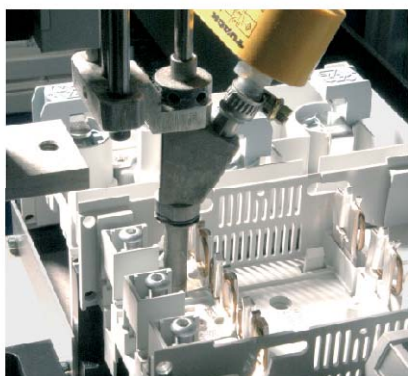
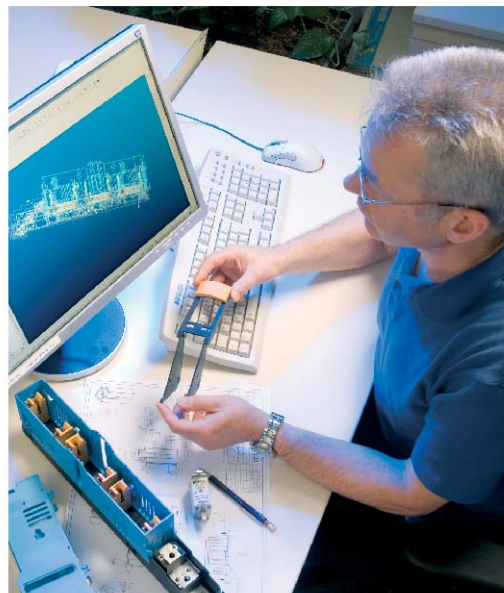


风力发电机防雷方案中熔断器应用

Fuse application for the wind power lightningproof solution

IN THE LINE OF POWER





EFEN products ensure the reliable and safe operation of green power utility, industrial and telecommunication installations. We are experts for fuse-links and low voltage switching devices. Our focus is on application-oriented solutions. EFEN engineers and technicians maintain a close liaison to our customers and provide information firsthand.

The unsurpassed quality of EFEN products is based on the advanced knowledge of our developers and a seamless production process management. The result: Products on which customers worldwide build their success.

»Quality made by EFEN« - founded in the Rheingau region in Germany in 1922, EFEN today has two plants in Germany. Subsidiaries in Hungary, Poland and China as well as international sales and marketing activities spread EFEN technology around the world.

The EFEN quality management system is certified in accordance with the international standard DIN ISO 9001 (EN 29001).

EFEN maintains a certified environment management system based on DIN ISO 14001.



埃芬产品为绿色能源电力、工控和通讯设备的操作提供了安全可靠的保证。我们是熔断器和低压熔断器开关的专家,并专注于提供“应用导向”的解决方案。埃芬的工程、技术专家时刻与客户保持紧密联络,并提供第一手资料。

埃芬产品的卓越品质建立于研发人员的领先水平 and 零缺陷的生产过程管理之上。

全球客户对埃芬产品的选择,保证了客户系统集成应用的成功。

优质 – 埃芬制造

1922年成立于德国的莱茵河畔的埃芬,目前在德国拥有两个工厂。在匈牙利、波兰以及中国设有分支机构。全球市场销售源源不断将埃芬的技术拓展到全世界各地。

埃芬的质量管理系统已通过DIN ISO 9001 (EN29001) 国际标准认证,并拥有DIN ISO 14001国际环境管理系统认证。



1500V 熔断器和底座
1500V fuse-links and fuse-bases



Rated voltage/ 额定电压 :AC1500V
Utilization category/使用 类别 :TF
Breaking capacity/ 额定短路电流 :50KA 1200V

The fuse-links have PURE-SILVER fuse-elements and dual time-current characteristics i.e., time-delay characteristic in the overcurrent range and quick-acting under short circuit conditions. The use of PURE-SILVER fuse elements gives the NH-fuse links excellent aging resistance.

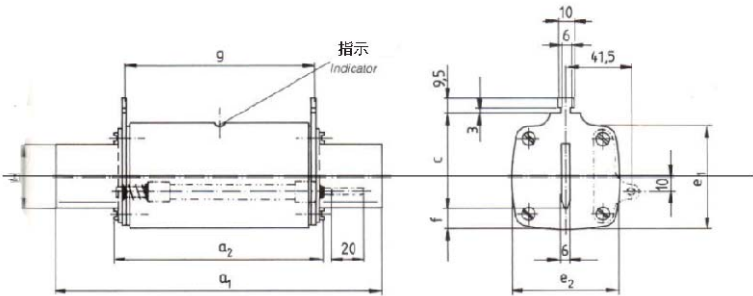
熔断器内部采用了纯银熔芯，并且具有“双重”保护特性：延时的过载保护和快速的短路保护。纯银的熔芯保证了熔断器极好的耐老化性能。

Version with striker: /带撞针：

Parallel to the fuse-link a spring-loaded striker pin is mounted after the melting of the NH fuse element the striker pin is released and operates a micro-switch on the NH-fuse bases.

平行连接到熔断器上的是有弹簧的撞针，熔断器熔断以后该撞针能够释放并且触发底座上的微动开关。

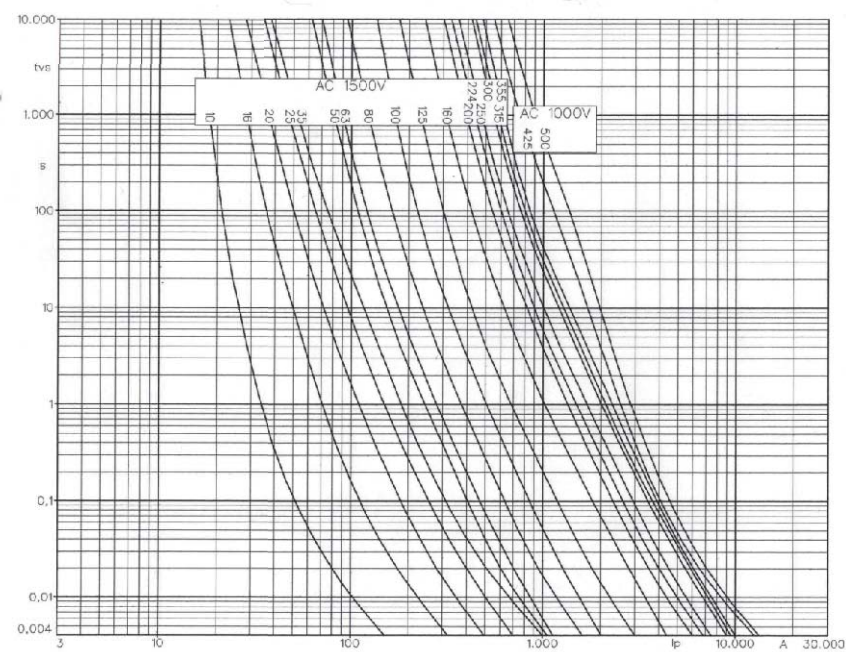
尺码/Size	a ₁	a ₂	b	c	e ₁	e ₂	f	g
3L	206	130	40	60	67	67	13,5	120



带撞针
with striker

尺寸 Size	电流 Amps	订购号 Order No.	包装 Pack
3L	10	35091.0010	1
	16	35091.0020	
	20	35091.0030	
	25	35091.0040	
	35	35091.0050	
	50	35091.0060	
	63	35091.0070	
	80	35091.0080	
	100	35091.0090	
	125	35091.0100	
	160	35091.0110	
	200	35091.0120	
	224	35091.0130	
	250	35091.0140	
	300	35091.0150	
	315	35091.0160	
	355	35091.0170	

Time-current characteristics/时间-电流特性曲线



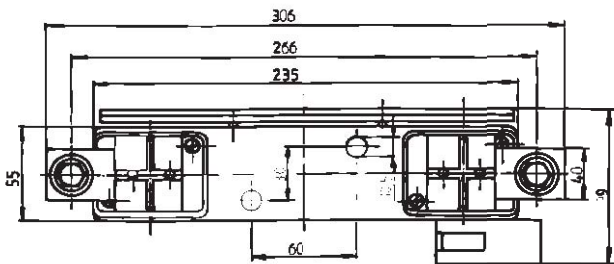
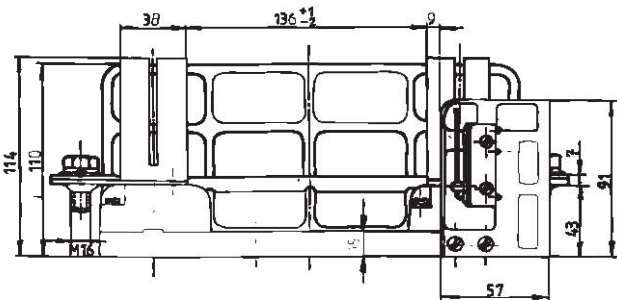
1500V fuse base/1500V 熔断器底座



Handle for NH fuse-links/插拔手柄

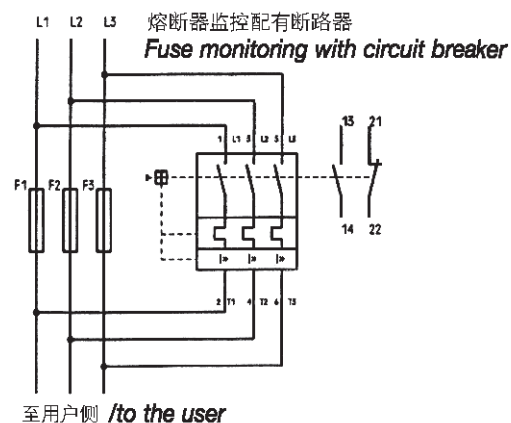


描述 Description	尺码 Size	电流 I_h Amps I_h	订货号 Order no.	型号 Description	重量 Weight
底座带有微动开关/1500V fuse-bases with micro switch					
螺母 M12 / Inserted screw nut M12	3L	425	33041.0010	NH-UNT 3L 1500 V Ms G6 G6	1,24
螺母 M16 / Inserted screw nut M16		630	33042.0010	NH-UNT 3L 1500 V Ms G8 G8	
插拔手柄 / Handle for NH fuse-links			36018.0010	NH-HANDGRIFF GR.3	0,30



Without controversy, Proved by new construction of EFEN fuse –switch series IN. Perfected technology and an appealing model show the best combination these units.

埃芬新型的IN系列熔断器开关毋庸置疑的证明了先进的技术和现代造型的完美结合。



The fuse switch with mechanical fuse monitoring (circuit breaker) has the following three advantages:

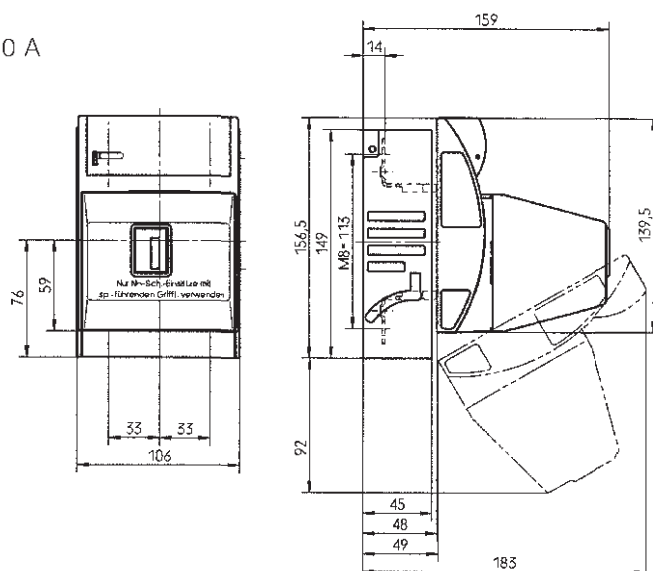
- ✓ 带有机械监控的该熔断器开关带有如下的3个优点:
- ✓ With SIEMENS SIRIUS 3 RV circuit breaker
使用西门子 SIRIUS 3 RV断路器
- ✓ Possibility for remote control of broken fuse-links
可以远程检测到熔断器熔断
- ✓ No separate auxiliary power supply required
不需要额外的电源

描述 Description		尺码 Size	电流 I_{th} Amps I_{th}	订货号 Order no.	型号 Description	力矩 机械 torque mech.	torque electr.	包装 Pack
螺栓连接 M8 Screw terminal M8		00	160	34060.0030	NH-Latr 00IN SN/SG U5U5	5 Nm	14 Nm	1

Note: 正常工作位置时，面板上微断开关处于I位置/Ready for operation: handle display "I"
熔断器熔断时，面板上微断开关处于0位置/Error message: handle display "0"

熔断器开关 尺码 00: 160 A

NH Fuse-Switches Size 00: 160 A



690V 熔断器
690V fuse-links



IN THE LINE OF POWER

Electrical characteristic/电气特性

The time-current characteristics are matched to the line and cable capacities. The lines to be protected can operate at optimal load since breaking in the overload range is slow and quick in case of a short circuit current.

熔断器的特性和电缆的特性完全匹配：允许适当时间的过载电流但短路电流动作时间短，所以使用熔断器能够得到最理想的保护。



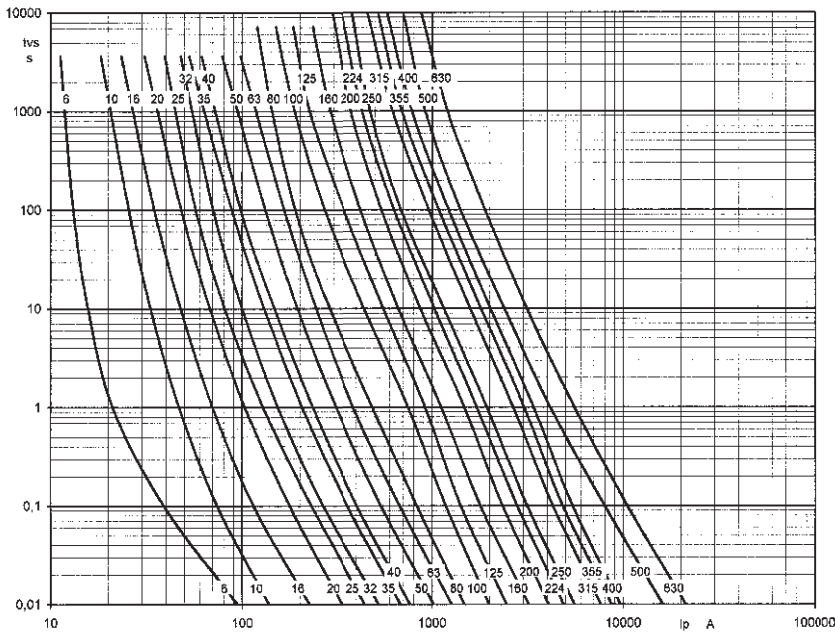
Rated voltage/额定电压: AC690V
Utilization Category/保护类型: gG
Breaking capacity/分断能力: 100KA

订购号
Order No.

尺寸 Size	电流 Amps	订购号 Order No.	包装 Pack
00	2	35027.0220	3
	4	35027.0230	
	6	35027.0010	
	10	35027.0020	
	16	35027.0030	
	20	35027.0040	
	25	35027.0050	
	32	35027.0060	
	35	35027.0070	
	40	35027.0080	
	50	35027.0090	
	63	35027.0100	
	80	35027.0110	
	100	35027.0120	

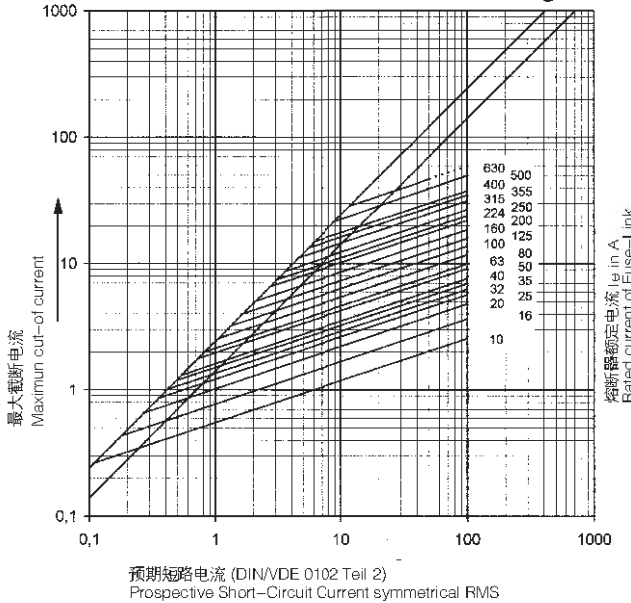
时间-电流特性曲线

Time-current characteristics



截断电流特性曲线

Cut-off current characteristics



德国总部 EFEN GmbH Schlangenbader Str.40 65344 Eltville, Germany
上海办事处: 上海市商城路800号 (世纪大道1090号) 斯米克大厦517室
北京办事处: 北京市朝阳区东三环北路3号 幸福大厦B座517室 (100027)
深圳办事处: 深圳市福田区金田路3038号现代国际大厦11层2单元
更多信息请浏览: www.efen.com.cn www.efen.com

Tel. +49(0)6129-46-0 Fax. +49(0)6129-46-222 Email: efen@efen.com
邮编: 200120 电话: 021-65758878 传真: 021-65758876
邮编: 100022 电话: 010-65684580 传真: 010-65684680
邮编: 518048 电话: 0755-82559246 传真: 0755-82559244