

## SUMMARY OF MODELS

Type	FH000	FH00	FH1	FH2	FH3	LTL4a
Rated operating current $I_e$	160 A	160 A	250 A	400 A	630 A	1 600 A
Rated operating voltage AC/DC $U_e$	690 V	690 V	690 V	690 V	690 V	690 V
Size	000	00	1	2	3	4a
Fuse-link size	000	000/00	1	2	3	4a
Utilization category at AC 400 V	AC-23B	AC-23B	AC-23B	AC-23B	AC-23B	AC-22B

Accessories							
Remote signalings of cover position		OD-FH-SK					EMV-LTL4a
Connecting sets		CS-FH000-..., N3x10-FH000	CS-FH00-...	CS-FH12-..., CS-FH123-...	CS-FH12-..., CS-FH2-..., CS-FH123-...	CS-FH3-..., CS-FH123-...	-
Interconnecting busbars		CS-FH000-3L	CS-FH000-3L	-	-	-	-
Adapters for busbar systems with spacing 60mm		OD-FH000-AL60	OD-FH00-AL60	OD-FH1-AL60	OD-FH2-AL60	OD-FH3-AL60	-
Assembly kits for 2-pole, 4-pole		OD-FH000-SS24	OD-FH00-SS24	OD-FH123-SS24			-
Connecting space covers		OD-FH000-KPA	OD-FH00-KP	OD-FH1-KP	OD-FH2-KP	OD-FH3-KP	-
Barriers		OD-FH000-Z	OD-FH00-Z3	OD-FH1-Z3	OD-FH2-Z3	OD-FH3-Z3	-
Locking inserts		OD-FH000-VU	-	OD-FH123-VU			-
Front shields		OD-FH000-KR	OD-FH00-KR	OD-FH1-KR	OD-FH2-KR	OD-FH3-KR	-

## SUMMARY OF MODELS

### Description

#### Connecting sets

- **Accessory for disconnecter FH000**
- For connection of CU/AL conductor of cross-section up to 95 mm<sup>2</sup>.



- For connection of 3 Cu conductors/pole of cross-section 10 mm<sup>2</sup>.



- **Accessory for switch-disconnector FH00**
- For connection of Cu/Al conductor of cross-section up to 95 mm<sup>2</sup>.

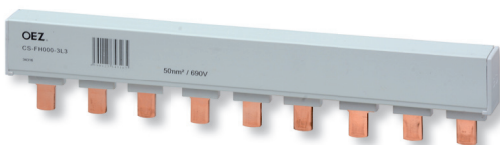


- **Accessory for switch-disconnector FH1, FH2 and FH3**
- For connection of Cu/Al conductor of cross-section up to 150 mm<sup>2</sup> for FH1 and FH2, up to 300 mm<sup>2</sup> for FH3.



#### Interconnecting busbar

- Accessory for switch-disconnector FH000 and FH00.
- For connection from 2 up to 5 pcs. 3-pole switch-disconnectors.



#### Barrier against accident contact

- To increase the safety of personnel in handling switch-disconnector.



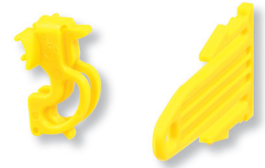
#### Connecting space covers

- For additional covering of connecting space.



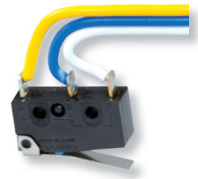
#### Locking insert

- For locking the switch-disconnector cover.



#### Remote signalling of cover position

- Indicates closed state.
- Cable length 1 m.



#### Adapter for busbar system with spacing 60 mm

- Busbar spacing 60 mm.
- Busbar thickness 5 ÷ 12 mm.
- Busbar width 12 ÷ 32 mm.
- Cable outlet bottom or top.



#### Remote signalling of fuse-link state

- Enables remote signalling of fuse-link in fuse switch-disconnector.

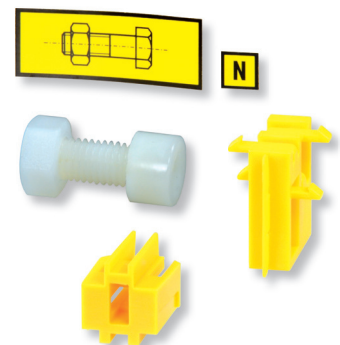
#### Front shield

- Additional covering of free space around the fuse switch-disconnector.

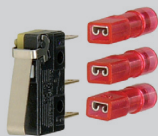


#### Assembly kit

- For assembling 2-pole or 4-pole.



## FUSE SWITCH-DISCONNECTORS LTL4a



- Fuse switch-disconnectors are intended for fuse-links with blade contacts size 4a.
- It enables safe disconnection of rated current according to utilization category.
- LTL4a-3x/9/.. 3-pole fuse switch-disconnector, 1-pole controlled.
- LTL4a-3x3/9/.. 3-pole fuse switch-disconnector, 3-pole controlled.

### Fuse switch-disconnectors

$I_n$ [A]	Number of poles	Type	Order code	Weight [kg]	Package [pcs]
1250	1	LTL4a-1x/9/1250	OEZ:08213	5.600	1
	3	LTL4a-3x/9/1250	OEZ:08211	16.800	1
	3	LTL4a-3x3/9/1250	OEZ:07886	17.700	1
1600	1	LTL4a-1x/9/1600	OEZ:14806	5.800	1
	3	LTL4a-3x/9/1600	OEZ:08714	17.300	1
	3	LTL4a-3x3/9/1600	OEZ:08212	18.200	1

### Signalling of front cover position

- At switch-disconnector closing the contacts 1 and 4 are closed.
- Mounting:  
1-pole control, mounting in each pole.  
3-pole control, mounting in the central pole.

Type	Order code	Weight [kg]	Package [pcs]
EMV-LTL4a	OEZ:10423	0.005	1

Technical information see page C33

## FUSE SWITCH-DISCONNECTORS LTL4a

### Specifications

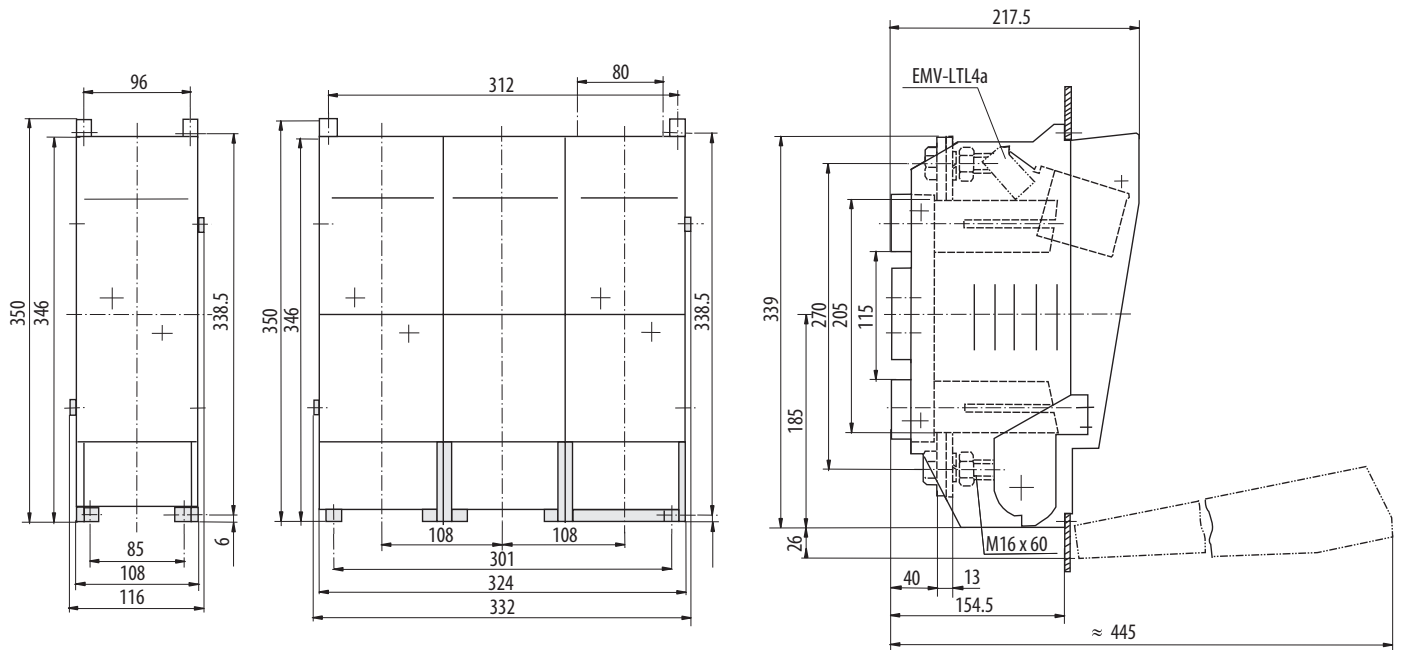
Type		LTL4a..1 250 A	LTL4a.. 1 600 A
Standards		IEC 60947-1 IEC 60947-3 EN 60947-1 EN 60947-3	IEC 60947-1 IEC 60947-3 EN 60947-1 EN 60947-3
Approval marks			
Rated operating current	$I_e$	1 250 A	1 600 A
Rated operating voltage	$U_e$	AC/DC 690 V	AC/DC 690 V
Utilization category		AC 500 V AC 690 V	AC-22B AC-21B
		AC 400 V, $\cos \varphi = 0,35$ AC 500 V, $\cos \varphi = 0,35$ AC 690 V, $\cos \varphi = 0,35$ DC 220 V, L/R = 15 ms	7 500 A 3 750 A 1 875 A 1 250 A
Rated making and breaking capacity		AC 500 V AC 690 V	AC-22B AC-21B
		AC 400 V, $\cos \varphi = 0,35$ AC 500 V, $\cos \varphi = 0,35$ AC 690 V, $\cos \varphi = 0,35$ DC 220 V, L/R = 15 ms	7 500 A 3 750 A 1 600 A 1 250 A
Rated thermal current with fuse-link	$I_{th}$	AC 500 V AC 690 V	1 250 A 1 000 A
Rated thermal current with disconnecting link	$I_{th}$		1 250 A 1 600 A
Rated frequency	$f_n$		40 ÷ 60 Hz 40 ÷ 60 Hz
Rated insulation voltage	$U_i$		AC 800 V AC 800 V
Rated conditional short-circuit current (RMS)	$I_{cc}$	AC 400 V	120 kA
		AC 500 V	80 kA
		AC 690 V	50 kA
Rated impulse withstand voltage			8 kV 8 kV
Rated short-time withstand current	$I_{cw}$	1 s	30 kA 35 kA
Fuse-link size			4a 4a
Max. power losses of the fuse-link	$P_v$		110 W 164 W
Power losses at $I_n$ without fuse-link	$P_z$		67 W 67 W
Overvoltage category for AC 690 V			IV IV
<b>Connection</b>			
Connecting screws		M16	2x M12
Torque		50 ÷ 60 Nm	35 ÷ 40 Nm
<b>Operating conditions</b>			
Electrical endurance	operating cycles		200 200
Mechanical endurance	operating cycles		1 000 1 000
Degree of protection from front side, built-in device, cover closed (without measuring holes broken off)			IP20 IP20
Degree of protection from front side, built-in device, cover opened or removed			IP10 IP10
Operating ambient temperature			-25 ÷ +55 °C -25 ÷ +55 °C
Working position			see page I3 see page I3
Max. sea level			2 000 m 2 000 m
Pollution degree			3 3
Seismic resistance according to VE ŠKODA			8 ÷ 50 Hz / 3 g 8 ÷ 50 Hz / 3 g

EN 60947-3 ed. 2/A2, p. C.5 Instructions for the use of 1-pole controlled devices states:

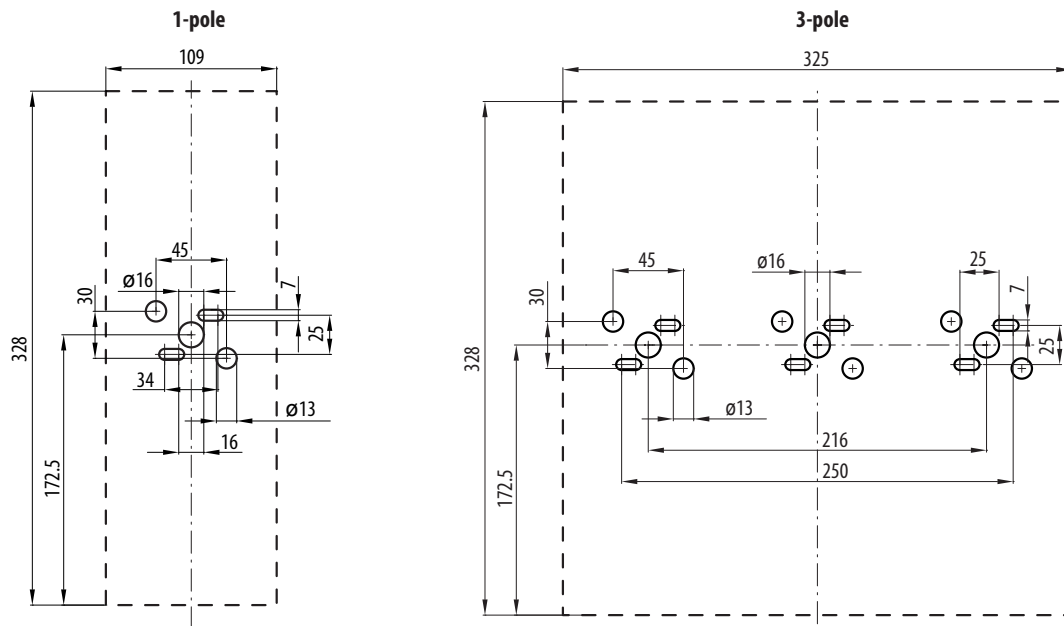
These devices are intended for distribution systems, with possible necessity of switching and/or safe disconnection of individual phases, and must not be used for switching a primary circuit of a three-phase equipment

# FUSE SWITCH-DISCONNECTORS LTL4a

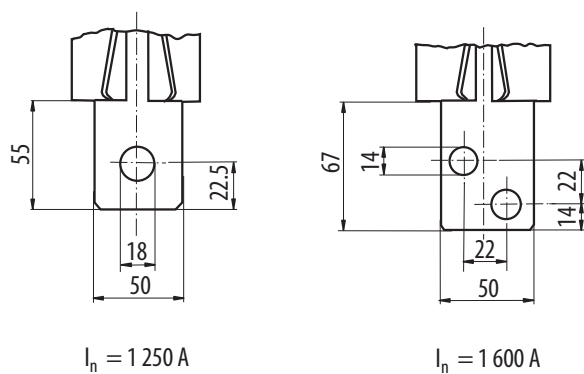
## Dimensions



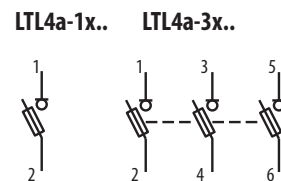
## Clearance and drilling diagrams



## Terminals of switch-disconnector



## Diagram



### Remote signalling of cover position of 1-pole and 3-pole switch-disconnectors

State of contacts with closed cover:  
contacts 1 – 4 closed

