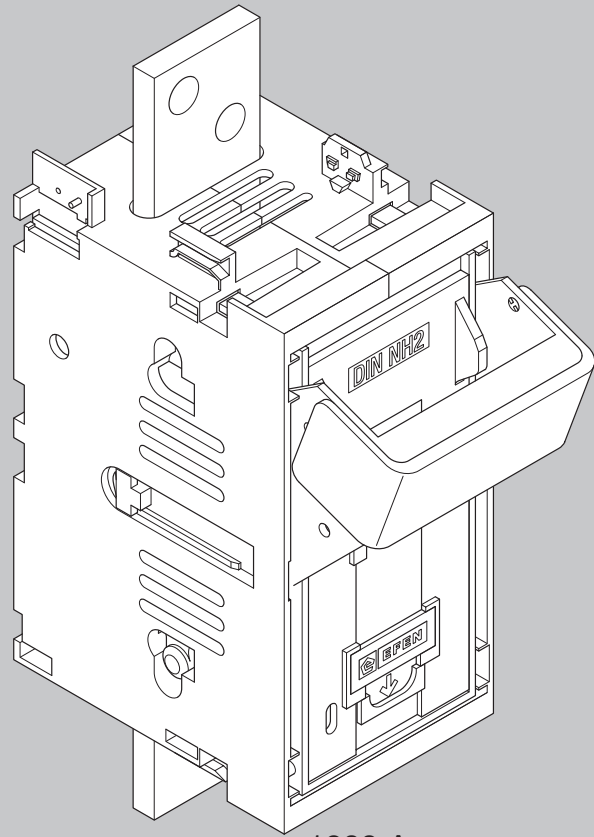


630 A



1200 A  
TPS

## Technologies for confined Spaces

**NH Fuse-Switch, 1-pole,  
for UPS systems**



**EFEN NH Battery-Fuse-Link**



**TPS disconnecter for 80 V DC**



**TPS Fault Terminator Fuse-Link**



# Content

Products for DC Application up to 550 V and 750 V	<b>386</b>
Products for DC Application up to 80 V - series TPS	<b>388</b>
Technical data	<b>see page 390</b>



## Products for DC Application up to 80 V

Particularly constructed for power distributions up to 80 V the EFEN-TPS Fuse-Switches offer clear advantages, for example to protect DC distributions in telecommunication power supplies.

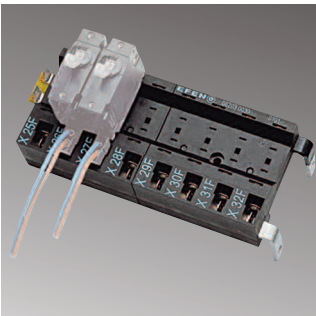
Their special DC Fuse-Links have a very high energy density which results in a compact design. This saves space and cost when installing power distribution systems.

## Products for DC Application up to 550 V

The 1-pole Load-Break-Switches are specifically designed for an operating voltage of 550 V DC. These are used to protect batteries and battery-supplied circuits.

A wide range of accessories are available.

Supply bus modul



NH Fuse-Base with microswitch  
up to 750 V DC



## Products for DC Application up to 550 V

 For more information  
see page 390


35178-0020

**NH Battery-Fuse-Link 550 V DC**

- Clear identification to the protection against mix-up

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
NH-BATTERIESICHERUNG 00 E	00		<b>35177-0010</b>	3	netto	0,010	0,004	28,60
NH-BATTERIESICHERUNG 00 G	00		<b>35177-0030</b>	3	netto	0,010	0,004	28,60
NH-BATTERIESICHERUNG 00 H	00		<b>35177-0040</b>	3	netto	0,010	0,004	28,60
NH-BATTERIESICHERUNG 00 A	00		<b>35177-0050</b>	3	netto	0,010	0,004	26,40
NH-BATTERIESICHERUNG 00 B	00		<b>35177-0060</b>	3	netto	0,010	0,004	26,40
NH-BATTERIESICHERUNG 00 C	00		<b>35177-0070</b>	3	netto	0,018	0,004	26,40
NH-BATTERIESICHERUNG 00 D	00		<b>35177-0080</b>	3	netto	0,013	0,004	28,65
NH-BATTERIESICHERUNG 1 A	2C		<b>35178-0010</b>	3	netto	0,019	0,010	57,30
NH-BATTERIESICHERUNG 1 B	2C		<b>35178-0020</b>	3	netto	0,025	0,010	57,30
NH-BATTERIESICHERUNG 1 C	2C		<b>35178-0030</b>	3	netto	0,047	0,010	57,30
NH-BATTERIESICHERUNG 2 A	2		<b>35179-0010</b>	3	netto	0,038	0,019	72,70
NH-BATTERIESICHERUNG 2 B	2		<b>35179-0020</b>	3	netto	0,055	0,019	88,00
NH-BATTERIESICHERUNG 3 A	3		<b>35180-0010</b>	1	netto	0,074	0,026	115,00
NH-BATTERIESICHERUNG 3 B	3		<b>35180-0020</b>	1	netto	0,085	0,026	123,00
NH-BATTERIESICHERUNG 3 C	3		<b>35180-0030</b>	1	netto	0,107	0,026	130,00
NH-BATTERIESICHERUNG 4 C	4a		<b>35183-0020</b>	1	netto	0,020	0,080	236,00
NH-BATTERIESICHERUNG 4 D	4a		<b>35183-0030</b>	1	netto	0,020	0,080	242,00
NH-BATTERIESICHERUNG 4 E	4a		<b>35183-0040</b>	1	netto	0,020	0,080	248,00



33107-0010

**NH Fuse-Switch, 1-pole switching for baseplate mounting**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Flat terminal M8	00	160	<b>33107-0010</b>	2	NT 6	0,003	0,005	65,25
Multiple use terminal U3 with pressure plates 2,5 - 25 mm <sup>2</sup>	00	125	<b>33108-0010</b>	2	NT 6	0,003	0,005	66,30
Multiple use terminal U4 with pressure plates and prism 25 - 70 mm <sup>2</sup>	00	160	<b>33109-0010</b>	2	NT 6	0,003	0,005	69,70
Flat terminal M10	1	250	<b>33095-0010</b>	2	NT 6	0,016	0,077	163,60
Flat terminal M10	2	400	<b>33096-0010</b>	2	NT 6	0,016	0,077	163,60
Flat terminal M12	3	630	<b>33097-0010</b>	2	NT 6	0,016	0,097	171,20
Flat terminal M16	4a	1600	<b>33047-0010</b>	1	NT 6	0,036	0,189	323,00



33100-0010

**NH Fuse-Switch, 1-pole switching for busbar mounting**

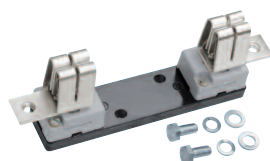
Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Flat terminal M 8, variable selection of cabel terminal on either top or bottom	00	160	<b>33111-0010</b>	2	NT 6	0,004	0,005	65,25
Multiple use terminal U3 with pressure plates 2,5 - 25 mm <sup>2</sup> , variable selection of cabel terminal on either top or bottomn	00	125	<b>33112-0010</b>	2	NT 6	0,004	0,005	66,30
Multiple use terminal U4 with pressure plates and prism 25 - 70 mm <sup>2</sup> , variable selection of cabel terminal on either top or bottom	00	160	<b>33113-0010</b>	2	NT 6	0,004	0,005	69,70
Flat terminal M10, terminal bottom	1	250	<b>33098-0010</b>	2	NT 6	0,016	0,077	166,90
Flat terminal M10, terminal top	1	250	<b>33098-0020</b>	2	NT 6	0,016	0,077	166,90
Flat terminal M10, terminal bottom	2	400	<b>33099-0010</b>	2	NT 6	0,016	0,077	166,90
Flat terminal M10, terminal top	2	400	<b>33099-0020</b>	2	NT 6	0,016	0,077	166,90
Flat terminal M12, terminal bottom	3	630	<b>33100-0010</b>	2	NT 6	0,016	0,097	178,80
Flat terminal M12, terminal top	3	630	<b>33100-0020</b>	2	NT 6	0,016	0,097	175,80
Flat terminal M16, terminal bottom	4a	1250	<b>33048-0010</b>	1	NT 6	0,036	0,205	327,00
Flat terminal M16, terminal top	4a	1250	<b>33048-0020</b>	1	NT 6	0,036	0,205	327,00
Flat terminal M16, terminal bottom	4a	1600	<b>33048-0030</b>	1	NT 6	0,036	0,205	384,00
Flat terminal M16, terminal top	4a	1600	<b>33048-0040</b>	1	NT 6	0,036	0,205	384,00

For more information  
see page **390**


31122-0100

**Accessories for NH-Fuse-Switches, 1-pole switching, size 00- 4a**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Striker (Elegard)			<b>36031-0010</b>	12	NZ 2			17,80
Nameplate 45 x 17 mm	00-3		<b>36040-0010</b>	1	NSL 5			2,45
Carrier for identification label	00N		<b>31122-0100</b>	1	NSL 5			1,50
Terminal cover	1 - 2 - 3		<b>31157-0100</b>	1	NSL 5			8,90
Twinning set for parallel operation	1 - 2 - 3		<b>81251-0100</b>	3	NSL 5			7,80
Lid with fuse-monitoring	1		<b>83359-0100</b>	1	NSL 5			61,90
Verbindungsblende zur gleichzeitigen Betätigung von 2 Einzelgeräten	00N		<b>31187-0100</b>	1	NSL 5			8,00
Lid with fuse-monitoring	2		<b>83360-0100</b>	1	NSL 5			61,90
Lid with fuse-monitoring	3		<b>83361-0100</b>	1	NSL 5			61,90
Micro switch for position indicating	00N		<b>36107-0010</b>	1	NSL 5			5,35



33039-0010

**NH Fuse-Bases 1500 V AC / 750 V DC for baseplate mounting**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Inserted screw nut M12, without micro switch	3L	425	<b>33039-0010</b>	1	NU 1	0,024	0,066	109,40
Inserted screw nut M16, without micro switch	3L	630	<b>33040-0010</b>	1	NU 1	0,028	0,102	124,90



33041-0010

**NH Fuse-Bases 1500 V AC / 750 V DC for baseplate mounting with microswitch**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Inserted screw nut M12, with micro switch	3L	425	<b>33041-0010</b>	1	NU 1	0,024	0,066	170,00
Inserted screw nut M16, with micro switch	3L	630	<b>33042-0010</b>	1	NU 1	0,028	0,102	212,00

**Accessorie for NH Fuse-Bases size 3L**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Barrier for mounting with screws 2 x M4x28 (screws are not included)	3L		<b>30219-0100</b>	1	NU 1			on demand

## Products for DC Application up to 80 V - series TPS

 For more information  
see page **390**


35300-0600

**TPS Fault Terminator Fuse-Links**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
TPS FAULT TERMINATOR 60 A	00	60	<b>35300-0060</b>	3	N 1	0,003		14,35
TPS FAULT TERMINATOR 80 A	00	80	<b>35300-0080</b>	3	N 1	0,003		15,45
TPS FAULT TERMINATOR 100 A	00	100	<b>35300-0100</b>	3	N 1	0,004		19,80
TPS FAULT TERMINATOR 150 A	00	150	<b>35300-0150</b>	3	N 1	0,004		25,40
TPS FAULT TERMINATOR 200 A	00	200	<b>35300-0200</b>	3	N 1	0,005		30,85
TPS FAULT TERMINATOR 250 A	00	250	<b>35300-0250</b>	3	N 1	0,007		35,20
TPS FAULT TERMINATOR 300 A	00	300	<b>35300-0300</b>	3	N 1	0,007		38,50
TPS FAULT TERMINATOR 400 A	00	400	<b>35300-0400</b>	3	N 1	0,013		40,75
TPS FAULT TERMINATOR 500 A	00	500	<b>35300-0500</b>	3	N 1	0,013		45,00
TPS FAULT TERMINATOR 600 A	00	600	<b>35300-0600</b>	3	N 1	0,018		49,50
TPS FAULT TERMINATOR 800 A	2	800	<b>35330-0800</b>	1	N 1	0,044	0,047	119,00
TPS FAULT TERMINATOR 1000 A	2	1000	<b>35330-1000</b>	1	N 1	0,064	0,047	123,00
TPS FAULT TERMINATOR 1200 A	2	1200	<b>35330-1200</b>	1	N 1	0,074	0,047	126,00
TPS FAULT TERMINATOR 1600 A	2	1600	<b>35330-1600</b>	1	N 1	0,084	0,047	142,00



35301-0100

**TPS Fault Terminator Fuse-Links with striker**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
TPS FAULT TERMINATOR 60 A SM	00	60	<b>35301-0060</b>	3	N 1	0,003		22,05
TPS FAULT TERMINATOR 80 A SM	00	80	<b>35301-0080</b>	3	N 1	0,003		24,30
TPS FAULT TERMINATOR 100 A SM	00	100	<b>35301-0100</b>	3	N 1	0,004		27,60
TPS FAULT TERMINATOR 150 A SM	00	150	<b>35301-0150</b>	3	N 1	0,004		33,10
TPS FAULT TERMINATOR 200 A SM	00	200	<b>35301-0200</b>	3	N 1	0,005		39,70
TPS FAULT TERMINATOR 250 A SM	00	250	<b>35301-0250</b>	3	N 1	0,007		42,95
TPS FAULT TERMINATOR 300 A SM	00	300	<b>35301-0300</b>	3	N 1	0,007		46,25
TPS FAULT TERMINATOR 400 A SM	00	400	<b>35301-0400</b>	3	N 1	0,013		49,60
TPS FAULT TERMINATOR 500 A SM	00	500	<b>35301-0500</b>	3	N 1	0,013		52,90
TPS FAULT TERMINATOR 600 A SM	00	600	<b>35301-0600</b>	3	N 1	0,018		57,30



33107-0250

**TPS Fuse-Switches for baseplate mounting**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Thread M8	00	250	<b>33107-0250</b>	2	NT 6	0,003	0,007	69,40
Flat terminal M12	00	600	<b>33107-0600</b>	2	NT 6	0,012	0,042	84,35
Flat terminal M16	2	1200	<b>33460-0000</b>	1	NT 6	0,012	0,067	309,00
Flat terminal 2 x M12	2	1600	<b>33560-0000</b>	1	NT 6	0,019	0,106	374,00



33107-0602

**TPS Fuse-Switches for baseplate mounting with fuse monitoring**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Thread M8	00	250	<b>33107-0252</b>	2	NT 6	0,003	0,007	72,65
Flat terminal M12	00	600	<b>33107-0602</b>	2	NT 6	0,012	0,042	113,15
Flat terminal M16	2	1200	<b>33460-0010</b>	1	NT 6	0,012	0,067	375,00
Flat terminal 2 x M12	2	1600	<b>33560-0010</b>	1	NT 6	0,019	0,106	438,00



33111-0250

**TPS Fuse-Switches for busbar mounting**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Thread M8	00	250	<b>33111-0250</b>	2	NT 6	0,003	0,008	69,40
Flat terminal M12	00	600	<b>33111-0600</b>	2	NT 6	0,012	0,042	84,35
Flat terminal M16	2	1200	<b>33470-0000</b>	2	NT 6	0,012	0,070	320,00

## Products for DC Application up to 80 V - series TPS

 For more information  
see page **390**


33111-0252

**TPS Fuse-Switches for busbar mounting with Fuse monitoring**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Thread M8	00	250	<b>33111-0252</b>	2	NT 6	0,003	0,008	72,65
Flat terminal M12	00	600	<b>33111-0602</b>	2	NT 6	0,012	0,042	142,35
Flat terminal M16	2	1200	<b>33470-0010</b>	1	NT 6			on demand
Flat terminal 2x M12	2	1600	<b>33570-0010</b>	1	NT 6			on demand



33120-0010

**NH Fuse-Base**

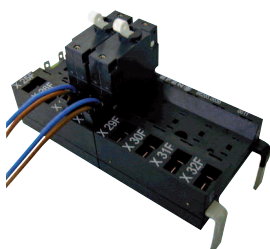
Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Flat terminal M8, baseplate mounting, for TPS Fault Terminator Fuse-Links up to 250 A	00	160	<b>33003-0020</b>	10	NU 1			16,50
Flat terminal M8, for busbar mounting, for TPS Fault Terminator Fuse-Links up to 250 A	00	160	<b>33120-0020</b>					
Flat terminal M8, for supporting rails, for TPS Fault Terminator Fuse-Links up to 250 A	00	160	<b>33120-0070</b>	10	NU 1	0,002	0,006	12,15



36571-0010

**Accessories TPS**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Micro switch for position indicating	00		<b>36107-0010</b>	1	NSL 5			5,35
Contact for electronic fuse monitoring: Tabs for flat connectors 6,3 mm	00		<b>36325-0010</b>	10	netto			4,50
Contact hooks for busbar mounting without drilling, TPS up to 250 A	00		<b>36571-0010</b>	1	NU 1			1,60
Contact cover with micro switch for fuse monitoring on 33120...	00		<b>36889-0010</b>	1	NU 1			12,70
Contact hook for busbar without drilling	00		<b>36890-0010</b>	1	NU 1			15,00
Incoming terminal shroud	00		<b>36896-0010</b>	1	netto			55,00
Solid link for TPS up to 600 A	00		<b>36917-0010</b>	1	netto			on demand
Twinning set for parallel operation of TPS Insulators	00N		<b>31187-0100</b>	1	NSL 5			8,00
Terminal cover 140 mm	1-2-3		<b>31319-0200</b>	1	NSL 5			9,60
Micro switch for position indicating	2		<b>36887-0010</b>	1	netto			5,00
Solid link for TPS up to 1600 A	2		<b>36918-0010</b>	1	netto			on demand
Twinning set for parallel operation	2		<b>45071-0100</b>	1	netto			13,45



66200-0030

**Supply Bus modules**

Description	Size	Amps	Order-No.	PU	PG	Sur. Ag	Sur. Cu	Price €/pc.
Terminals left	4		<b>66200-0030</b>	1				on demand
Terminals right	4		<b>66201-0030</b>	1				on demand
Terminals left	8		<b>66202-0030</b>	1				on demand
Terminals right	8		<b>66203-0030</b>	1				on demand
Terminals left	12		<b>66204-0030</b>	1				on demand
Terminals right	12		<b>66205-0030</b>	1				on demand
Terminals left	16		<b>66206-0030</b>	1				on demand
Terminals right	16		<b>66207-0030</b>	1				on demand



**Questionnaire EFEN-Battery-Switches and -Battery-Fuse-Links for UPS applications**

Company:

Contact person:

Phone no. for technical information:

**1. UPS-system**

1.1 Manufacturer:

1.2 Type:

1.3 Output power:

1.4 Power factor:

1.5 Efficiency:

1.6 DC circuit voltage:

1.7 Temporary overload:

**2. Battery**

2.1 Manufacturer:

2.2 Type:

2.3 Nominal voltage:

2.4 Nominal capacity:

2.5 Back-up time:

2.6 Final discharge voltage  
(after back-up time):

2.7 Acceptable overload:

Place, date:

Completed by:

(Signature)

**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 operating.
- 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 characteristics has to be carefully selected according to the UPS and the battery rating in order to provide reliable full range protection of the 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 left).*

**3. Features and advantages of EFEN Battery Fuse-Switches and Fuse-Links for UPS**

- EFEN Battery-Fuse-Links provide superior short-circuit protection.
- Silver fuse elements resistant to 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 battery voltage in the market.

**HRC Battery-Fuse-Links DC 550 V for uninterrupted power supply (UPS)**

Description	Size	Type	Order no.	Description	Pack	Weight in kg
HRC Battery-Fuse-Links	00	00 E	35177-0010	NH-BATTERIESICHERUNG 00 E	3	0,148
HRC Battery-Fuse-Links	00	00 G	35177-0030	NH-BATTERIESICHERUNG 00 G	3	0,148
HRC Battery-Fuse-Links	00	00 H	35177-0040	NH-BATTERIESICHERUNG 00 H	3	0,148
HRC Battery-Fuse-Links	00	00 A	35177-0050	NH-BATTERIESICHERUNG 00 A	3	0,148
HRC Battery-Fuse-Links	00	00 B	35177-0060	NH-BATTERIESICHERUNG 00 B	3	0,148
HRC Battery-Fuse-Links	00	00 C	35177-0070	NH-BATTERIESICHERUNG 00 C	3	0,148
HRC Battery-Fuse-Links	00	00 D	35177-0080	NH-BATTERIESICHERUNG 00 D	3	0,148
HRC Battery-Fuse-Links	2C	1 A	35178-0010	NH-BATTERIESICHERUNG 1 A	3	0,398
HRC Battery-Fuse-Links	2C	1 B	35178-0020	NH-BATTERIESICHERUNG 1 B	3	0,398
HRC Battery-Fuse-Links	2C	1 C	35178-0030	NH-BATTERIESICHERUNG 1 C	3	0,398
HRC Battery-Fuse-Links	2	2 A	35179-0010	NH-BATTERIESICHERUNG 2 A	3	0,636
HRC Battery-Fuse-Links	2	2 B	35179-0020	NH-BATTERIESICHERUNG 2 B	3	0,636
HRC Battery-Fuse-Links	3	3 A	35180-0010	NH-BATTERIESICHERUNG 3 A	1	0,915
HRC Battery-Fuse-Links	3	3 B	35180-0020	NH-BATTERIESICHERUNG 3 B	1	0,915
HRC Battery-Fuse-Links	3	3 C	35180-0030	NH-BATTERIESICHERUNG 3 C	1	0,915
HRC Battery-Fuse-Links	4a	4 C	35183-0020	NH-BATTERIESICHERUNG 4 C	1	2,589
HRC Battery-Fuse-Links	4a	4 D	35183-0030	NH-BATTERIESICHERUNG 4 D	1	2,589
HRC Battery-Fuse-Links	4a	4 E	35183-0040	NH-BATTERIESICHERUNG 4 E	1	2,589

**NH Fuse-Switches, 1-pole switching for baseplate mounting**

Description	Size	Order no.	Description	Pack	Weight in kg
Flat terminal M8	00	33107-0010	NH-LATR 00 1P SC G4G4	2	0,359
Multiple use terminal U3 with Pressure plate for 2,5 - 25 mm <sup>2</sup>	00	33108-0010	NH-LATR 00 1P SC U3U3	2	0,35
Multiple use terminal U4 with Pressure plate and contact prism for 25 - 70 mm <sup>2</sup>	00	33109-0010	NH-LATR 00 1P SC U4U4	2	0,384
Flat terminal M10	1	33095-0010	NH-LATR 1 1P SC L5L5	2	2,028
Flat terminal M10	2	33096-0010	NH-LATR 2 1P SC L5L5	2	2,028
Flat terminal M12	3	33097-0010	NH-LATR 3 1P SC L6L6	2	2,221
Flat terminal M16	4a	33047-0010	NH-LATR/UNT 4A 1P L8L8	1	4,136

**NH Fuse-Switches, 1-pole switching for busbar mounting**

Description	Size	Order no.	Description	Pack	Weight in kg
Flat terminal M8, branch top/bottom free selection	00	33111-0010	NH-LATR 00 1P SB SC G4	2	0,375
Multiple use terminal U3 with Pressure plate for 2,5 - 25 mm <sup>2</sup> , branch top/bottom free selection	00	33112-0010	NH-LATR 00 1P SB SC U3	2	0,37
Multiple use terminal U4 with Pressure plate and contact prism for 25 - 70 mm <sup>2</sup> , branch top/bottom free selection	00	33113-0010	NH-LATR 00 1P SB SC U4	2	0,382
Flat terminal M10, branch top	1	33098-0020	NH-LATR 1 1PO SB SC L5	2	1,676
Flat terminal M10, branch bottom	1	33098-0010	NH-LATR 1 1PU SB SC L5	2	1,681
Flat terminal M10, branch top	2	33099-0020	NH-LATR 2 1PO SB SC L5	2	1,687
Flat terminal M10, branch bottom	2	33099-0010	NH-LATR 2 1PU SB SC L5	2	1,7
Flat terminal M12, branch top	3	33100-0020	NH-LATR 3 1PO SB SC L6	2	1,794
Flat terminal M12, branch bottom	3	33100-0010	NH-LATR 3 1PU SB SC L6	2	1,803
Flat terminal M16, branch top	4a	33048-0020	NH-LATR/UNT 4A 1PO SB L8	1	4,098
Flat terminal M16, branch bottom	4a	33048-0010	NH-LATR/UNT 4A 1PU SB L8	1	4,098



\* Size 2 (compact version 2/1)

Size	a <sub>1</sub>	a <sub>2</sub>	b	c	e <sub>1</sub>	e <sub>2</sub>	f	g
00	78,5	53	15	35	40	28	12,5	47
2C	150	71	20,2	48	50	50	10	65
2	150	71	26,2	48	58	58	14,5	65
3	150	72	40	60	70	70	15	65
4a	200	98	50	85	110	102	28	87

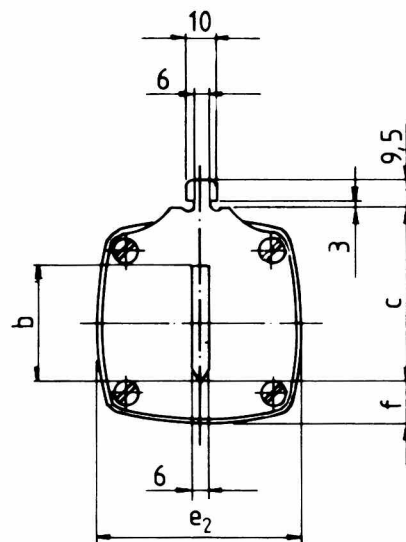
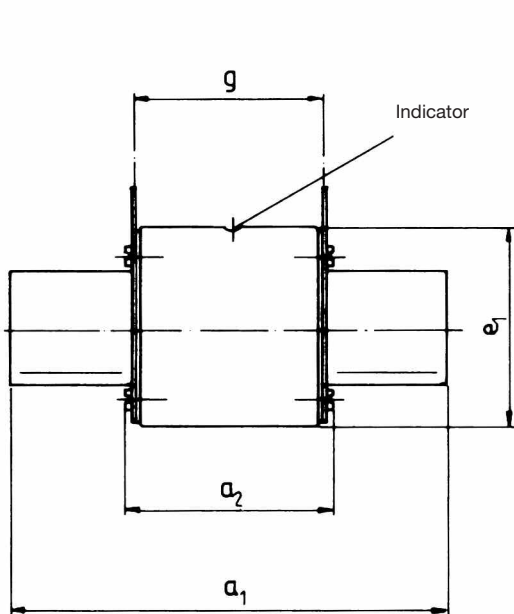
**Fuse-Switches and Fuse-Links**  
**VDE 0660 T107**

**System**

For uninterruptible power supplies, EFEN offers a complete range of single-pole compact load-break switches which are specifically designed for 550 Volt DC operating voltage. The Load Break Switches are used to protect batteries and battery-supplied circuits, they define the interface and disconnect the system e.g. for service purposes. Fuse-monitoring devices, signaling devices and a multitude of accessories are available.

**Support**

The short-circuit disconnection of a battery system must be precisely tuned to its capacity and service concept. Battery-Fuses selected in coordination with EFEN ensure reliable protection.



Dimensions  
DIN 43620/1

Products for DC Applications  
 up to 550 V

## Technical data

Technical data for single-pole NH Fuse-Switch acc. to VDE 0660 T107/IEC/EN 60 947/3

For LV Fuse-Links acc. to DIN 43620/11	Size	00	1	2	3	4a
Rated operational current $I_e$	A	160	250	400	630	1250 1600 <sup>2)</sup>
Conventional free air thermal current $I_{th}$	A	160	250	400	630	1250 1600 <sup>2)</sup>
Rated operational voltage $U_e$	V	690	690	690	690	690
Rated insulation voltage $U_i$	V	800	800	800	800	800
Rated impuls withstand voltage $U_{imp}$	kV	8	8	8	8	8
Rated conditional short circuit current (when protected by Fuse-Links)	kA	50	50	50	50	50
Weight without Fuse-Links	kg	0,38	2,4	2,4	2,5	4,2
Utilization category IEC/EN 60 947/3	$U_e=400$ V $U_e=400$ V $U_e=400$ V)	AC-22 B AC-21 B DC-21 B	AC-22 B AC-21 B DC-21 B	AC-22 B AC-21 B DC-21 B	AC-22 B AC-21 B DC-21 B	AC-22 B AC-21 B DC-21 B
Permissible ambient air temperature	°C	-40 to +55				

## Tightening torques for terminal and busbar mounting

Type of terminal	00	1	2	3	4a
Flat terminal	14 Nm	32 Nm	32 Nm	32 Nm	56 Nm
Multiple use terminal U3 with Pressure Plate	4				
Multiple use terminal U4 with Pressure Plate and contact prism	4				

**NH Fuse-Switches, 1-pole switching for baseplate mounting**

Description	Size	Amps I <sub>n</sub>	Order no.	Description	Pack	Weight in kg
Flat terminal M8	00	160	<b>33107-0010</b>	NH-Latr. 00 1P SC G4G4	2	0,36
Multiple use terminal U3 with Pressure plate for 2,5 - 25 mm <sup>2</sup>	00	125	<b>33108-0010</b>	NH-Latr. 00 1P SC U3U3	2	0,35
Multiple use terminal U4 with Pressure plate and contact prism for 25 - 70 mm <sup>2</sup>	00	160	<b>33109-0010</b>	NH-Latr. 00 1P SC U4U4	2	0,38
Flat terminal M10	1	250	<b>33095-0010</b>	NH-Latr. 1 1P SC L5L5	2	2,03
Flat terminal M10	2	400	<b>33096-0010</b>	NH-Latr. 2 1P SC L5L5	2	2,03
Flat terminal M12	3	630	<b>33097-0010</b>	NH-Latr. 3 1P SC L6L6	2	2,22
Flat terminal M16	4a	1250 1600	<b>33047-0010</b>	NH-Latr./Unt. 4a 1P L8L8	1	4,14
Flat terminal M12	4a	1600	<b>33047-0070</b>	NH-Latr./Unt. 4a 1P 1600A L6L6	1	4,45

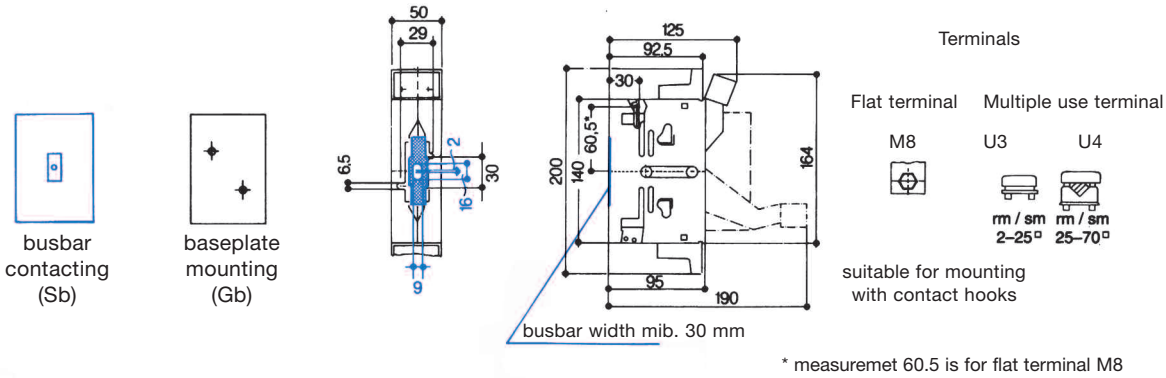
**NH Fuse-Switches, 1-pole switching for busbar contacting**

Branch cable	Description	Size	Amps I <sub>n</sub>	Order no.	Description	Pack	Weight in kg
top/ bottom choice when mounting	Flat terminal M8	00	160	<b>33111-0010</b>	NH-Latr. 00 1P SB SC G4	2	0,38
	Multiple use terminal U3 with Pressure plate for 2,5 - 25 mm <sup>2</sup>	00	125	<b>33112-0010</b>	NH-Latr. 00 1P SB SC U3	2	0,37
	Multiple use terminal U4 with Pressure plate and contact prism for 25 - 70 mm <sup>2</sup>	00	160	<b>33113-0010</b>	NH-Latr. 00 1P SB SC U4	2	0,38
top	Flat terminal M10	1	250	<b>33098-0020</b>	NH-Latr. 1 1PO SB SC L5	2	1,68
	Flat terminal M10	2	400	<b>33099-0020</b>	NH-Latr. 2 1PO SB SC L5	2	1,69
	Flat terminal M12	3	630	<b>33100-0020</b>	NH-Latr. 3 1PO SB SC L6	2	1,79
	Flat terminal M16	4a	1250	<b>33048-0020</b>	NH-Latr./Unt. 4a 1POSB L8	1	4,10
	Flat terminal M12	4a	1600	<b>33048-0030</b>	NH-LATR/UNT 4A 1PU SB 1600A L6	1	4,35
bottom	Flat terminal M10	1	250	<b>33098-0010</b>	NH-Latr. 1 1PU SB SC L5	2	1,68
	Flat terminal M10	2	400	<b>33099-0010</b>	NH-Latr. 2 1PU SB SC L5	2	1,70
	Flat terminal M12	3	630	<b>33100-0010</b>	NH-Latr. 3 1PU SB SC L6	2	1,80
	Flat terminal M16	4a	1250	<b>33048-0010</b>	NH-Latr./Unt. 4a 1PU SB L8	1	4,09
	Flat terminal M12	4a	1600	<b>33048-0040</b>	NH-LATR/UNT 4A 1PO SB 1600A L6	1	4,35

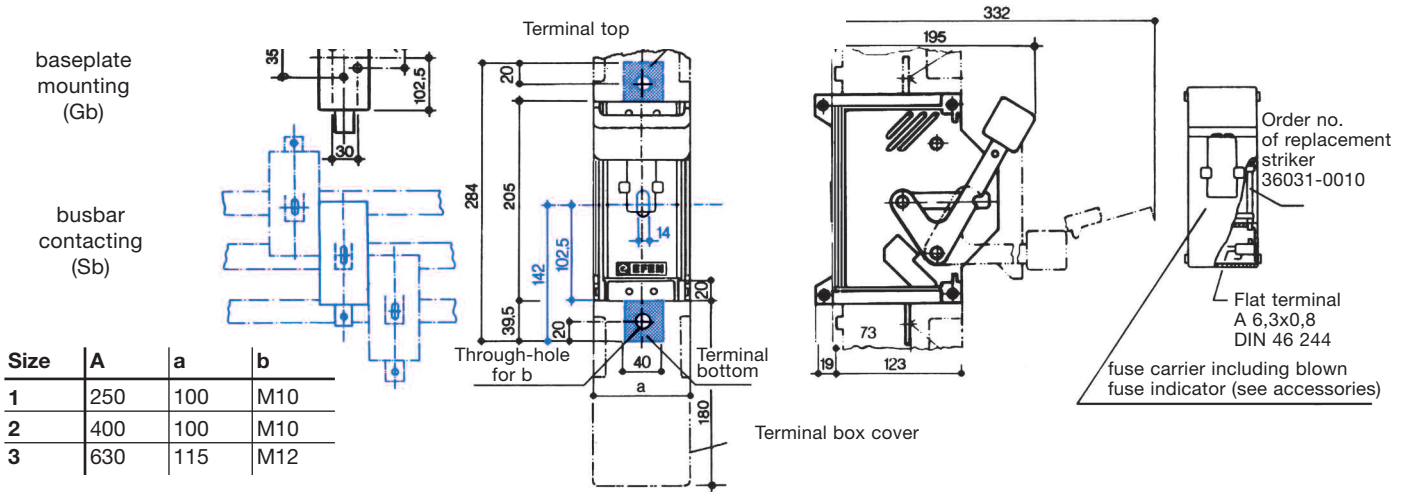
Products for DC Applications  
up to 550 V

Technical data

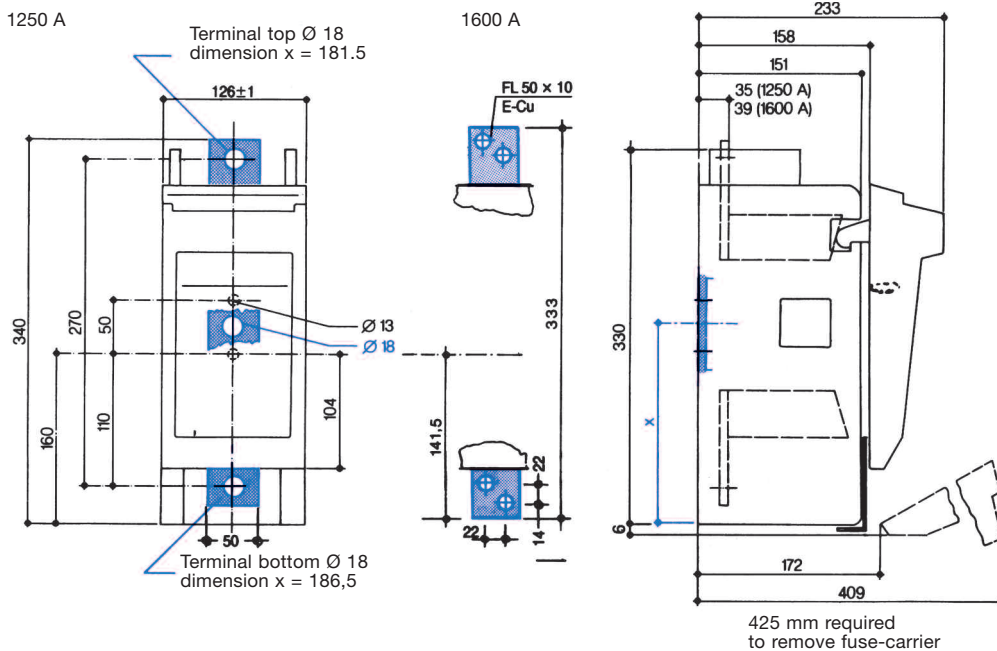
NH Fuse-Switches size 00: 125/160 A



NH Fuse-Switches size 1 – 3: 250 A, 400 A, 630 A



NH Fuse-Switches size 4a: 1250 A, 1600 A



Products for DC Applications  
 up to 750 V

## Technical data

## NH Fuse-Bases for base plate mounting, size 3L, for 1500 V AC / 750 V DC

Description	Size	Amps I <sub>n</sub>	Order no.	Description	Pack	Weight in kg
Insert nut M12	3L	425	33039-0010	NH-UNT 3L 1500 V G6 G6	1	1,24
Insert nut M16	3L	630	33040-0010	NH-UNT 3L 1500 V G8 G8	1	1,24

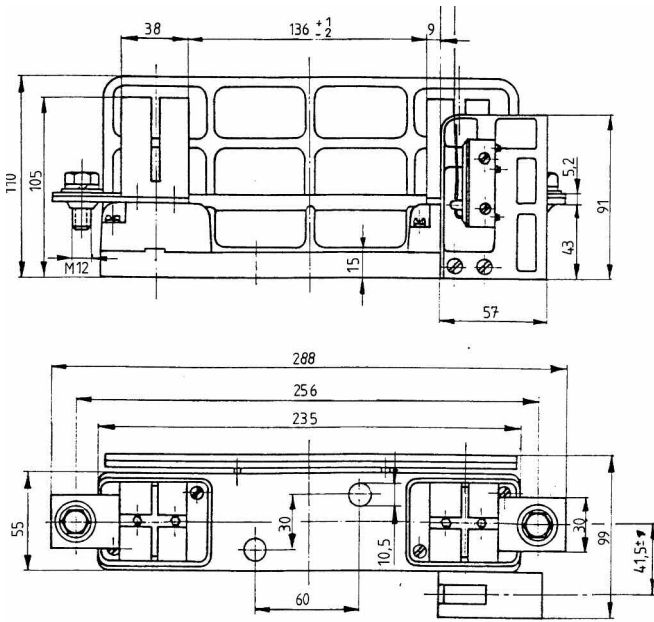
## NH Fuse-Bases for base plate mounting, size 3L, for 1500 V AC / 750 V DC, with striker

Description	Size	Amps I <sub>n</sub>	Order no.	Description	Pack	Weight in kg
Insert nut M12	3L	425	33041-0010	NH-UNT 3L 1500 V Ms G6 G6	1	1,24
Insert nut M16	3L	630	33042-0010	NH-UNT 3L 1500 V Ms G8 G8	1	1,24

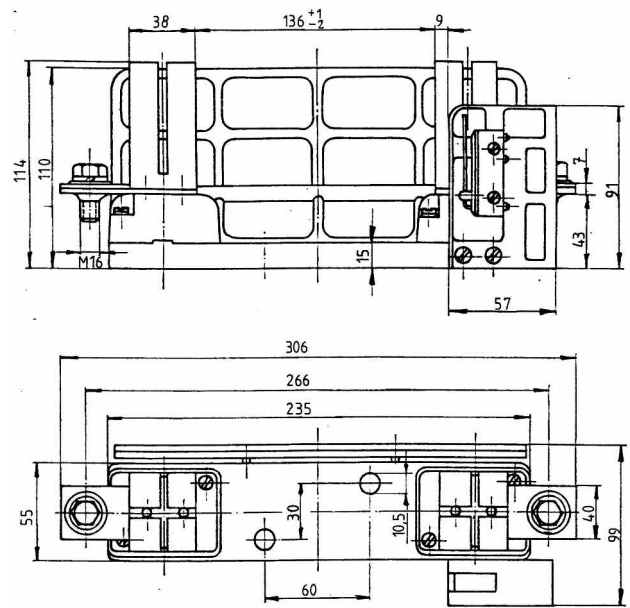
## Accessorie for NH Fuse-Bases size 3L

Description	Size	Amps I <sub>n</sub>	Order no.	Description	Pack	Weight in kg
Barrier for mounting with screws 2 x M4x28 (screws are not included)	3L		30219-0100	Seitentrennwand	1	0,200

Insert nut M12, 425 A



Insert nut M16, 630 A






Products for DC Applications  
up to 80 V, TPS-Series

Technical data

TPS 00/250

**Fuse-Bases**

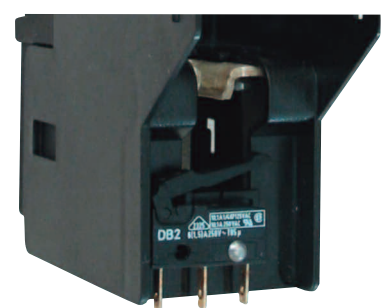
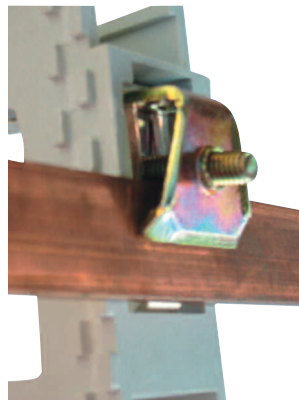
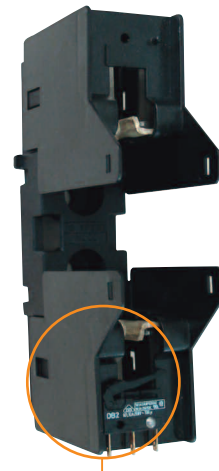
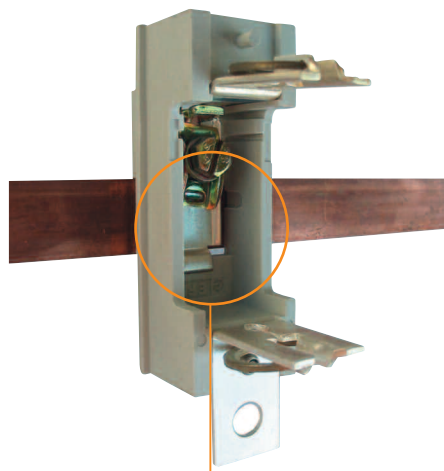
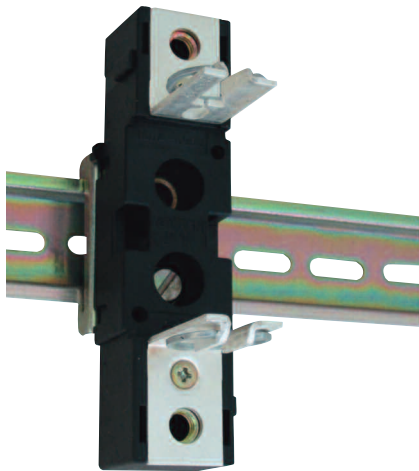
TPS Fault Terminator Fuse-Links are useful in Fuse-Bases alternative to TPS Fuse-Isolators. This is possible, if no condition of disconnection is needed and comfortable handling of the TPS Fuse-Isolators is not necessary-

DC	80 V	250 A
		



**Types:**

- Baseplate mounting (33120-0010) see product photo (top)
- Supporting rails mounting (33120-0070)
- Busbar mounting (33003-0020) – Contact hook
- Fuse monitoring (accessory 36889-0010)



**Technical data**
**Rated operational voltage:** DC 80 V

**Permissible ambient air temperature:** -40 up to +55 °C

**Baseplate mounting**


Terminals	I <sub>N</sub>	I <sub>E</sub>	Type	Order no. Standard	Order no. with fuse monitoring	Torque Housing	Torque Terminals	Pack
M8	250 A	250 A	TPS 00/250	<b>33107-0250</b>	<b>33107-0252</b>	5 Nm	14 Nm	2
M12	600 A	400 A	TPS 00/600	<b>33107-0600</b>	<b>33107-0602</b>	5 Nm	40 Nm	2
M16	1200 A	1200 A	TPS 00/1200	<b>33460-0000</b>	<b>33460-0010</b>	14 Nm	56 Nm	1
2 x M12	1600 A	1200 A	TPS 00/1600	<b>33560-0000</b>	<b>33560-0010</b>	14 Nm	40 Nm	1

**Busbar mounting**

Terminals	I <sub>N</sub>	I <sub>E</sub>	Type	Order no. Standard	Order no. with fuse monitoring	Torque Housing	Torque Terminals	Pack
M8	250 A	250 A	TPS 00/250	<b>33111-0250</b>	<b>33111-0252</b>	14 Nm/6 Nm*	14 Nm	2
M12	600 A	400 A	TPS 00/600	<b>33111-0600</b>	<b>33111-0602</b>	40 Nm/15 Nm*	40 Nm	2
M16	1200 A	1200 A	TPS 2/1200	<b>33470-0000</b>	<b>33470-0010</b>	14 Nm	56 Nm	1

\* when using contact hooks

**Accessories**

Description	Type	Order no.	Pack
Contact hook for busbar without drilling	TPS 00/250	<b>36571-0010</b>	1
	TPS 00/600	<b>36890-0010</b>	1
Twinning set for parallel operation of 2 TPS Isolators	TPS 00/250	<b>31187-0100</b>	1
	TPS 00/600	<b>31187-0100</b>	1
	TPS 2/1200	<b>45071-0100</b>	3
	TPS 2/1600	<b>45071-0100</b>	3
Terminal cover	TPS 2/1200	<b>31319-0200</b>	1
	TPS 2/1600	<b>31319-0200</b>	1
Micro switch for position indication	TPS 00/250	<b>36107-0010</b>	1
	TPS 00/600	<b>36107-0010</b>	1
	TPS 2/1200	<b>36887-0010</b>	1
	TPS 2/1600	<b>36887-0010</b>	1
Contact for electronic fuse monitoring: Tabs for flat connectors 6,3 mm	TPS 00/250	<b>36325-0010</b>	10
Solid-links	TPS 00/600	<b>36917-0010</b>	1
	TPS 2/1600	<b>36918-0010</b>	1
 legard Replacement for fuse-monitoring TPS 2	TPS 2/1200	<b>36031-0010</b>	12
	TPS 2/1600	<b>36031-0010</b>	12

Products for DC Applications  
up to 80 V, TPS-Series

Technical data

**Lid for load circuit of TPS Isolator size 00 (250 & 600 A)**

By protection of battery in telecom power supply with TPS Isolator size 00 direct connection of battery is possible with EFEN lid for load circuit. Telecom power supply is disconnected of the battery. Due to test of capacity of the battery with defined loads is possible.

**Application:**

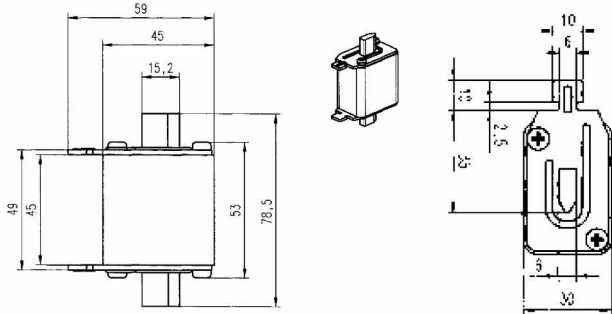
For the capacity test the battery cover is taken out of the inserted TPS Isolator with the Fuse-Link. By using the lid for load circuit directly a load can be contact the battery to test capacity. After its completion the lid for load circuit with Fuse-Link can be replaced and the battery is recharged by system.

Hereby a capacity test is possible without changing the construction design of the system.

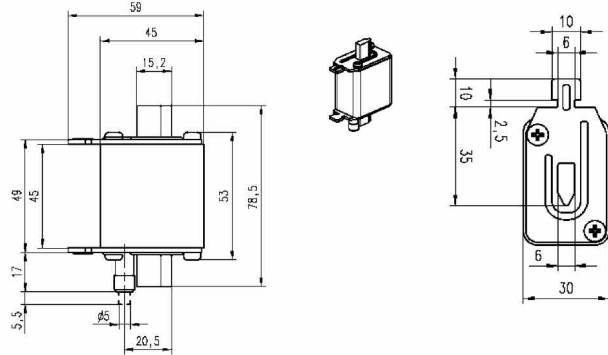
Description	Size	Amps	Order no.	Description	Pack	Weight in kg
Lid for load circuit of TPS Isolator, Terminal M12	00	600	36896-0010	DECKEL GR.00 TPS/600 EXT. EINSPEISUNG	1	1,0

**TPS Fault Terminator**

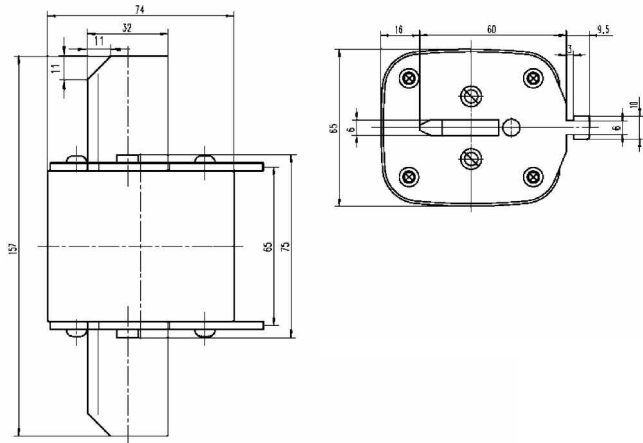
TPS 00/60-600 A



TPS 00/60-600 A with striker

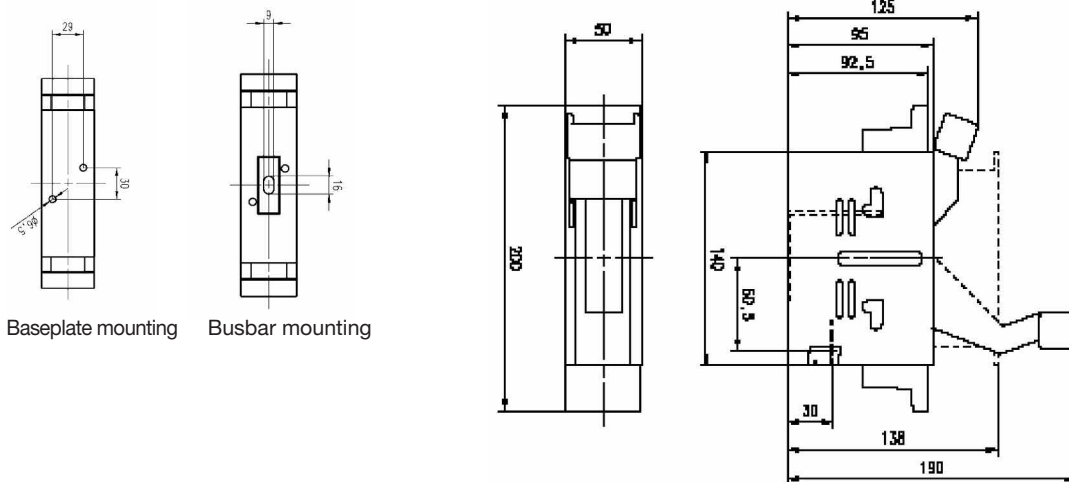


TPS 2/800-1600 A

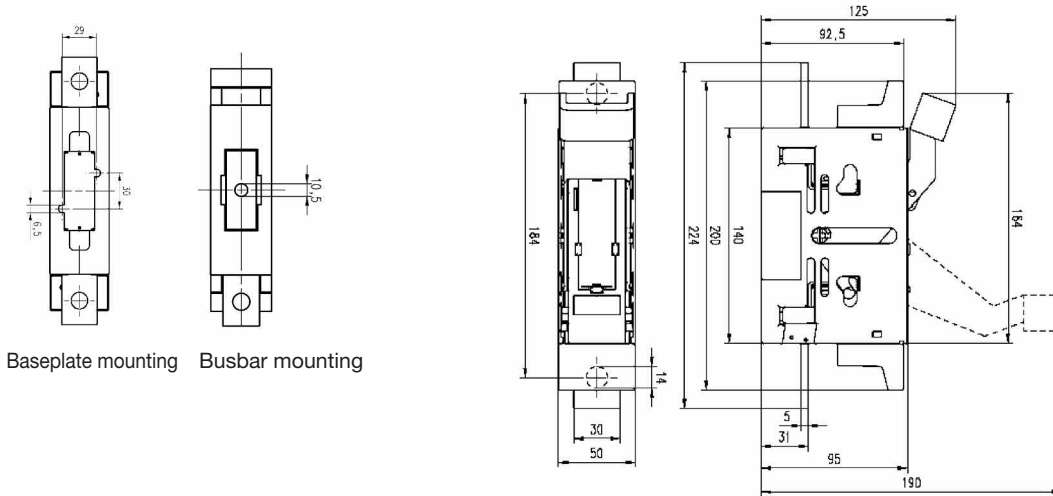


**TPS Fuse-Isolator**

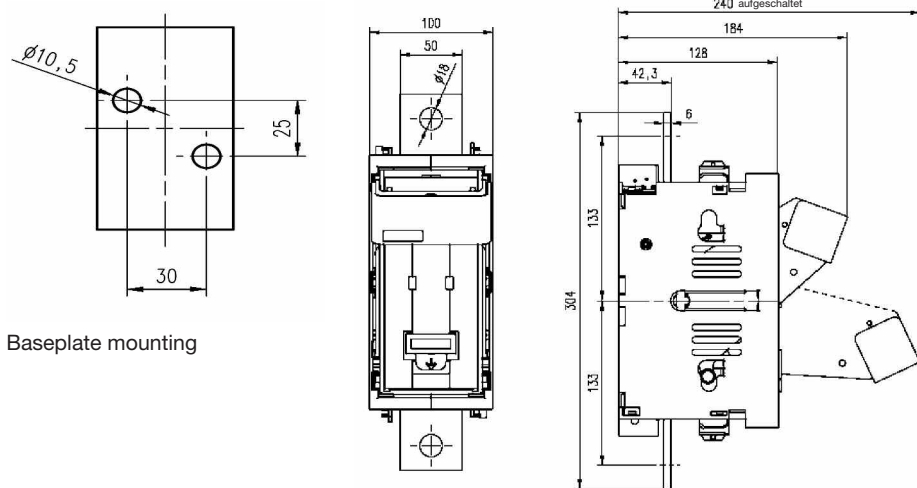
TPS 00/250



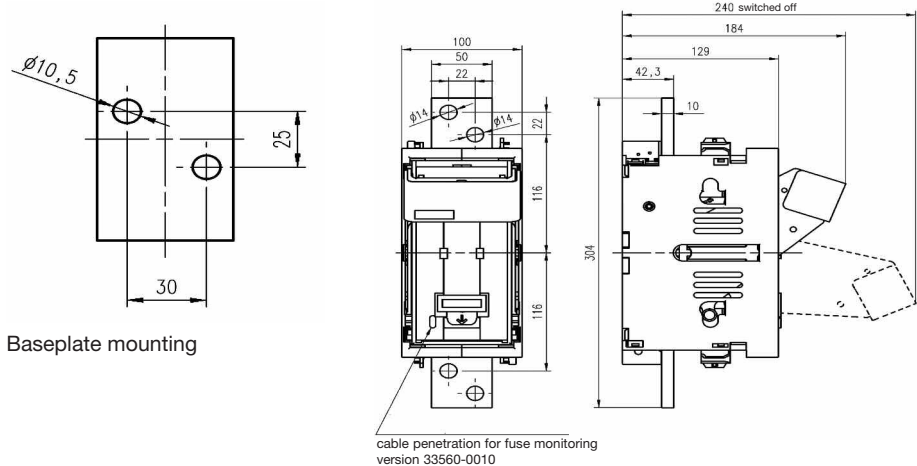
TPS 00/600



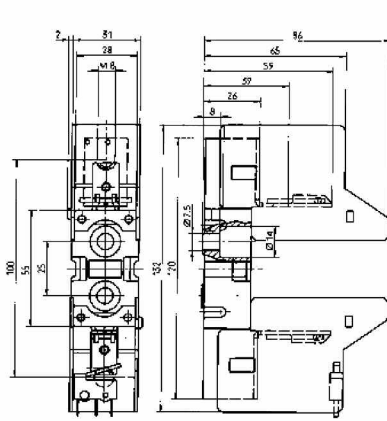
TPS 2/1200



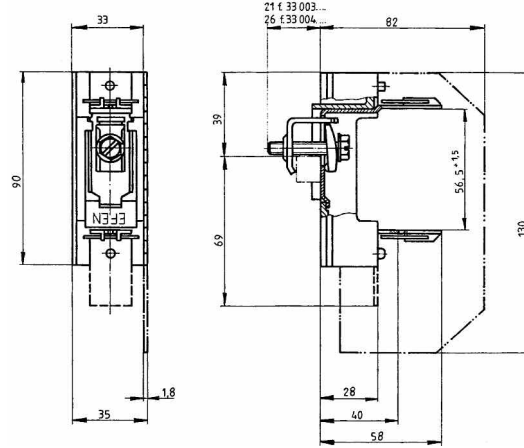
TPS 2/1600



Fuse-Bases



Baseplate mounting

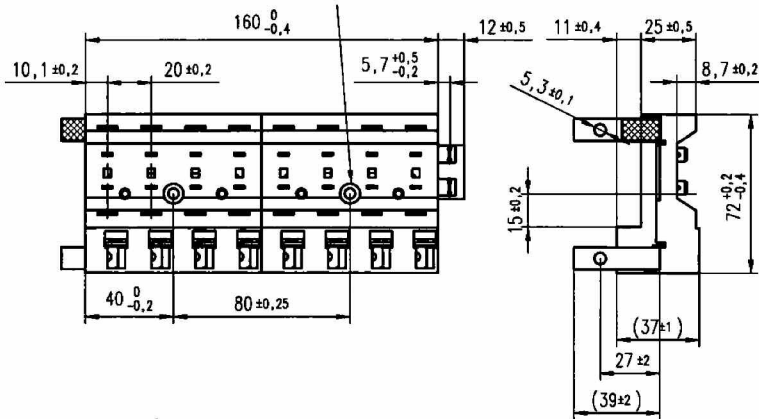


Busbar mounting

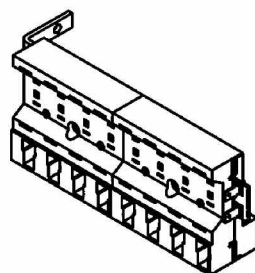
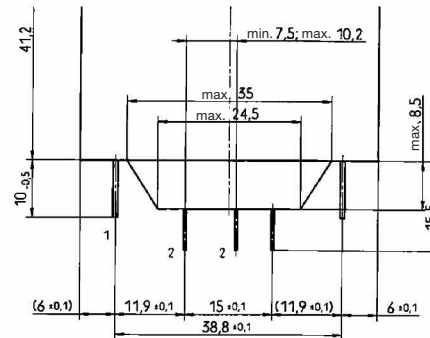
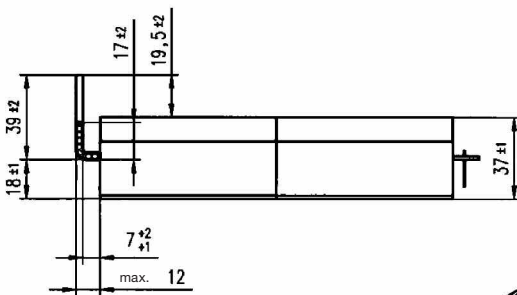
Supply bus moduls

Hole for screw M4

Length



Length	
4 pol.	80 mm
8 pol.	160 mm
12 pol.	240 mm
16 pol.	386 mm
18 pol.	400 mm
20 pol.	480 mm



1 Faston-Knife 6,3 acc. to IEC 61210  
2 Faston-Knife 2,8/0,5 acc. to IEC 61210