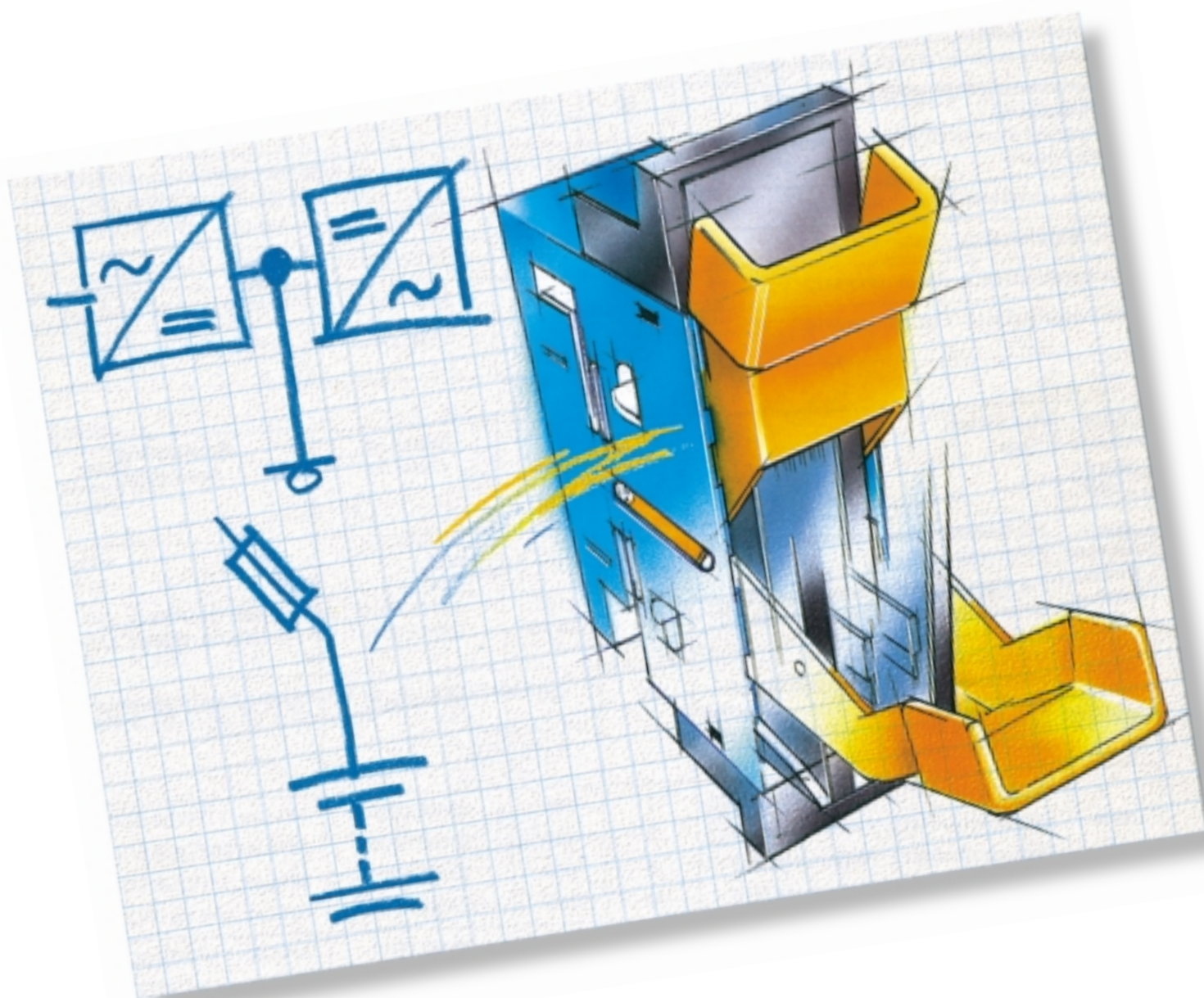


UPS 专用 EFEN 电池保护刀熔开关和熔断器
EFEN-battery fuse-switches and fuse-links for UPS



EFEN 埃 芬 有 限 公 司

Postfach 12 54 D-65332 Eltville Telefon(+49)(6129) 46-0 Fax 46222 E-Mail efen@efen.com

1. 使用范围

- ☐ 电池和 UPS 之间的规定接口
- ☐ 电池在维护保养时的隔断
- ☐ 发生短路时对电池的过热保护机械损伤保护

2. EFEN 针对电池保护的刀熔开关和熔断器的选择标准

- ☐ EFEN 公司出品的尺码从 00 至 4a 的单极式低压高分断能力熔断器隔离开关特别适用于不间断电池组的隔断及保护。传统的线路保护方法已不再适用于这样的使用场合，必须使用具有快速反应特性的熔断器。在选择正确开关规格的时候，要特别注意这类熔断器的不同温升特性。而 EFEN 公司所选用的材料，因其上佳的温度稳定性，从而使自己的产品既能保证设备最大限度地利用空间又能确保可靠的工作状态。
- ☐ 电池保护所要求的熔断器必须慎之又慎地加以选择。UPS 设备上所使用的熔断器，必须是耐老化的，因为它们无论如何不能在正常的负荷条件下，过早地发生开断现象。
- ☐ 熔断器特性必须根据 UPS 的功率参数以及所使用的电池来加以选择，以便保证对电池的全范围保护。对此，EFEN 公司的技术部门将为您全力提供技术上的支持。请将询问表填写后寄给我们，参阅第 7 页第 4 项)

1. Application

- ☐ *Defined point of intersection between battery and UPS.*
- ☐ *Isolation of the battery during service and maintenance work.*
- ☐ *Protection of the battery and connecting cables against overheating and mechanical damage in case of high faults.*

2. Specific requirements for EFEN-battery-switches and battery-fuses

- ☐ *EFEN-single-pole fuse-switches DIN-sizes 00 up to 4a are specifically suited to disconnect and safeguard backup batteries in UPS applications. These batteries can in most cases not be protected by general purpose fuselinks but require fast acting characteristics. The extra heat coming from these fuse-links has to be regarded when selecting suitable fuse-switch-disconnectors. EFEN has chosen high temperature and mechanically stable materials that allow for a very compact and durable design and reliable operation.*
- ☐ *Specific care must be taken when selecting appropriate fuse-links to protect the back-up battery. The fuse elements have to be resistant to aging in order to prevent premature operation under rated service conditions.*
- ☐ *The fuse-link characteristic has to be carefully selected according to the UPS and the battery rating in order to provide reliable full range protection of battery. Experienced application engineers in EFEN's electrical laboratory are prepared to work out proposals for individual applications and to assist the UPS-designer in this special subject.
(Please fill-in and return questionnaire, see page 7 point 4.)*



3. EFEN 电池保护刀熔开关和 UPS 电池保护熔断器的技术特征以及优点

- ☐ 快速熔断器提供最佳的短路保护
- ☐ 耐老化的纯银熔芯能防止过早的和无意的开断现象的出现
- ☐ 极低的功率损耗不会对塑料件产生热损伤
- ☐ 带两个灭弧室的并行接插点保证了最佳的直流开关特性
- ☐ 塑料件的高强耐热性能避免了过负荷时的热损伤
- ☐ 全部系列的电池开关和熔断器能为电池电压在 550V 以下的的所有 UPS 装置提供最佳的保护

3. Features and advantages of EFEN battery fuse-switches and fuse-links for UPS.

- ☐ Fast-acting fuse-links provide superior short-circuit protection.
- ☐ Fuse elements resistant to thermal and chemical ageing prevent premature operation.
- ☐ Low power dissipation prevents overheating of insulating components.
- ☐ Parallel switching including two arc quenching chambers gives excellent DC breaking capacity.
- ☐ High power acceptance of fuse-switches prevent overheating even under severe load conditions.
- ☐ Complete choice of fuse-switches and fuse-links available for tailor-made protection of major UPS up to 550 V batteryvoltage in the market.

UPS 用直流 550V 低压高分断能力熔断器 HRC battery fuse-links DC 550 V for UPS

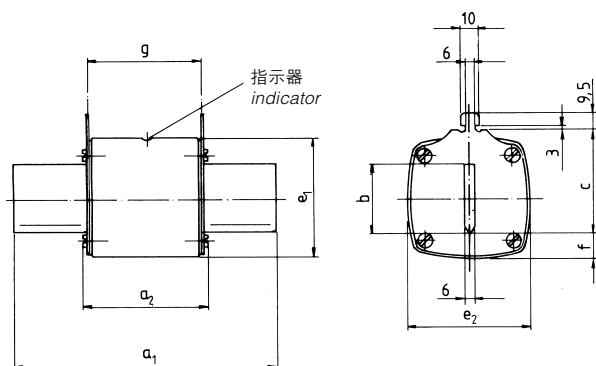
订购号 Order-no.	尺码 / 型号 Size/Type
35177.0010	00 E
35177.0030	00 G
35177.0040	00 H
35177.0050	00 A
35177.0060	00 B
35177.0070	00 C
35177.0080	00 D
35178.0010	1A*
35178.0020	1B*
35178.0030	1C*

订购号 Order-no.	尺码 / 型号 Size/Type
35179.0010	2 A
35179.0020	2 B
35180.0010	3 A
35180.0020	3 B
35180.0030	3 C
35183.0020	4 C
35183.0030	4 D
35183.0040	4 E

* 对应 NH 熔断器尺码 2

*acc.to dimension NH fuse size 2

尺寸 / Dimensions: DIN 43620/1



尺码

Size	a1	a2	b	c	e1	e2	f	g
00	78,5	53	15	35	40	28	12,5	47
1	150	71	25	48	45	45	10	65
2	150	72	30	48	59	59	14,5	65
3	150	72	40	60	70	70	15	65
4a	200	98	50	85	110	102	28	87

低压高分断能力熔断器负荷隔离开关
AC690V/DC550V
单极, 尺码 00-4a
HRC fuse-switches
AC 690 VDC 550 V
single-pole, size 00-4a

连接形式 Type	尺码 Size	电流 A	订购号 Order-no.	品名 Description
整体直接安装: / For baseplate mounting 平面连接 M8 / Flat terminal M8	00	160	33107.0010	NH-Latr.001P SC G4G4
通用连接 U3(带压紧块) Multiple use terminal U3(with pressure plate)	00	125/160*	33108.0010	NH-Latr.001P SC U3U3
通用连接 U4(带压紧块和三角夹块) Multiple use terminal U4(Pressure plate with contact prism)	00	160	33109.0010	NH-Latr.001P SU U4U4
平面连接 M10 / Flat terminal M10	1	250	33095.0010	NH-Latr.1 1P SCL5L5
平面连接 M10 / Flat terminal M10	2	400	33096.0010	NH-Latr.2 1P SCL5L5
平面连接 M12 / Flat terminal M12	3	630	33097.0010	NH-Latr.3 1P SCL6L6
平面连接 M16 / Flat terminal M16	4a	1250 1600**	33047.0010	NH-Latr./Unt.4a 1P L8L8

母排 分支 Branch cable	连接形式 Type	尺码 Size	A	订购号 Order-no.	品名 Description
在安装时 再确认顶部 或底部 出线 top/ bottom choice when mounting	母线式安装 For busbar contracting				
	平面连接 M8 / Flat terminal M8	00	160	33111.0010	NH-Latr.00 1P SB SC G4
	平面连接 U3(带压紧块) Multiple use terminal U3 (with pressure plate)	00	125/160*	33112.0010	NH-Latr.00 1P SB SC U3
	平面连接 U4(带压紧块和三角夹块) Multiple use terminal U4 (Pressure plate with contact prism)	00	160	33113.0010	NH-Latr.00 1P SB SC U4
顶部出线 top	平面连接 M10 / Flat terminal M10	1	250	33098.0020	NH-Latr.1 1PO SB SCL5
	平面连接 M10 / Flat terminal M10	2	400	33099.0020	NH-Latr.2 1PO SB SCL5
	平面连接 M12 / Flat terminal M12	3	630	33100.0020	NH-Latr.3 1PO SB SCL6
	平面连接 M16 / Flat terminal M16	4a	1250	33048.0020	NH-Latr./Unt.4a 1PO SBL8
底部出线 bottom	平面连接 M10 / Flat terminal M10	1	250	33098.0010	NH-Latr.1 1PU SB SCL5
	平面连接 M10 / Flat terminal M10	2	400	33099.0010	NH-Latr.2 1PU SB SCL5
	平面连接 M12 / Flat terminal M12	3	630	33100.0010	NH-Latr.3 1PU SB SCL6
	平面连接 M16 / Flat terminal M16	4a	1250 1600**	33048.0010	NH-Latr./Unt.4a 1PU SBL8

* 在使用编号 83349.0100 的接头时: 电流允许至 160A / When using connectors no.83349.0100 up to 160A allowable.

** 1600A: 根据客户要求 / on demand

附件请参阅第 8 页 / Accessories see page 8

其它连接形式根据要求定制。 / Other types on demand.

寄信人:

公司:

EFEN GmbH
- Anwendungstechnik -
Postfach 12 54

D-65332 Eltville

日期:

Date:

联络人:

Contact:

传真:

Fax:

EFEN 电池保护用刀熔开关和熔断器
EFEN-battery-switches and-battery-fuse-links

尊敬的女士和先生:

Dear Sirs,

我们对使用 EFEN 电池开关和电池熔断器有浓厚兴趣。我们已详细填写反面的询问表, 请你们根据填写的技术数据为我们提供最佳的电池开关和电池熔断器。

We are interested in using EFEN-battery-switches and -battery-fuses. Enclosed questionnaire has been completed thoroughly. May we ask you to quote the fuses and switches best suited for our application to the given data.

我们也有兴趣使用 EFEN 公司的其它产品。

请寄给我们以下产品的介绍资料:

We also intersted in using other EFEN-products.

please send us information about the following products:

- | | |
|--|---|
| ☐ Liste „N“: | 低压高分断能力熔断器 / <i>NH fuse-links</i> |
| ☐ Liste „NT“: | 低压高分断能力刀熔开关 / <i>NH fuse-switches horizontal design</i> |
| ☐ Liste „NSL/NL“: | 直列式低压高分断能力刀熔开关, 直列式低压高分断能力熔断器配电排
<i>Lastschaltleisten, NH fuse-switches vertical design, NH fuse-rails</i> |
| ☐ Liste „NZ“: | 低压高分断能力刀熔开关附件 / <i>NH accessories</i> |
| ☐ Liste „HH“: | 高压高分断能力熔断器 / <i>High voltage HRC fuse-links</i> |
| ☐ Liste „NA“: | 低压避雷器 / <i>Low voltage lightning arresters</i> |

谨致友好的问候!

Yours faithfully

4. UPS 设备用 EFEN 电池保护刀熔开关和熔断器询问表

4.Questionnaire EFEN-battery-switches and -battery-fuse-links for UPS applications

公司:

Company:

联络人:

Contact person:

技术反馈时的回电号码:

Phone no. for technical information:

1. UPS 装置 *UPS-system*

1.1 生产厂:
Manufacturer:

1.2 型号:
Type:

1.3 输出功率:
Output power:

1.4 功率因素:
Power factor:

1.5 效率:
Efficiency:

1.6 中间电压:
DC circuit voltage:

1.7 过负荷能力:
Temporary overload:

2. 电池 *Battery*

2.1 生产厂:
Manufacturer:

2.2 型号:
Type:

2.3 额定电压:
Nominal voltage:

2.4 容量:
Nominal capacity:

2.5 使用时间:
Back-up time:

2.6 放电电压:(使用时间结束时)
Final discharge voltage(after back-up time):

2.7 过负荷能力:
Acceptable overload:

日期:

Place, date:

填表人:

Company by:

(签名)

(Signature)

单极低压高分断能力刀熔开关附件，尺码 00-3 / Accessories for 1-pole NH fuse-switches size 00-3

尺码 Size	附件名称 Type	订购号 Order-no.
00	辅助开关 1 常开或 1 常闭 <i>Auxiliary switch 1 b or 1 a</i>	36107.0010
	接触保护 / 参数标牌 <i>Contact shrouds</i>	31122.0100
	两台开关同时操作作用的连接板 <i>Connection frame for simultaneous operation of 2 units</i>	31187.0100
	铭牌，可卸下 <i>Nameplate, provided with thread</i>	36040.0010
1,2+3	接线端子罩盖 / Terminal box cover	31157.0100
	两台开关同时操作作用的联连组板 (1 组 =3 件) <i>Connection parts for simultaneous operation of 2 unites (1 set=3 pcs.)</i>	81251.0100
	根据要求可提供带微动开关的结构，用于指示开关的位置 <i>Version with micro switch for position indication on demand</i>	
1 2 3	带熔断器监视的盖板 / Lid with fuse monitoring unit	83359.0100 83360.0100 83361.0100
1,2+3	撞针 Striker	36031.0010