacity	-	kA	AC50 DC8		
使用类别 / Utilization category	-	-	gR		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-3		
尺寸 / Dimensions	B	mm	16	18	20
重量 / Weight	-	g	48	49	52



NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

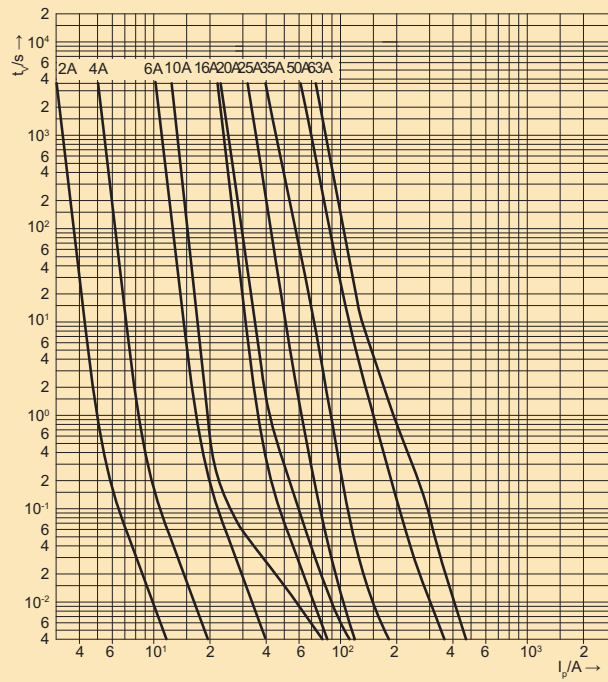
高压熔断器  
IKUS HV HRC  
fuse-links

附录  
Appendix

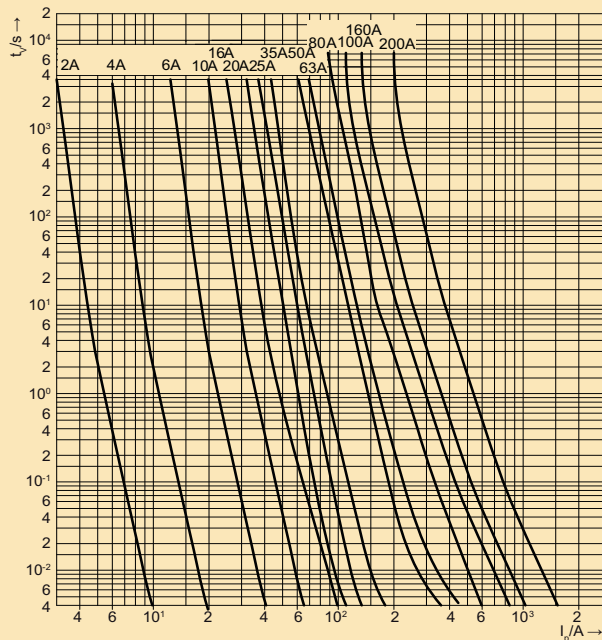
特性gR AC400V-500V; D0/D / Characteristics gR AC400V-500V; D0/D

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
GRD01...	D070...01	R-64	GRD02...	D070...02	R-64



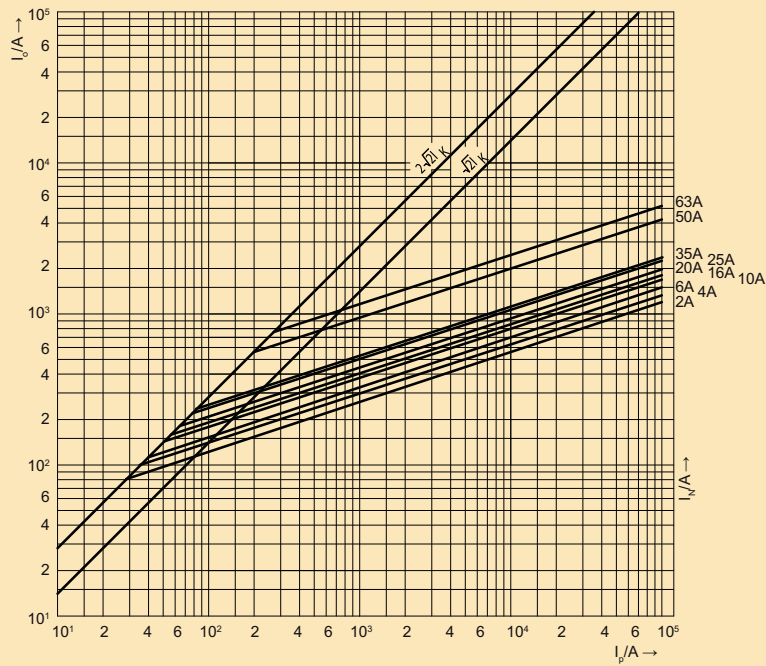
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
GRNDZ...	D171...00	R-64	GRD2...	D271...00	R-64
GRD3...	D371...00	R-64	-	-	-



特性gR AC400V-500V; D0/D / Characteristics gR AC400V-500V; D0/D

截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
GRD01...	D070...01	R-64	GRD02...	D070...02	R-64

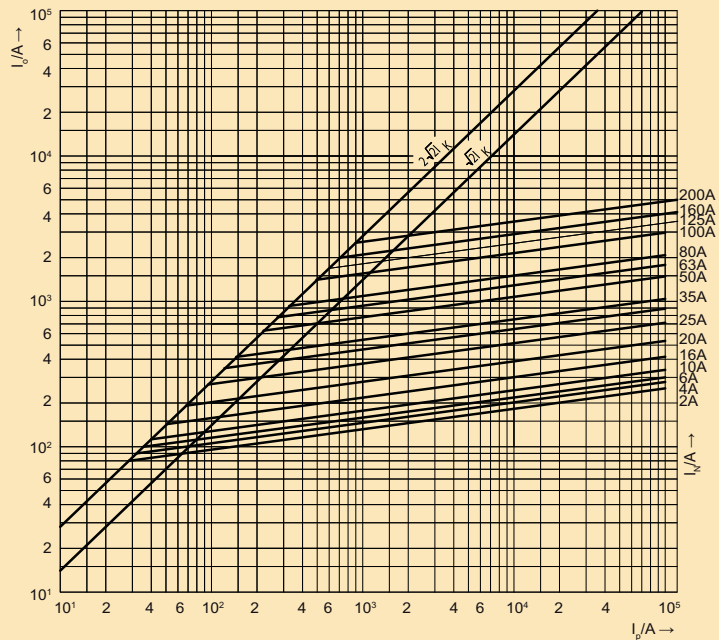


NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
GRNDZ...	D171...00	R-64	GRD2...	D271...00	R-64
GRD3...	D371...00	R-64	-	-	-



D型熔断器  
D-type fuses

高压熔断器  
IKUS HVHRC  
fuse-links


附录  
Appendix



## gS熔断器半导体保护、线缆保护的理想组合

### Fuse-links utilization category gS for combined semiconductor and line protection

#### 产品优势 / Convincing advantages



**理想组合**

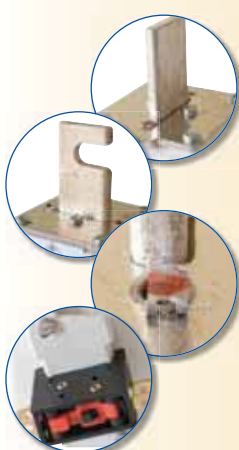
- gS熔断器半导体保护、线缆保护的理想组合
- 兼有aR和gG熔断器的特性
- 减少空间, 节约成本

**优化的功耗**

- 标准开关的应用

**应用领域**

- 多种应用领域, 调速系统, 软启动, 伺服驱动直流驱动等等



**触头类型与指示器**

- 触刀适用NH底座
- 栓接适用母排直接栓接
- 顶部或中间撞击器指示装置

**Ideal combination**

- Utilization category gS combines semiconductor and line protection
- Merges the characteristics of utilization classes aR and gG in one fuse
- Reduced space requirements and costs

**Optimized power dissipation**

- Enables application in standard switchgear

**Multiple field of applications**

- For protection of variable speed drives, soft starters, servo drives, DC drives and more

**Contact types and indication**

- Blade contacts for application in NH fuse-bases
- Screw contacts for application in special fuse-bases respectively direct mounting on busbars
- Indication/signalling via top indicator or with centre indicator



NH刀型gs 熔断器AC690V / NH fuse-links gS AC690V with blade contacts

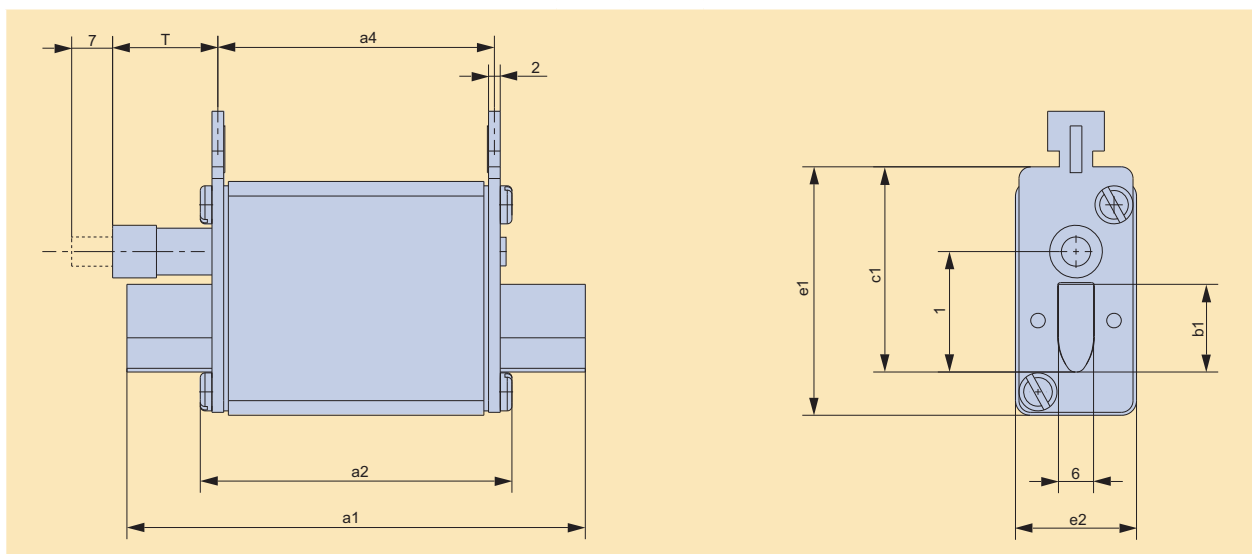
U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号/ Type	指示器 Indicator	NH熔断器 NH fuse-links
								顶部/ top	
								订货号 Article-No.	
690V	000	16	210	19	2,8	3	M000gS/16A/690V	R5582250	光伏熔断器 Fuses for photovoltaic applications
		20	440	44	3,3		M000gS/20A/690V	R5582450	
		25	760	72	4,2		M000gS/25A/690V	R5582650	
		35	1.680	160	5,2		M000gS/35A/690V	R5583150	
		40	3.100	290	5,8		M000gS/40A/690V	R5583450	
		50	4.500	450	6,2		M000gS/50A/690V	R5583550	
		63	9.250	890	7,3		M000gS/63A/690V	R5583850	
		80	18.300	1.380	8,1		M000gS/80A/690V	R5584150	
		100	34.200	3.400	10,5		M000gS/100A/690V	R5584350	
		125	64.500	5.900	11,7		M000gS/125A/690V	R5584650	
	00	160	77.000	8.500	14,0	3	M00gS/160A/690V	R5584914	NH熔断器底座 NH fuse-bases
	1*	160	61.500	7.800	23,0	3	M1gS/160A/690V	R1584900	
		200	101.000	14.300	26,0		M1gS/200A/690V	R1585200	
		250	202.000	29.300	30,0		M1gS/250A/690V	R1585600	
		315	312.000	47.500	36,0		M1gS/315A/690V	R1585900	
	2*	350	425.000	57.000	41,0	3	M2gS/350A/690V	R2586000	D型熔断器 D-type fuses
		400	585.000	83.500	45,0		M2gS/400A/690V	R2586200	
		450	765.000	107.000	52,0		M2gS/450A/690V	R2586400	
		500	970.000	150.000	56,0		M2gS/500A/690V	R2586600	
	3*	560	1.800.000	214.000	55,0	3	M3gS/560A/690V	R3586700	高压熔断器 IKUS HV HRC fuse-links
		630	2.300.000	291.000	57,0		M3gS/630A/690V	R3586900	

\* 同等额定电流应需求更小尺码 / Rated current of smaller sizes on request

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技术参数 / Technical data

型号 / Type			M000gS/.../690V	M00gS/.../690V
尺码 / Size	-	-	NH000	NH00
额定电压 / Rated voltage	$U_n$	V	AC690	
额定电流 / Rated current	$I_n$	A	16-125	160
额定分断能力 / Rated breaking capacity	-	kA	100	
使用类别 / Utilization category	-	-	gS	
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2	
尺寸 / Dimensions	a1	mm	78,5	78,5
	a2		53	53
	a4		49	49
	b1		15	15
	c1		35	35
	e1		43	49
	e2		21	30
重量 / Weight	-	g	140	140



技术参数 / *Technical data*

型号 / Type			M1gS/.../690V	M2gS/.../690V	M3gS/.../690V
尺码 / Size	-	-	NH1	NH2	NH3
额定电压 / Rated voltage	$U_n$	V	AC690		
额定电流 / Rated current	$I_n$	A	160-315	350-500	560-630
额定分断能力 / Rated breaking capacity	-	kA	100		
使用类别 / Utilization category	-	-	gS		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
尺寸 / Dimensions	a1	mm	135	150	150
	a2		72	72	72
	a4		67	67	67
	b1		24	30	37
	c1		40	48	60
	e1		55	63	74
	e2		46	54	64
重量 / Weight	-	g	420	660	870

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

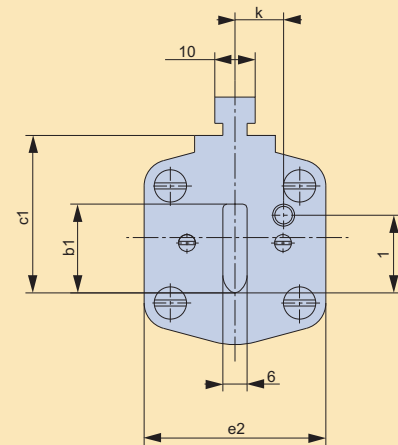
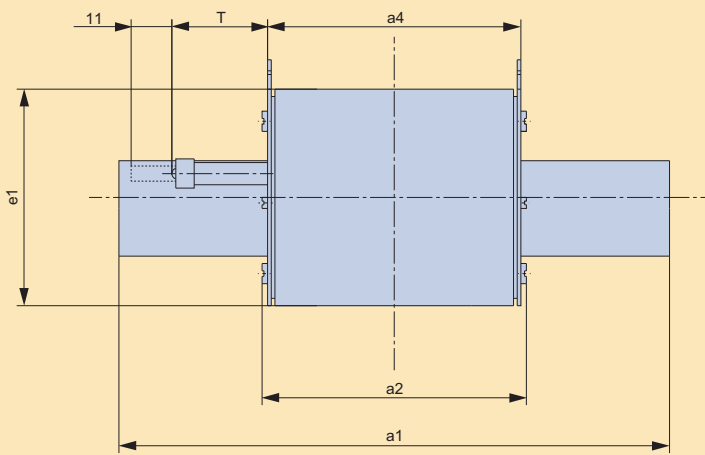
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
fuse-links

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Appendix



NH熔断器gS, AC690V, 螺栓连接, size 1-3, 110mm / NH fuse-links gS AC690V with screw contacts; size 1-3; 110mm



U <sub>n</sub>	尺码 Size	I <sub>n</sub> [A]	熔断焦耳 积分 Operating I <sup>2</sup> t at U <sub>n</sub> I <sup>2</sup> t[A <sup>2</sup> s]	弧前焦耳 积分 Pre-arcing I <sup>2</sup> t I <sup>2</sup> t[A <sup>2</sup> s]	耗散功率 Power dissipation P <sub>n</sub> [W]	包装 PU	型号/ Type	指示器 / Indicator	
								顶部/ top	中间指示器 Centre indicator ...MgS...
								订货号 Article-No.	订货号 Article-No.
690V	1	160	61.500	7.800	23,0	1	S1gS/110/160A/690V	R1584921	R1584922
		200	101.000	14.300	26,0		S1gS/110/200A/690V	R1585221	R1585222
		250	202.000	29.300	30,0		S1gS/110/250A/690V	R1585621	R1585622
		315	312.000	47.500	36,0		S1gS/110/315A/690V	R1585921	R1585922
	2	355	425.000	57.000	41,0	1	S2gS/110/355A/690V	R2586021	R2586022
		400	585.000	83.500	45,0		S2gS/110/400A/690V	R2586221	R2586222
		450	765.000	107.000	52,0		S2gS/110/450A/690V	R2586421	R2586422
		500	970.000	150.000	56,0		S2gS/110/500A/690V	R2586621	R2586622
	3*	560	1.800.000	214.000	55,0	1	S3gS/110/560A/690V	R3586721	R3586722
		630	2.300.000	291.000	57,0		S3gS/110/630A/690V	R3586921	R3586922

\* 根据要求提供小尺码的额定电流 / Rated current of smaller sizes on request

技术参数 / *Technical data*

型号 / Type			S1gS/.../690V	S2gS/.../690V	S3gS/.../690V
尺码 / Size	-	-	NH1	NH2	NH3
额定电压 / Rated voltage	$U_n$	V	AC690		
额定电流 / Rated current	$I_n$	A	160-315	350-500	560-630
额定分断能力 / Rated breaking capacity	-	kA	100		
使用类别 / Utilization category	-	-	gS		
标准 / Standards	-	-	IEC/EN 60269-1 IEC/EN 60269-4 DIN VDE 0636-2		
螺栓间距 / Hole centres	S	mm	110	110	110
尺寸 / Dimensions	a1	mm	140	140	140
	a2		74	74	74
	e1 e2		51	60	75
	b		24	30	37
	H*		90	99	114
重量 / Weight	-	g	420	660	870

NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for  
photovoltaic  
applications

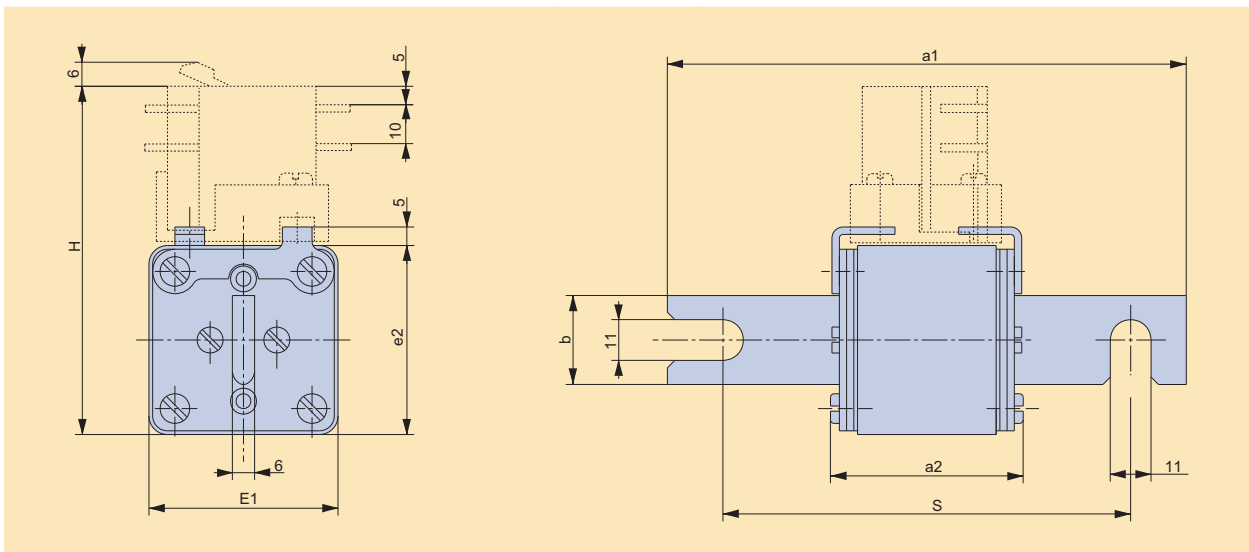
半导体保护  
熔断器  
Fuse-links for  
semiconductor  
protection

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC  
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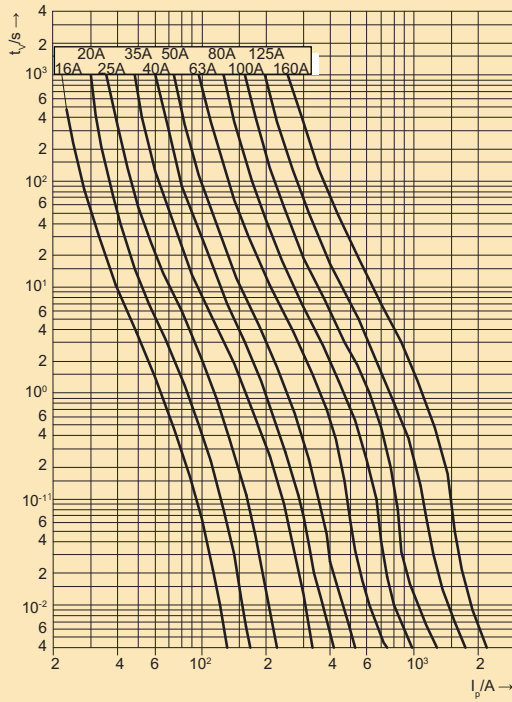


\* 带适配器AMK和微动开关MK / With adapter AMK and microswitch MK

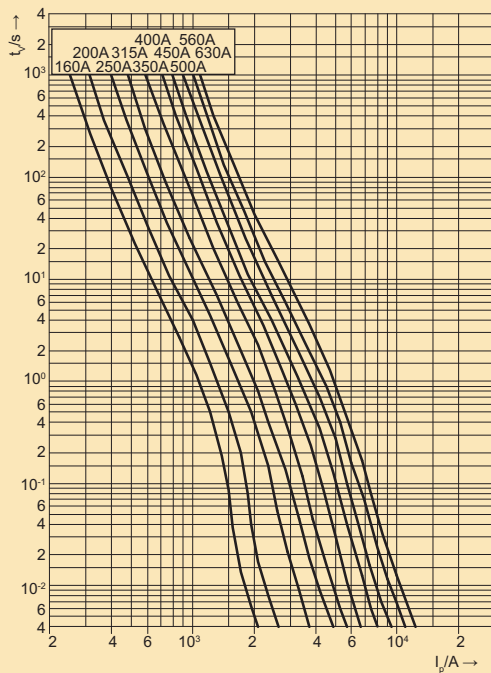
特性gS / Characteristics gS

时间电流特性 / Time current characteristics

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M000gS/.../690V	R558...50	R-71	M00gS/160A/690V	R5584914	R-71



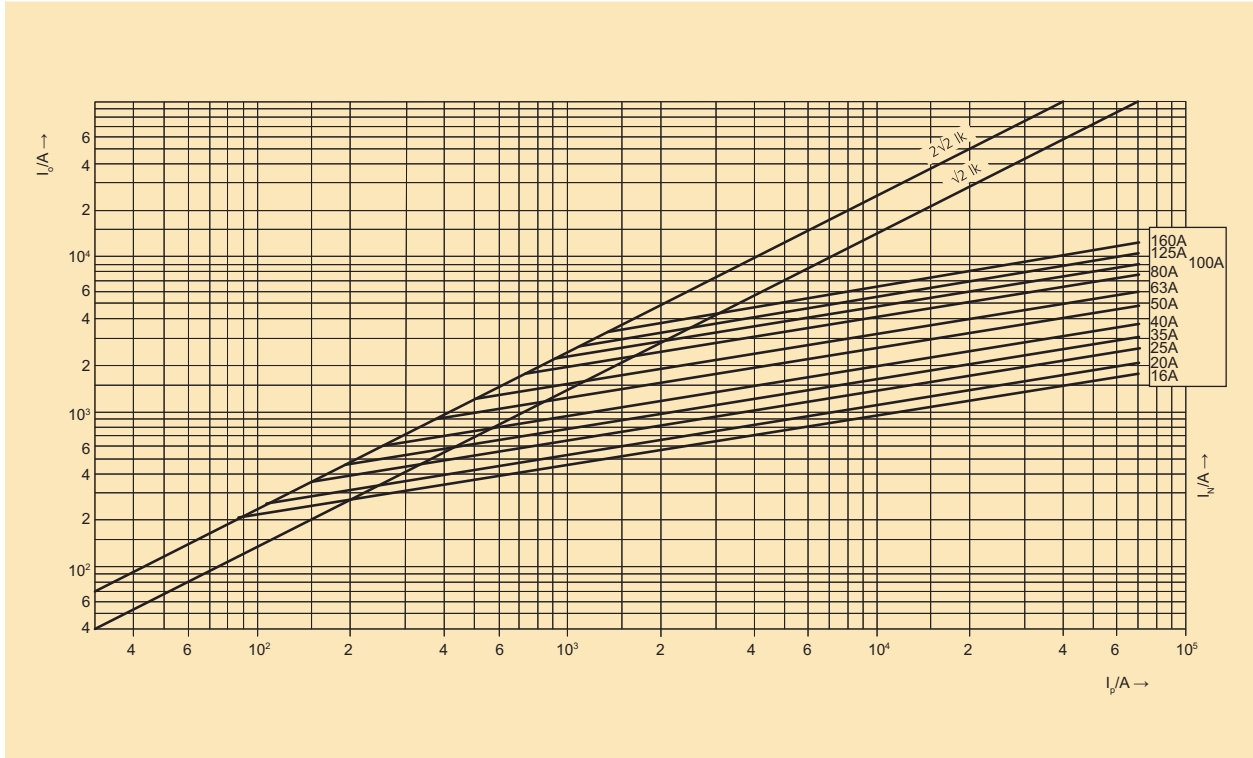
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...gS/.../690V	R158...00, R258...00, R358...00	R-71	S...gS/.../690V	R158...21, R258...21, R358...21	R-74
S...MgS/.../690V	R158...22, R258...22, R358...22	R-74		-	-



特性gS / Characteristics gS

截断电流图 / Peak let-through current chart

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M000gS/.../690V	R558...50	R-71	M00gS/160A/690V	R5584914	R-71

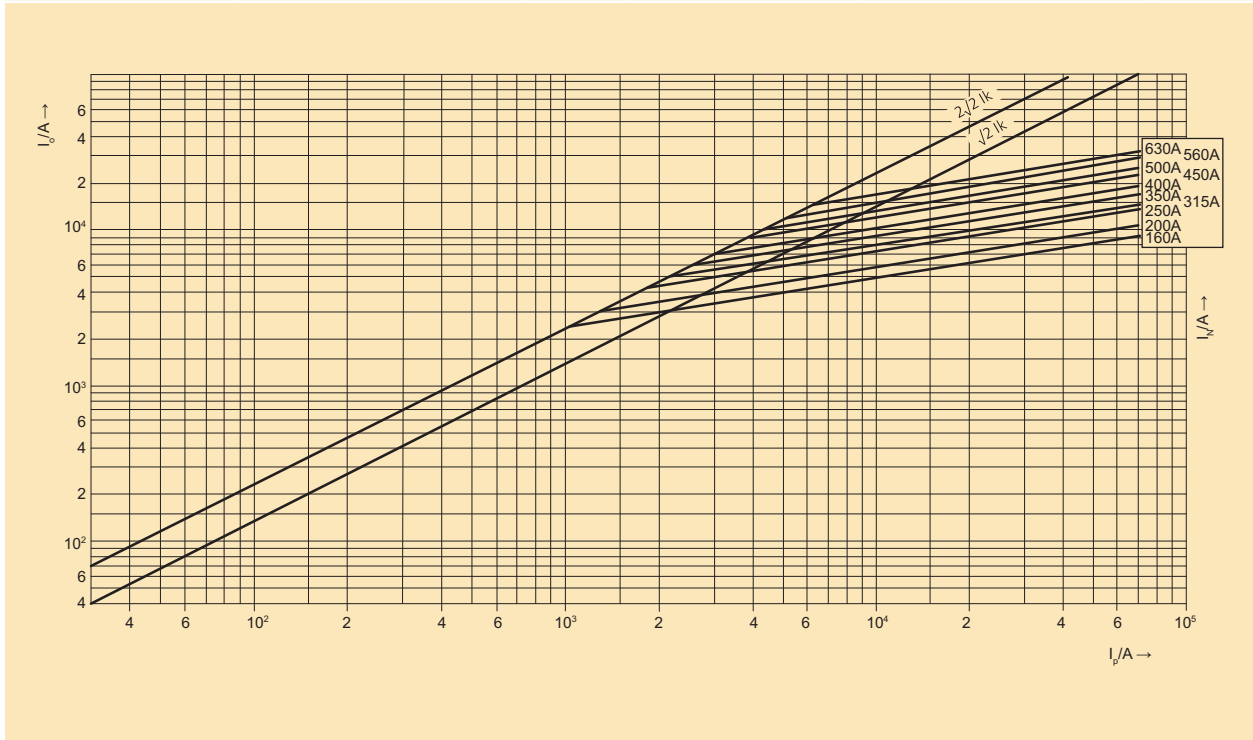


NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护熔断器  
Fuse-links for semiconductor protection

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...gS/.../690V	R158...00, R258...00, R358...00	R-71	S...gS/.../690V	R158...21, R258...21, R358...21	R-74
S...MgS/.../690V	R158...22, R258...22, R358...22	R-74		-	-



D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC fuse-links

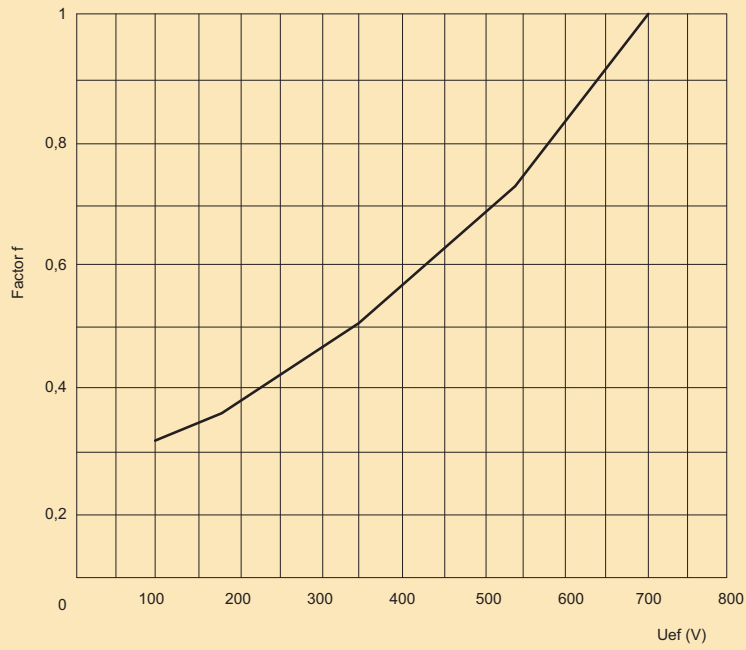
附录  
Appendix



特性gS / Characteristics gS

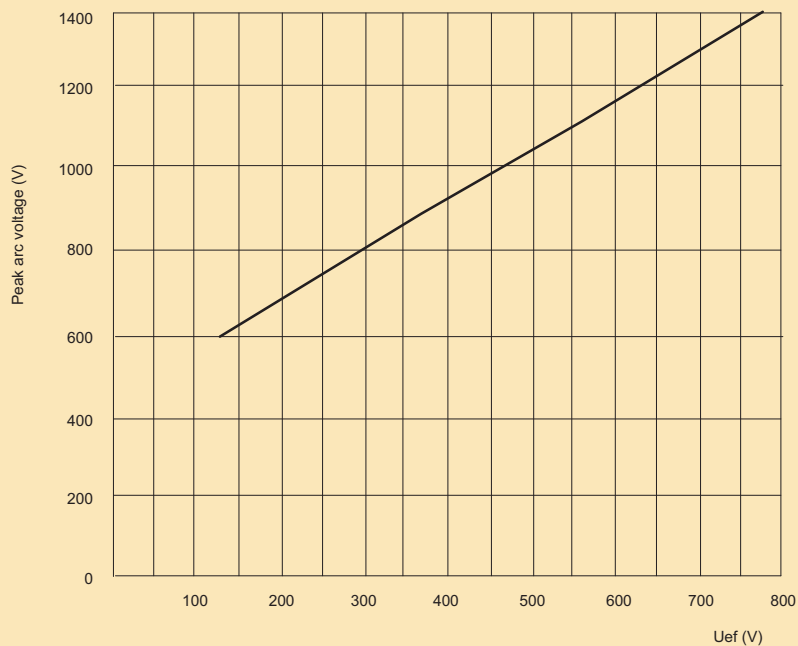
熔化的I<sup>2</sup>t校正系数 / Conversion factor Operating I<sup>2</sup>t

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...gS/.../690V	-	-	S...gS/.../690V	-	-
S...MgS/.../690V	-	-		-	-



最大燃弧电压 / Maximum arc voltage occuring

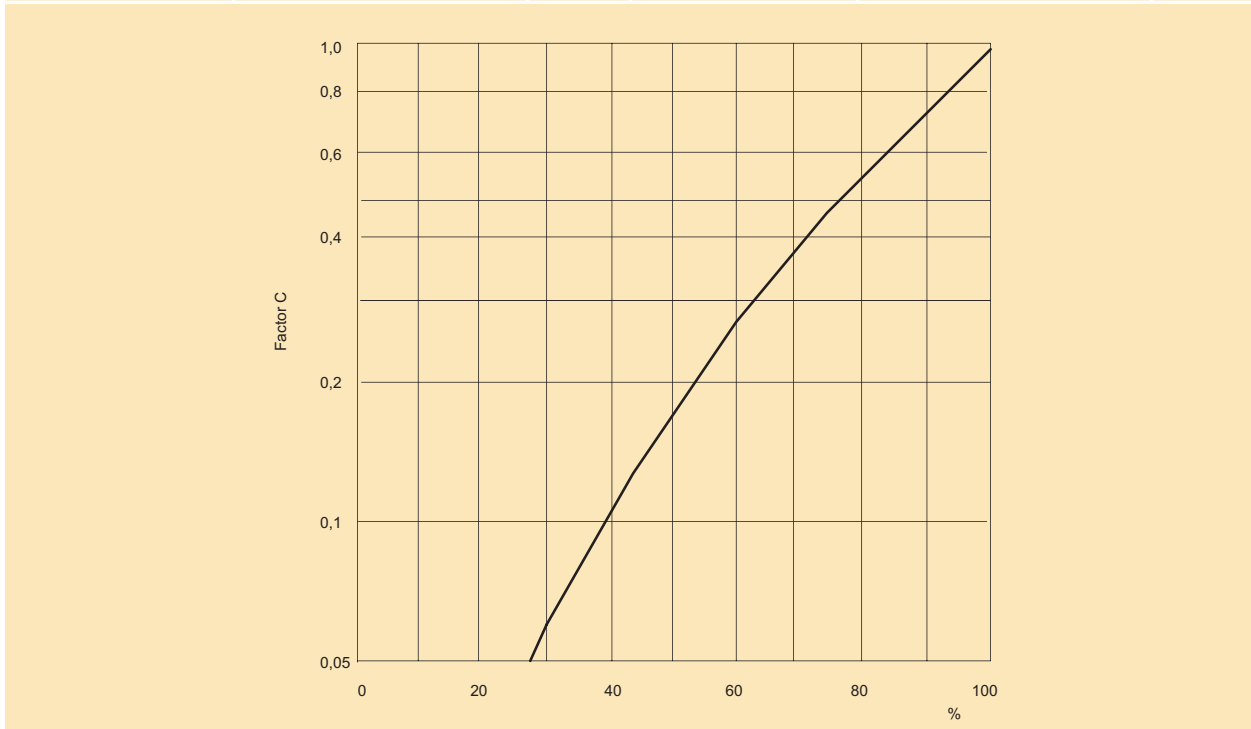
型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...gS/.../690V	-	-	S...gS/.../690V	-	-
S...MgS/.../690V	-	-		-	-



特性gS / Characteristics gS

部分负载的功耗校正系数 / Conversion power dissipation for partial load

型号 / Type	订货号 / Article-No.	页码 / Page	型号 / Type	订货号 / Article-No.	页码 / Page
M...gS/.../690V	-	-	S...gS/.../690V	-	-
S...MgS/.../690V	-	-	-	-	-







NH熔断器  
NH fuse-links

光伏熔断器  
Fuses for photovoltaic applications

半导体保护熔断器  
Fuse-links for semiconductor protection

半导体保护熔断器的附件 / Accessories for fuse-links for semiconductor protection

描述 / Description	包装 PU	型号 / Type	订货号 Article -No.	页码 Page
 NH熔断器插拔手柄 / NH fuse handle				
适用尺码 NH000-NH3 / For size NH000-NH3	1	GPSHE	U8950001	-
适用尺码 NH1-NH3 lang (AC1200V/DC1100V) For size NH1-NH3 long (AC1200V / DC1100V)	1	GP1200	U8950003	-
 NH熔断器带绝缘套插拔手柄 / NH fuse handle with sleeve				
适用尺码 NH000-NH3 / For size NH000-NH3	1	GPSHE/Al	U8950005	-
 顶部开关单元 / Gripping-lug top unit switch				
微动开关适用尺码 NH000-NH3 Microswitch for size NH000-NH3	10	MK/LS	R8524920	-
 中间指示器的微动开关 / Microswitch for centre indicator				
适配器 S...Müf.../690V / G...Müf.../690V Adapter for S...Müf.../690V / G...Müf.../690V	1	AMK1	R8327610	-
适配器 S...Müf.../1000V / G...Müf.../1000V Adapter for S...Müf.../1000V / G...Müf.../1000V	1	AMK2	R8347210	-
微动开关 AMK1 / AMK2 Microswitch for AMK1 / AMK2	1	MK	R8347220	-

NH熔断器底座  
NH fuse-bases

D型熔断器  
D-type fuses

高压熔断器  
IKUS HV HRC fuse-links

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