

Specifications 技术参数

Square body fuse links

Ratings & Features Applications 电气参数/功能应用领域:

- ◇ Volts电压: 1000Vdc;
- ◇ Amps电流: 100-630A;
- ◇ Interrupting Capacity分断:
 - Max1000Vdc 50kA;(or less)
 - Min≥5In;
- ◇ Time Constant时间常数: ≤5ms; ;
- ◇ Class Type产品类别: aR;
- ◇ Design For Dc Applications 直流应用设计;
- ◇ Excellent Dc Performance 卓越的直流分断能力;
- ◇ Superior cycling capability 可循环利用率高
- ◇ Low Watt Losses 低功率损耗;
- ◇ Electrical Energy Storage 电能/储能;
- ◇ Disconnect or Maintenance Safety Disconnect 隔离开关、维护开关
- ◇ Battery Pack Protection 动力电池包保护;
- ◇ Backup Protection For Dc Relay 直流继电器保护;



Standards / Approvals 认证/标准:

- ◇ Refer To UL 248.1/UL 248.13
- ◇ IEC 60269.1/IEC 60269.4
 - 性能参考UL 248.13及IEC60269.4;
- ◇ Reach Declaration Available Upon Request;
 - 可根据要求提供REACH声明;
- ◇ UL, TUV, CE;
- ◇ RoHS Compliant.
 - 符合RoHS。

Features & benefits 产品特性:

Higher voltage rating provides overall system efficiency using smaller, more economical conductors while meeting the needs of higher voltage. Up to ten times faster opening under high fault current conditions helps assure reliable protection of circuits and components. Greater ampacity within sizing guidelines, Excellent power of resisting voltaic impingement and environment temperature tolerance, Excellent resistance to mechanical vibration and impact resistance.

满足高电压、小尺寸、更经济的导体使用，提升整体系统效率，同时满足更高电压的需求。在大的故障电流条件下，断开速度快，确保电路和部件的可靠保护。实现尺寸范围内更大的载流量。良好的抗电流冲击能力以及冷、热环境温度耐受能力，具有优越的抗机械振动与冲击能力。

Product Model 产品型号说明:

HC HV I 1000 = 400 B = 59ES

HC: Company Code

PV: Photovoltaic

HV: High Speed

F: Fiberglass T: Ceramics

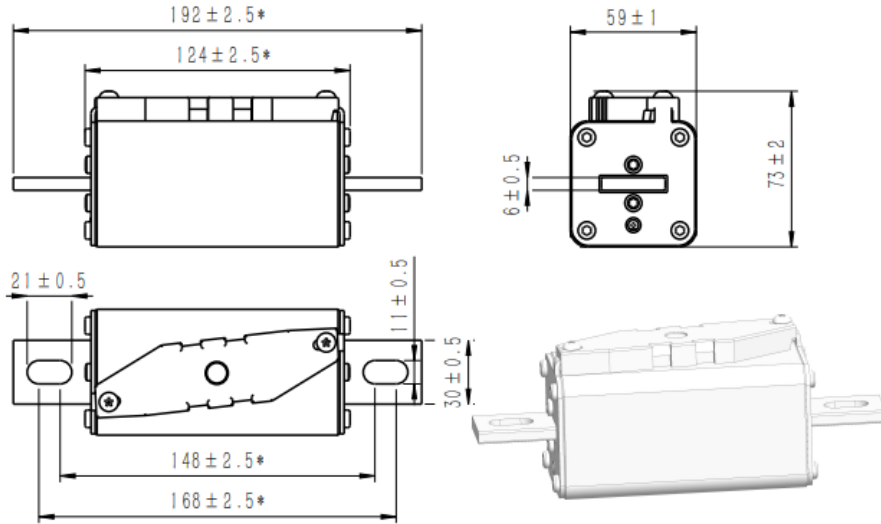
Rated Voltage: 1000: 1000V

Rated Current: 400: 400A

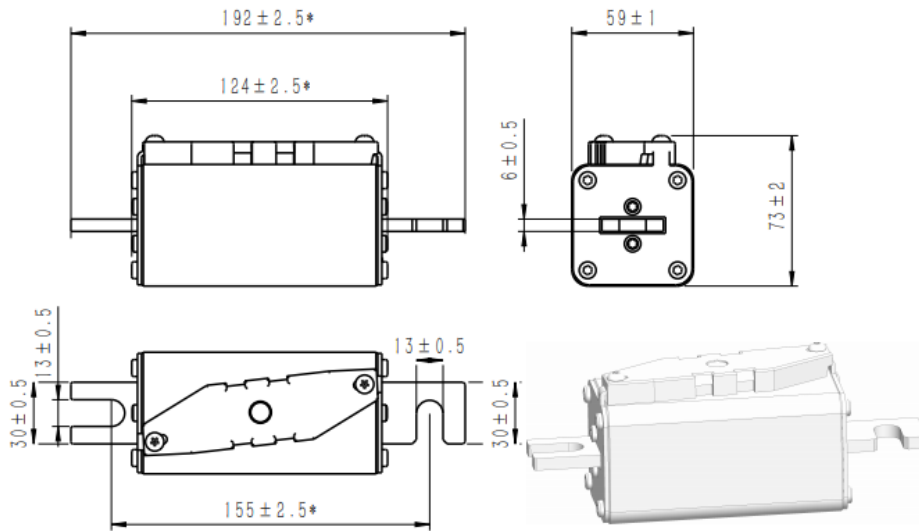
x: Connect: A,B,U,K

Type Series Code: 59ES

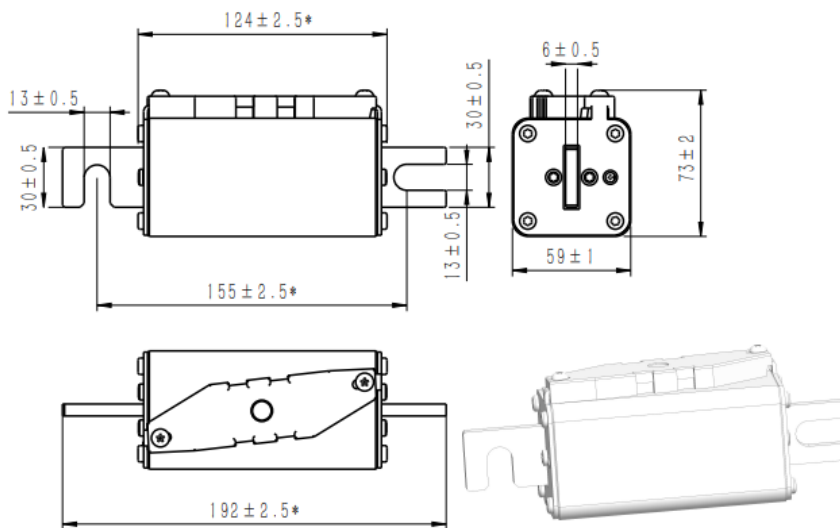
Dimensions (mm) 尺寸



Bolted: xxxB-59ES 长条螺栓横向安装



Din: xxxU-59ES 勾叉螺栓横向安装



Customize: xxxK-59ES 可定制勾叉螺栓纵向安装

Fuse Ratings 额定参数

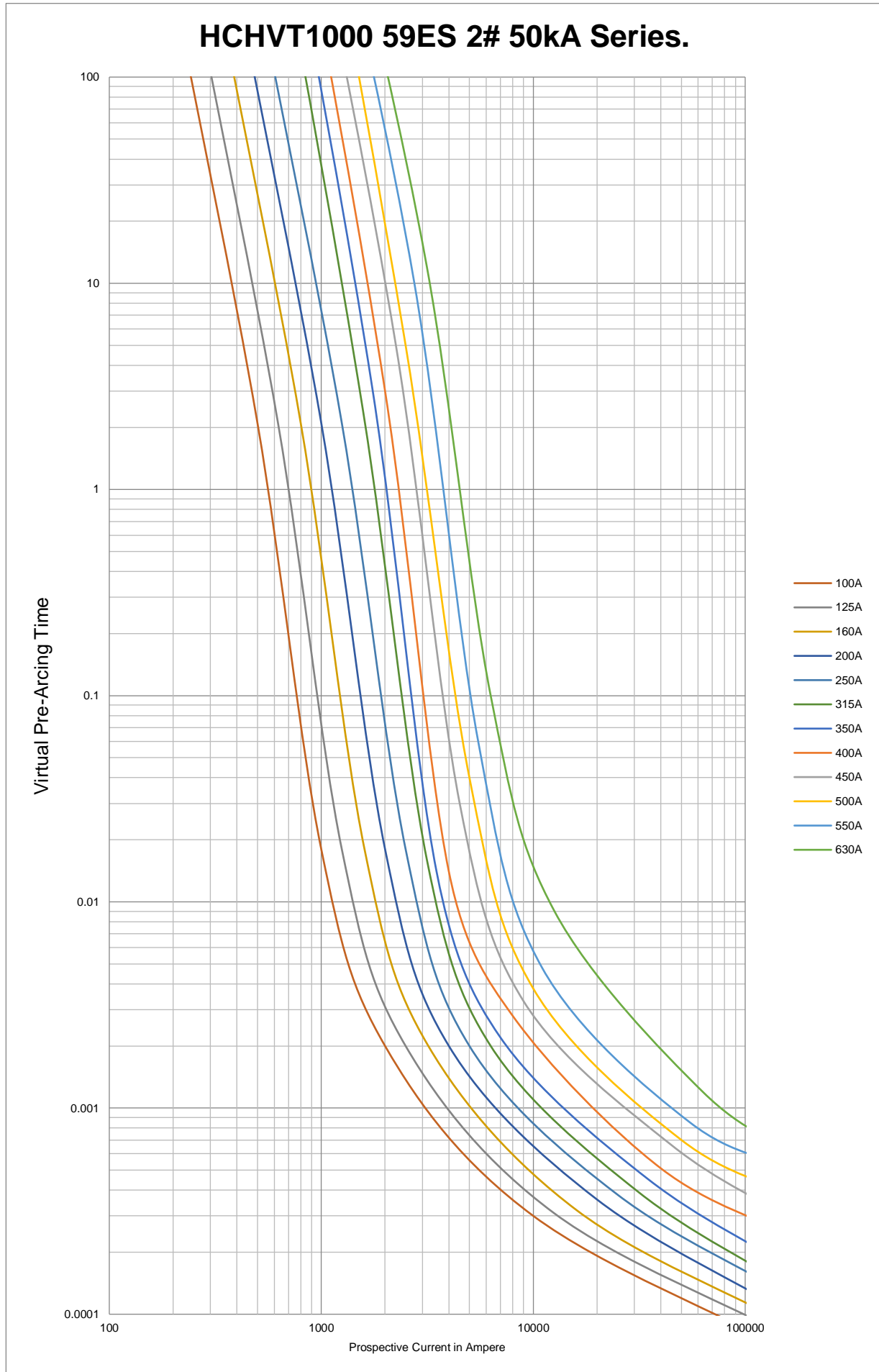
Connect	Part No.	Fuse Amps	Average @50KA/1000Vdc		Power Loss (W)		Approvals
			A ² s Melting	A ² t Clearing	80%	100%	UL
Bolted	HCHVT1000-100B-59ES	100A	2370	8857	41	53	●
	HCHVT1000-125B-59ES	125A	4890	13219	47	60	●
	HCHVT1000-160B-59ES	160A	7192	19440	50	64	●
	HCHVT1000-200B-59ES	200A	11066	29907	68	86	●
	HCHVT1000-250B-59ES	250A	17940	48480	86	107	●
	HCHVT1000-315B-59ES	315A	30568	82610	102	127	●
	HCHVT1000-350B-59ES	350A	40655	109878	109	136	●
	HCHVT1000-400B-59ES	400A	58496	158090	121	151	●
	HCHVT1000-450B-59ES	450A	78890	213215	128	161	○ Pending
	HCHVT1000-500B-59ES	500A	101503	274330	139	174	○ Pending
	HCHVT1000-550B-59ES	550A	125982	340490	155	194	○ Pending
	HCHVT1000-630B-59ES	630A	185020	500100	162	203	○ Pending

Connect	Part No.	Fuse Amps	Average @50KA/1000Vdc		Power Loss (W)		Approvals
			A ² s Melting	A ² t Clearing	80%	100%	UL
Din	HCHVT1000-100U-59ES	100A	2370	8857	41	53	●
	HCHVT1000-125U-59ES	125A	4890	13219	47	60	●
	HCHVT1000-160U-59ES	160A	7192	19440	50	64	●
	HCHVT1000-200U-59ES	200A	11066	29907	68	86	●
	HCHVT1000-250U-59ES	250A	17940	48480	86	107	●
	HCHVT1000-315U-59ES	315A	30568	82610	102	127	●
	HCHVT1000-350U-59ES	350A	40655	109878	109	136	●
	HCHVT1000-400U-59ES	400A	58496	158090	121	151	●
	HCHVT1000-450U-59ES	450A	78890	213215	128	161	○ Pending
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	HCHVT1000-550U-59ES	550A	125982	340490	155	194	○ Pending
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Connect	Part No.	Fuse Amps	Average @50KA/1000Vdc		Power Loss (W)		Approvals
			A ² s Melting	A ² t Clearing	80%	100%	UL
Customize	HCHVT1000-100K-59ES	100A	2370	8857	41	53	●
	HCHVT1000-125K-59ES	125A	4890	13219	47	60	●
	HCHVT1000-160K-59ES	160A	7192	19440	50	64	●
	HCHVT1000-200K-59ES	200A	11066	29907	68	86	●
	HCHVT1000-250K-59ES	250A	17940	48480	86	107	●
	HCHVT1000-315K-59ES	315A	30568	82610	102	127	●
	HCHVT1000-350K-59ES	350A	40655	109878	109	136	●
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◇ DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C ;

Time-Current Curve 时间电流曲线图



Operating conditions 使用条件

- ◇ Product storage Temperature: $-40^{\circ}\text{C}\sim 120^{\circ}\text{C}$ ($-40^{\circ}\text{F}\sim 248^{\circ}\text{F}$);
产品存储温度: $-40^{\circ}\text{C}\sim 120^{\circ}\text{C}$, 在 40°C 时相对湿度不大于70%;
- ◇ Product storage Humidity: $T=40^{\circ}\text{C}$ RH \leq 70%, $T\leq 30^{\circ}\text{C}$ RH \leq 80%, $T\leq 20^{\circ}\text{C}$ RH \leq 90%;
在 30°C 以下, 产品相对湿度不大于80, 在 20°C 以下, 相对湿度不大于90%;
- ◇ Package storage Temperature: $-40^{\circ}\text{C}\sim 80^{\circ}\text{C}$ ($-40^{\circ}\text{F}\sim 176^{\circ}\text{F}$);
包装存储温度: $-40^{\circ}\text{C}\sim 80^{\circ}\text{C}$;
- ◇ Fuses can perform regularly under the flowing conditions without corrections;
熔断器在下述的正常使用条件下工作, 不需要额外的修正;
- ◇ Regular current flow should $\leq 75\%$ of recommended rated current;
推荐长期通流的电流值不大于额定电流的75%;
- ◇ High frequency vibration resistance: $\geq 20\text{g}$;
本系列熔断器有良好的抗振动和冲击的耐受能力, 可承受20g以上的加速度;
- ◇ Intense vibration and shocking conditions need more tests.
振动较为强烈的应用环境, 可商议进行对应测试, 一般要经过较长的周期。
- ◇ Replacing fuses if damaging facilities;
对有机损伤的熔断器必须进行更换;
- ◇ DO NOT change fuses while loading unless MUST.
除非使用要求允许, 如熔断器式负荷开关, 否则请勿带负载更换熔断器。
- ◇ Operating temperature: $-5^{\circ}\text{C}\sim 40^{\circ}\text{C}$ ($23^{\circ}\text{F}\sim 104^{\circ}\text{F}$);
正常使用条件: $-5^{\circ}\text{C}\sim 40^{\circ}\text{C}$;
- ◇ Allowable operating temperature: $-40^{\circ}\text{C}\sim 125^{\circ}\text{C}$ ($-40^{\circ}\text{F}\sim 257^{\circ}\text{F}$);
允许使用条件: $-40^{\circ}\text{C}\sim 125^{\circ}\text{C}$;
- ◇ Temperature correction factors: when below -5°C (23°F), low overload (L.O.) pre-arcing time will slightly extend, rated current will slightly increase;
周围空气温度变化的参数修正: 在低于 -5°C 下工作, 熔断器的低倍过载电流的弧前时间略有延长, 额定电流略有增大, 但是除非 -5°C 以上不是工作范围, 一般不参考增加熔断器额定电流;
- ◇ If operating above 40°C (104°F), rated current need extra corrections, factors: $-Kt$ ①.
熔断器在 40°C 以上工作, 额定电流需要额外的修正, 修正系数为 $-Kt$ 。

*Note①: Kt value has already considered the safety current allowance under regular operating scenarios.

*注1: Kt的取值已考虑熔断器在正常工作条件下的额定电流安全余量的影响。

