



Catalog

Power distribution components

– Load-Break Switches / Load-Changeover Switches



## Load-Break Switches / Load-Changeover Switches

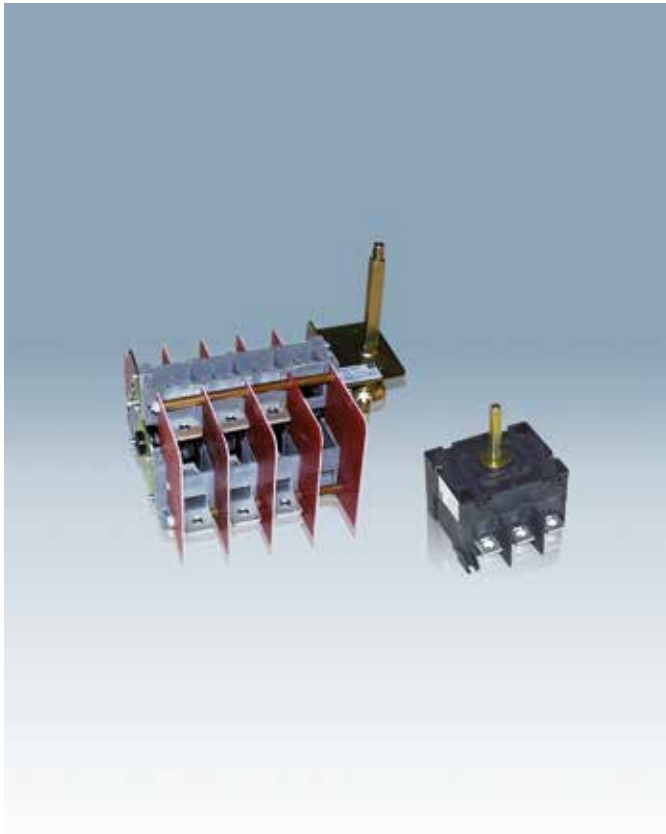
Load-break switches and load-changeover switches by EFEN are characterized by their robust functionality and compact design. They are ideally suited for applications in building-site power distributions, grid and grid back-up feed systems, telecommunications, hospitals, airports, railroad systems and transport services.

### System

EFEN load-break switches and load-changeover switches are robust and versatile. The range comprises 3 and 4-pole as well as bypass variants with dual switch mechanisms, allowing six or eight poles to be switched simultaneously. Variants complying with DIN and BS standard are available.

### Features

Thanks to their robust and compact design, the devices can be used in many ways, e.g. for construction-site power distribution, grid and grid back-up feed systems, utility applications and telecommunications. The visible isolation gap is another benefit of the changeover switches.



## Load-Break Switches / Load-Changeover Switches

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**Load-Break Switch of type FAM**  
with double breaking



**Load-Changeover Switch of type FMU**  
in steel enclosure



## Load-break switches without fuse-links



### Application

Load-break switches of type FAM reliably and safely disconnect circuits under nominal load and under overload conditions from the grid (feed). When switched off, the device complies with the requirements for isolator switches up to 690 Volt.

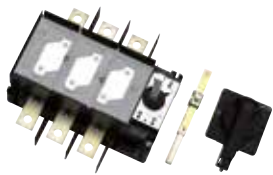
### Areas of use

- Installation distributors
- Power distribution
- Motor control centers
- Control systems

### Scope of supply

Devices are supplied with handle and face plate.

► Technical data, page 11



29250-1100

### Load-break switches, 3 and 4-pole, 63–200 A, type FAM

Designation	Poles	Amps	PU	Product designation	Order no.
Load-break switch	3	100	1	FAM 10/3-A 100A/3 AF KM L	29250-0600
Load-break switch	3	125	1	FAM 12/3-A 125A/3 AF KM L	29250-0700
Load-break switch	3	160	1	FAM 16/3-A 160A/3 AF KM L	29250-0800
Load-break switch	3	200	1	FAM 20/3-A 200A/3 AF KM L	29250-0900

## Switch-fuse



### Features

Switch-fuses of type SILA combine the benefits of an NH fuse-switch with those of a load-break switch in one unit. Their actuation is independent of the operator. The switching chamber is isolated from the fuse-links. Arcing that occurs when disconnecting is quenched inside the switching chamber.

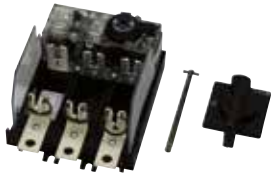
### Areas of use

- Construction site power distribution
- Switchboards
- Installation distributors, etc.

### Scope of supply

Devices are supplied complete with padlockable handle, front cover, door coupling and shaft extension.

► Technical data, page 11



### Switch-fuse (DIN type) 3-pole, 63–125 A, type SILA – NH 00

Designation	Amps	PU	Product designation	Order no.
Switch-fuse	63	1	SILA-NH 00-6/3-SE-A 63A/3 AF KM SN L	29400-0400
Switch-fuse	125	1	SILA-NH 00-12/3-SE-A 125A/3 AF KM SN L	29400-0700

29400-0700

### Accessories for switch-fuses (DIN type) 3 and 4-pole, 63–125 A, type SILAD – NH 00

Designation	Poles	Amps	PU	Product designation	Order no.
Neutral pole with box terminal			1	NULLKONTAKT SILA 00 LANG SK	36909-0010
Neutral pole with lug, 185 mm			1	NULLKONTAKT SILA 00 LANG	36910-0010
Neutral pole with clinch nut			1	NULLKONTAKT SILA 00 LANG EPM	36911-0010
Terminal cover, single-side	3	63–125	1	KLAD-SILA 00 KURZE RÜCKWAND	36507-0010
Aux. switch 1 NO / 1 NC in position 1	3	63–160	1	HILFSSCHALTER 1W SILA/FAM 160	36593-0010

## Switch-fuse



### Features

Switch-fuses of type SILAD combine the benefits of an NH fuse-switch with those of a load-break switch in one unit. Their actuation is independent of the operator. The switching chamber is isolated from the fuse-links. Arcing that occurs when disconnecting is quenched inside the switching chamber.

### Areas of use

- Construction site power distribution
- Switchboards
- Installation distributors, etc.

### Scope of supply

Devices are supplied complete with padlockable handle, front cover, door coupling and shaft extension.

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29410-0700

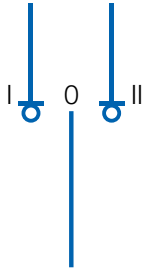
### Switch-fuse (DIN type) 3-pole, 63–630 A; type SILAD – NH 00

Designation	Poles	Amps	PU	Product designation	Order no.
Switch-fuse	3	63	1	SILAD-NH 00-6/3-SE-A 63A/3 AF KM SN L	29410-0400
Switch-fuse	3	125	1	SILAD-NH 00-12/3-SE-A 125A/3 AF KM SN L	29410-0700
Switch-fuse	3	250	1	SILAD-NH 1-25/3-SE-A 250A/3 AF KM TZSN L	29400-1000
Switch-fuse	3	400	1	SILAD-NH 2-40/3-SE-A400A/3 AF KM TZ SN L	29420-1300
Switch-fuse	3	630	1	SILAD-NH 3-63/3-A 630A/3 AF KM TZ SN	29420-1500

### Accessories for switch-fuses (DIN type) 3 and 4-pole, 63–630 A, type SILAD – NH 00

Designation	Poles	Amps	PU	Product designation	Order no.
Neutral pole with lug	*	63–125	1	NULLKONTAKT SILA 00 L	36907-0010
Neutral pole with box terminal	*	63–125	1	NULLKONTAKT FAM 6-16 SK	36908-0010
Neutral pole with clinch nut	*	100–160	1	NULLKONTAKT SILA 00 EPM	36906-0010
Terminal cover, single-side	3	100–160	1	KLEMMENABDECKUNG SILA 00 1-FACH	36501-0010
Terminal cover, single-side	3 + 4	200–300	1	KLAD-SILA 1 1-FACH	36506-0010
Terminal cover, single-side	3	400	1	KLAD-SILAC II	36589-0010
Terminal cover, single-side	3	630	1	KLAD-SILAC III	36591-0010

## Load-changeover switch



### Application

Load-changeover switches of type FMU (FMUN) connect one consumer with either of two power sources (e. g. grid or back-up power supply). The switching function of the devices is 1 – 0 – 2\*. In position 1, the consumer is connected to grid supply. In position 2, it is connected to a back-up power supply. In position 0, the con-

sumer is completely isolated from the power sources. Thanks to the visible disconnection, the load-changeover switch complies with fuse-switch requirements.

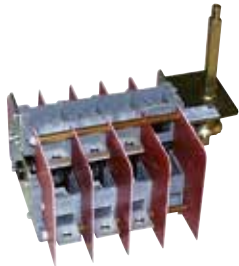
### Areas of use

Telecommunications, railroad systems, utility applications, hospitals, radio stations, airports, transport services, etc.

### Scope of supply

Devices are supplied with handle and face plate.

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29300-0400

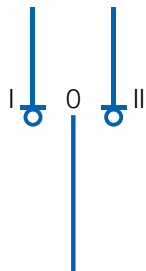
### Load-changeover switches, 3 and 4-pole, 63–2000 A, type FMU (FMUN)

Designation	Poles	Amps	PU	Product designation	Order no.
Load-changeover switch	3	63	1	FMU 6/3-U0 63A/3 AF KM L	29300-0400
Load-changeover switch	3	80	1	FMU 8/3-U0 80A/3 AF KM L	29300-0500
Load-changeover switch	3	100	1	FMU 10/3-U0 100A/3 AF KM L	29300-0600
Load-changeover switch	3	125	1	FMU 12/3-U0 125A/3 AF KM L	29300-0700
Load-changeover switch	3	160	1	FMU 16/3-U0 160A/3 AF KM L	29300-0800
Load-changeover switch	3	200	1	FMUN 20/3-U0 200A/3 AF KM BN L	29320-0900
Load-changeover switch	3	250	1	FMUN 25/3-U0 250A/3 AF KM BN L	29320-1000
Load-changeover switch	3	300	1	FMUN 30/3-U0 300A/3 AF KM BN L	29320-1100
Load-changeover switch	3	400	1	FMUN 40/3-U0 400A/3 AF KM BN L	29320-1300
Load-changeover switch	3	500	1	FMUN 50/3-U0 500A/3 AF KM BN L	29320-1400
Load-changeover switch	3	630	1	FMU 63/3-U0 630A/3 AF KM L	29300-1500
Load-changeover switch	3	800	1	FMU 80/3-U0 800A/3 AF KM L	29300-1600
Load-changeover switch	3	1000	1	FMU 100/3-U0 1000A/3 AF KM L	29300-1700
Load-changeover switch	3	1250	1	FMU 125/3-U0 1250A/3 AF KM L	29300-1800
Load-changeover switch	3	1600	1	FMU 160/3-U0 1600A/3 AF KM L	29300-1900
Load-changeover switch	3	2000	1	FMU 200/3-U0 2000A/3 AF KM L	29300-2000
Load-changeover switch	4	63	1	FMU 6/4-U0 63A/4 AF KM L	29304-0400
Load-changeover switch	4	80	1	FMU 8/4-U0 80A/4 AF KM L	29304-0500
Load-changeover switch	4	100	1	FMU 10/4-U0 100A/4 AF KM L	29304-0600
Load-changeover switch	4	125	1	FMU 12/4-U0 125A/4 AF KM L	29304-0700
Load-changeover switch	4	160	1	FMU 16/4-U0 160A/4 AF KM L	29304-0800
Load-changeover switch	4	200	1	FMUN 20/4-U0 200A/4 AF KM BN L	29324-0900
Load-changeover switch	4	250	1	FMUN 25/4-U0 250A/4 AF KM BN L	29324-1000
Load-changeover switch	4	300	1	FMUN 30/4-U0 300A/4 AF KM BN L	29324-1100
Load-changeover switch	4	400	1	FMUN 40/4-U0 400A/4 AF KM BN L	29324-1300
Load-changeover switch	4	500	1	FMUN 50/4-U0 500A/4 AF KM BN L	29324-1400
Load-changeover switch	4	630	1	FMU 63/4-U0 630A/4 AF KM L	29304-1500
Load-changeover switch	4	800	1	FMU 80/4-U0 800A/4 AF KM L	29304-1600
Load-changeover switch	4	1000	1	FMU 100/4-U0 1000A/4 AF KM L	29304-1700
Load-changeover switch	4	1250	1	FMU 125/4-U0 1250A/4 AF KM L	29304-1800
Load-changeover switch	4	1600	1	FMU 160/4-U0 1600A/4 AF KM L	29304-1900
Load-changeover switch	4	2000	1	FMU 200/4-U0 2000A/4 AF KM L	29304-2000

### Accessories for load-changeover switches, 3 and 4-pole, 63–2000 A, type FMU (FMUN)

Designation	Poles	Amps	PU	Product designation	Order no.
Door coupling + shaft extension		63–250	1	TKV-WV FWA160/FMU250 200MM	36509-0010
Door coupling + shaft extension	3 + 4	300–500	1	TKV-DG 245 WV-1250 200MM	36505-0010
Door coupling + shaft extension	3 + 4	630–1250	1	TKV-DG 355 WV-1250-FMU	36515-0010
Door coupling + shaft extension	3 + 4	1600–2000	1	TKV-WV 2000 FMU	36612-0010
Terminal cover, single-side	3 + 4	63–160	1	DKLAD 160 FMU	36503-0010
Terminal cover, single-side	3 + 4	200–250	1	DKLAD 250 FMU	36645-0010
Terminal cover, single-side	3 + 4	300–500	1	DKLAD 500 FMU	36588-0010
Terminal cover, single-side	4	630–1250	1	DKLAD 4-1250 FMU	36651-0010
Terminal cover, two sides, DKLAD	3	630–1250	1	DKLAD FMU 63-125/3	36703-0010
Terminal cover, single-side	3	1600–2000	1	DKLAD 3-2000 FMU	36694-0010
Terminal cover, two sides, DKLAD	4	1600–2000	1	KLAD FMU 160-200/4	45149-0200

## Load-changeover switches, type FMU, steel enclosure, 3 and 4-pole, 63–2000 A



### Application

Load-changeover switches of type FMU with steel enclosure provide some specific features for the following typical applications:

- Change-over to secondary power supply
- Connection to two power sources
- Switching function 1 – 0 – 2
- Switch for visible disconnection

► Technical data, on demand



29300-0410

### Enclosure ST-FMU 6-16

#### Features:

- Dimensions: 300 x 300 x 120 mm
- Terminal opening: 134 x 44 mm
- Degree of protection: IP65
- Utilization category: I<sub>b</sub> AC 21B 415V

Designation	Poles	Amps	PU	Product designation	Order no.
ST-FMU 6/3 with screw terminal M6	3	63	1	ST-FMU 6/3-U0 63A/3 AF KM GS L	29300-0410
ST-FMU 8/3 with screw terminal M6	3	80	1	ST-FMU 8/3-U0 80A/3 AF KM GS L	29300-0510
ST-FMU 10/3 with screw terminal M6	3	100	1	ST-FMU 10/3-U0 100A/3 AF KM GS L	29300-0710
ST-FMU 12/3 with screw terminal M6	3	125	1	FMU 12/3-U0 125A/3 AF KM L	29300-0810
ST-FMU 16/3 with screw terminal M8	3	160	1	FMU 16/3-U0 160A/3 AF KM L	29304-0410
ST-FMU 6/4 with screw terminal M6	4	63	1	FMUN 20/3-U0 200A/3 AF KM BN L	29304-0510
ST-FMU 8/4 with screw terminal M6	4	80	1	FMUN 25/3-U0 250A/3 AF KM BN L	29304-0610
ST-FMU 10/4 with screw terminal M6	4	100	1	FMUN 30/3-U0 300A/3 AF KM BN L	29304-0710
ST-FMU 12/4 with screw terminal M6	4	125	1	FMUN 40/3-U0 400A/3 AF KM BN L	29304-0810
ST-FMU 16/4 with screw terminal M8	4	160	1	FMUN 50/3-U0 500A/3 AF KM BN L	29320-1400



29320-0910

### Enclosure ST-FMUN 20-25

#### Features:

- Dimensions: 300 x 400 x 210 mm
- Terminal opening: 234 x 48 mm
- Degree of protection: IP65
- Utilization category: I<sub>b</sub> AC 21B 415V

Designation	Poles	Amps	PU	Product designation	Order no.
ST-FMUN 20/3 with screw terminal M10	3	200	1	ST-FMUN 20/3-U0 200A/3 KM AF GS L	29320-0910
ST-FMUN 25/3 with screw terminal M10	3	250	1	ST-FMUN 25/3-U0 250A/3 KM AF GS L	29320-1010
ST-FMUN 20/4 with screw terminal M10	4	200	1	ST-FMU 10/3-U0 100A/3 AF KM GS L	29324-0910
ST-FMUN 25/4 with screw terminal M10	4	250	1	ST-FMUN 25/4-U0 250A/4 KM AF GS L	29324-1010



29320-1110

### Enclosure ST-FMUN 30-50

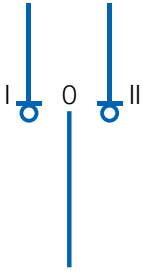
#### Features:

- Dimensions: 380 x 600 x 210 mm
- Terminal opening: 303 x 65 mm
- Degree of protection: IP65
- Utilization category: I<sub>b</sub> AC 21B 415V

Designation	Poles	Amps	PU	Product designation	Order no.
ST-FMUN 30/3 with screw terminal M10	3	300	1	ST-FMUN 20/3-U0 200A/3 KM AF GS L	29320-1110
ST-FMUN 40/3 with screw terminal M10	3	400	1	ST-FMUN 25/3-U0 250A/3 KM AF GS L	29320-1310
ST-FMUN 50/3 with screw terminal M10	3	500	1	ST-FMU 10/3-U0 100A/3 AF KM GS L	29320-1410
ST-FMUN 30/4 with screw terminal M10	4	300	1	ST-FMUN 25/4-U0 250A/4 KM AF GS L	29324-1110
ST-FMUN 40/4 with screw terminal M10	4	400	1	ST-FMUN 40/4-U0 400A/4 KM AF GS L	29324-1310
ST-FMUN 50/4 with screw terminal M10	4	500	1	ST-FMUN 50/4-U0 500A/4 KM AF GS L	29324-1410



## Load-changeover switches, type FMU, steel enclosure, 3 and 4-pole, 63–2000 A



### Application

Load-changeover switches of type FMU with steel enclosure provide some specific features for the following typical applications:

- Change-over to secondary power supply
- Connection to two power sources
- Switching function 1 – 0 – 2
- Switch for visible disconnection

► Technical data, on demand



29300-1510

### Enclosure ST-FMUN 63-125

#### Features:

- Dimensions: 500 x 700 x 250 mm
- Terminal opening: 303 x 114 mm
- Degree of protection: IP65
- Utilization category: I<sub>e</sub> AC 21B 415V

Designation	Poles	Amps	PU	Product designation	Order no.
ST-FMU 63/3 with screw terminal M12	3	630	1	ST-FMU 63/3-U0 630A/3 AF KM L	29300-1510
ST-FMU 80/3 with screw terminal M12	3	800	1	ST-FMU 80/3-U0 800A/3 AF KM GS L	29300-1610
ST-FMU 100/3 with screw terminal M12	3	1000	1	ST-FMU 100/3-U0 1000A/3 AF KM GS L	29300-1710
ST-FMU 125/3 with screw terminal M12	3	1250	1	ST-FMU 125/3-U0 1250A/3 AF KM GS L	29300-1810
ST-FMU 63/4 with screw terminal M12	4	630	1	ST-FMU 63/4-U0 630A/4 AF KM GS L	29304-1510
ST-FMU 80/4 with screw terminal M12	4	800	1	ST-FMU 80/4-U0 800A/4 AF KM GS L	29304-1610
ST-FMU 100/4 with screw terminal M12	4	1000	1	ST-FMU 100/4-U0 1000A/4 AF KM GS L	29304-1710
ST-FMU 125/4 with screw terminal M12	4	1250	1	ST-FMU 125/4-U0 1250A/4 AF KM GS L	29304-1810



29300-1910

### Enclosure ST-FMUN 160-200

#### Features:

- Dimensions: 760 x 760 x 300 mm
- Terminal opening: 303 x 114 mm
- Degree of protection: IP65
- Utilization category: I<sub>e</sub> AC 21B 415V

Designation	Poles	Amps	PU	Product designation	Order no.
ST-FMU 160/3 with screw terminal M12	3	1600	1	ST-FMU 160/3-U0 1600A/3 AF KM GS L	29300-1910
ST-FMU 200/3 with screw terminal M12	3	2000	1	ST-FMU 200/3-U0 2000A/3 AF KM GS L	29300-2010
ST-FMU 160/4 with screw terminal M12	4	1600	1	ST-FMU 160/4-U0 1600A/4 AF KM GS L	29304-1910
ST-FMU 200/4 with screw terminal M12	4	2000	1	ST-FMU 200/4-U0 2000A/4 AF KM GS L	29304-2010

## Master and emergency switches



### Application

Master and emergency switches of type HSWA are especially suitable for use in machine controls and control cabinets. Due to their exceptional technical properties, they comply with any requirement for repair and service switches or crane master switches. They feature a motor-breaking capacity of AC 23 (switching of motors and other highly inductive loads).

### Areas of use

- Enclosed systems
- Machine tools
- Factory-built assemblies of switchgear

### Scope of supply

Devices are supplied complete with padlockable handle, front cover, door coupling with latch, and shaft extension with single-side terminal cover.

► Technical data, page 13



29160-1000

### Master and emergency switches, 3-pole, 250–1250 A, type HSWA

Designation	Poles	Amps	PU	Product designation	Order no.
Master and emergency switch	3	250	1	HSWA 25/3K-A 250A/3 AF KW L	29160-1000
Master and emergency switch	3	315	1	HSWA 30/3K-A 315A/3 AF KW L	29160-1200
Master and emergency switch	3	400	1	HSWA 40/3K-A 400A/3 AF KW L	29160-1300
Master and emergency switch	3	500	1	HSWA 50/3K-A 500A/3 AF KW L	29160-1400
Master and emergency switch	3	630	1	HSWA 63/3K-A 630A/3 AF KW L	29160-1500
Master and emergency switch	3	800	1	HSWA 80/3-A 800A/3 AF KW L	29160-1600
Master and emergency switch	3	1000	1	HSWA 100/3-A 1000A/3 AF KW L	29160-1700
Master and emergency switch	3	1250	1	HSWA 125/3-A 1250A/3 AF KW L	29160-1800

### Accessories for master and emergency switches, 3-pole, 250–1250 A, type HSWA

Designation	Poles	Amps	PU	Product designation	Order no.
Terminal cover, single-side	3	63–100	1	KLAD FWA 8/3K	31828-0200
Terminal cover, single-side	3	125–200	1	KLAD-160	36573-0010
Terminal cover, single-side	3	250–630	1	KLAD-630	36658-0010
Aux. switch 1 NO / 1 NC in position 1	3	250–630	1	HILFSSCHALTER 1S1Ö 630A	36516-0010
Aux. switch 1 NO / 1 NC in position 1	3	800–1250	1	HILFSSCHALTER 1S1Ö FWA 1250A	36504-0010

## Load-break switches without fuse-links 3-pole, type FAM

### Type FAM: 63–300 A / AC21B 690 V / AC22B 415 V

Type	Outer dimensions W x H x D in mm	Order no. H1S10 Aux. switch 1 NO / 1 NC in pos. 1	Order no. KLAD Terminal cover, single-side	Rated uninter- rupted current I <sub>u</sub>	Rated operat- ing current I <sub>o</sub> AC21B 690 V	Rated operat- ing current I <sub>o</sub> AC22B 415 V	Poles	Max. conductor cross-section	Order no.
FAM 10/3	114x110x72	36593-0010 *	36702-0010	100A	100A	80A	3	70 mm <sup>2</sup>	<b>29250-0600</b>
FAM 12/3	114x110x72	36593-0010 *	36702-0010	125A	125A	80A	3	70 mm <sup>2</sup>	<b>29250-0700</b>
FAM 16/3	114x110x72	36593-0010 *	36702-0010	160A	160A	100A	3	70 mm <sup>2</sup>	<b>29250-0800</b>
FAM 20/3	208x210x94	36596-0010 *	36506-0010	200A	200A	200A	3	150 mm <sup>2</sup>	<b>29250-0900</b>

\* Note: auxiliary contact = 1 C/O

Type	Accessories	Order no.
Clinch nut	Neutral pole for 3-pole + N	<b>36906-0010</b>
Lug terminal	Neutral pole for 3-pole + N	<b>36907-0010</b>
Box terminal	Neutral pole for 3-pole + N	<b>36908-0010</b>

## Switch-fuses 3-pole, type SILA

### Type SILA: 63–125 A / AC22B 415 V

Type	Outer dimen- sions W x H x D in mm	Order no. H1S10 Aux. switch 1 NO / 1 NC in pos. 1	Order no. KLAD Terminal cover, single-side	Rated uninter- rupted current I <sub>u</sub>	Rated operat- ing current I <sub>o</sub> AC22B 415 V	Fuse-link size NH	Poles	Max. conductor cross-section	Order no.
SILA-NH 00-6/3-SE	114x 95x72	36593-0010 *	36501-0010	63A	63A	000/00	3	16–70 mm <sup>2</sup>	<b>29400-0400</b>
SILA 00-12/3-SE	114x 95x72	36593-0010 *	36501-0010	125A	125A	00	3	16–70 mm <sup>2</sup>	<b>29400-0700</b>

\* Note: auxiliary contact = 1 C/O

Type	Accessories	Order no.
Box terminal	Neutral pole for 3-pole + N	<b>36909-0010</b>
Lug terminal	Neutral pole for 3-pole + N	<b>36910-0010</b>
Clinch nut	Neutral pole for 3-pole + N	<b>36911-0010</b>

## Switch-fuses 3 and 4-pole, type SILAD-NH

### Type SILAD-NH: 63–630 A / AC22B 415 V

Type	Outer dimensions W x H x D in mm	Order no. H1S10 Aux. switch 1 NO / 1 NC in pos. 1	Order no. KLAD Terminal cover, single-side	Rated uninter- rupted current I <sub>u</sub>	Rated operat- ing current I <sub>o</sub> AC22B 415 V	Fuse-link size NH	Poles	Max. conductor cross-section	Order no.
SILAD 00-6/3-SE	120x140x140	upon request	36507-0010	63A	63A	000/00	3	16–70 mm <sup>2</sup>	<b>29410-0400</b>
SILAD 00-12/3-SE	120x140x140	upon request	36507-0010	125A	125A	00	3	16–70 mm <sup>2</sup>	<b>29410-0700</b>
SILAD 1-25/3-SE	208x210x145	upon request	36506-0010	250A	250A	1	3	50–150 mm <sup>2</sup>	<b>29400-1000</b>
SILAD 1-25/3+N-SE	208x210x145	upon request	36506-0010	250A	250A	1	3+N	50–150 mm <sup>2</sup>	<b>29403-1000</b>
SILAD 2-40/3-SE	256x160x195	upon request	36589-0010	400A	400A	2	3	95–240 mm <sup>2</sup>	<b>29420-1300</b>
SILAD 2-40/3+N-SE	256x160x195	upon request	36589-0010	400A	400A	2	3+N	95–240 mm <sup>2</sup>	<b>29423-1300</b>
SILAD 3-63/3-SE	324x238x230	upon request	36591-0010	630A	630A	3	3	120–300 mm <sup>2</sup>	<b>29420-1500</b>
SILAD 3-63/3+N-	324x238x230	upon request	36591-0010	630A	630A	3	3+N	120–300 mm <sup>2</sup>	<b>29423-1500</b>

\* Note: auxiliary contact = 1 C/O

Type	Accessories	Order no.
Clinch nut	Neutral pole for 3-pole + N	<b>36906-0010</b>
Lug terminal	Neutral pole for 3-pole + N	<b>36907-0010</b>
Box terminal	Neutral pole for 3-pole + N	<b>36908-0010</b>

## Load-changeover switches 3 and 4-pole, type FMU (FMUN)

Type FMU (FMUN): 63–800A / AC21B 415 V

Type	Outer dimensions W x H x D in mm	Order no. H1S10 Aux. switch 1 NO / 1 NC in pos. 1	Order no. KLAD Terminal cover, single-side	Rated uninter- rupted current I <sub>U</sub>	Rated operat- ing current I <sub>o</sub> AC21B 415 V	Poles	Max. conductor cross-section	Order no.
FMU 6/3	189x150x 98	36509-0010	36503-0010	63A	63A	3	25 mm <sup>2</sup>	29300-0400
FMU 6/4	189x150x 98	36509-0010	36503-0010	63A	63A	4	25 mm <sup>2</sup>	29304-0400
FMU 8/3	189x150x 98	36509-0010	36503-0010	80A	80A	3	25 mm <sup>2</sup>	29300-0500
FMU 8/4	189x150x 98	36509-0010	36503-0010	80A	80A	4	25 mm <sup>2</sup>	29304-0500
FMU 10/3	189x150x 98	36509-0010	36503-0010	100A	100A	3	25 mm <sup>2</sup>	29300-0600
FMU 10/4	189x150x 98	36509-0010	36503-0010	100A	100A	4	25 mm <sup>2</sup>	29304-0600
FMU 12/3	189x150x 98	36509-0010	36503-0010	125A	125A	3	35 mm <sup>2</sup>	29300-0700
FMU 12/4	189x150x 98	36509-0010	36503-0010	125A	125A	4	35 mm <sup>2</sup>	29304-0700
FMU 16/3	189x150x 98	36509-0010	36503-0010	160A	160A	3	70 mm <sup>2</sup>	29300-0800
FMU 16/4	189x150x 98	36509-0010	36503-0010	160A	160A	4	70 mm <sup>2</sup>	29304-0800
FMUN 20/3	245x181x 95	36509-0010	36645-0010	200A	200A	3	120 mm <sup>2</sup>	29320-0900
FMUN 20/4	245x181x 95	36509-0010	36645-0010	200A	200A	4	120 mm <sup>2</sup>	29324-0900
FMUN 25/3	245x181x 95	36509-0010	36645-0010	250A	250A	3	150 mm <sup>2</sup>	29320-1000
FMUN 25/4	245x181x 95	36509-0010	36645-0010	250A	250A	4	150 mm <sup>2</sup>	29324-1000
FMUN 30/3	286x285x143	36505-0010	36588-0010	300A	300A	3	185 mm <sup>2</sup>	29320-1100
FMUN 30/4	286x285x143	36505-0010	36588-0010	300A	300A	4	185 mm <sup>2</sup>	29324-1100
FMUN 40/3	286x285x143	36505-0010	36588-0010	400A	400A	3	240 mm <sup>2</sup>	29320-1300
FMUN 40/4	286x285x143	36505-0010	36588-0010	400A	400A	4	240 mm <sup>2</sup>	29324-1300
FMUN 50/3	286x285x143	36505-0010	36588-0010	500A	500A	3	300 mm <sup>2</sup>	29320-1400
FMUN 50/4	286x285x143	36505-0010	36588-0010	500A	500A	4	300 mm <sup>2</sup>	29324-1400
FMU 63/3	390x245x180	36515-0010	36703-0010	630A	630A	3	2x185 mm <sup>2</sup>	29300-1500
FMU 63/4	475x245x180	36515-0010	36651-0010	630A	630A	4	2x185 mm <sup>2</sup>	29304-1500
FMU 80/3	390x253x180	36515-0010	36703-0010	800A	800A	3	2x185 mm <sup>2</sup>	29300-1600
FMU 80/4	475x253x180	36515-0010	36651-0010	800A	800A	4	2x185 mm <sup>2</sup>	29304-1600

## Master and emergency switches 3-pole, type HSWA

Type HSWA: 205–630 A / AC22B 415 V / AC23B 415 V

Type	Outer dimen- sions W x H x D in mm	Order no. H1S10 Aux. switch 1 NO / 1 NC in pos. 1	Order no. KLAD Terminal cover, single-side	Rated uninter- rupted current I <sub>U</sub>	Rated operat- ing current I <sub>o</sub> AC22B 415 V	Rated operat- ing current I <sub>o</sub> AC23B 415 V	Poles	Max. conductor cross-section	Order no.
HSWA 25/3K	200x210x118	36516-0010	36538-0010	250A	250A	250A	3	185 mm <sup>2</sup>	29160-1000
HSWA 30/3K	200x210x118	36516-0010	36538-0010	315A	315A	250A	3	195 mm <sup>2</sup>	29160-1200
HSWA 40/3K	200x210x118	36516-0010	36538-0010	400A	400A	250A	3	240 mm <sup>2</sup>	29160-1300
HSWA 50/3K	200x225x118	36516-0010	36538-0010	500A	500A	400A	3	2x150 mm <sup>2</sup>	29160-1400
HSWA 63/3K	208x225x118	36516-0010	36538-0010	630A	630A	400A	3	2x185 mm <sup>2</sup>	29160-1500

## Notes

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## Notes



## Efficient distribution

When it comes to reliable power supply, replacing nuclear power by renewable energies is one of the greatest challenges. To this end, EFEN offers consistent solutions for safety interfaces from power generation to power storage and to the selective control of consumers.



## Reliable protection

Reliable protection of people and assets is a key requirement of any power distribution system. The comprehensive solutions from EFEN ensure maximum safety in all areas of power supply, infrastructure and industry.



## Smart monitoring

Higher energy efficiency reduces peak loads and also lower energy costs. Early-warning systems ensure minimal unplanned plant downtimes. Smart solutions from EFEN ensure maximum availability of power distribution systems.

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