

LV HRC fuse switch-disconnectors



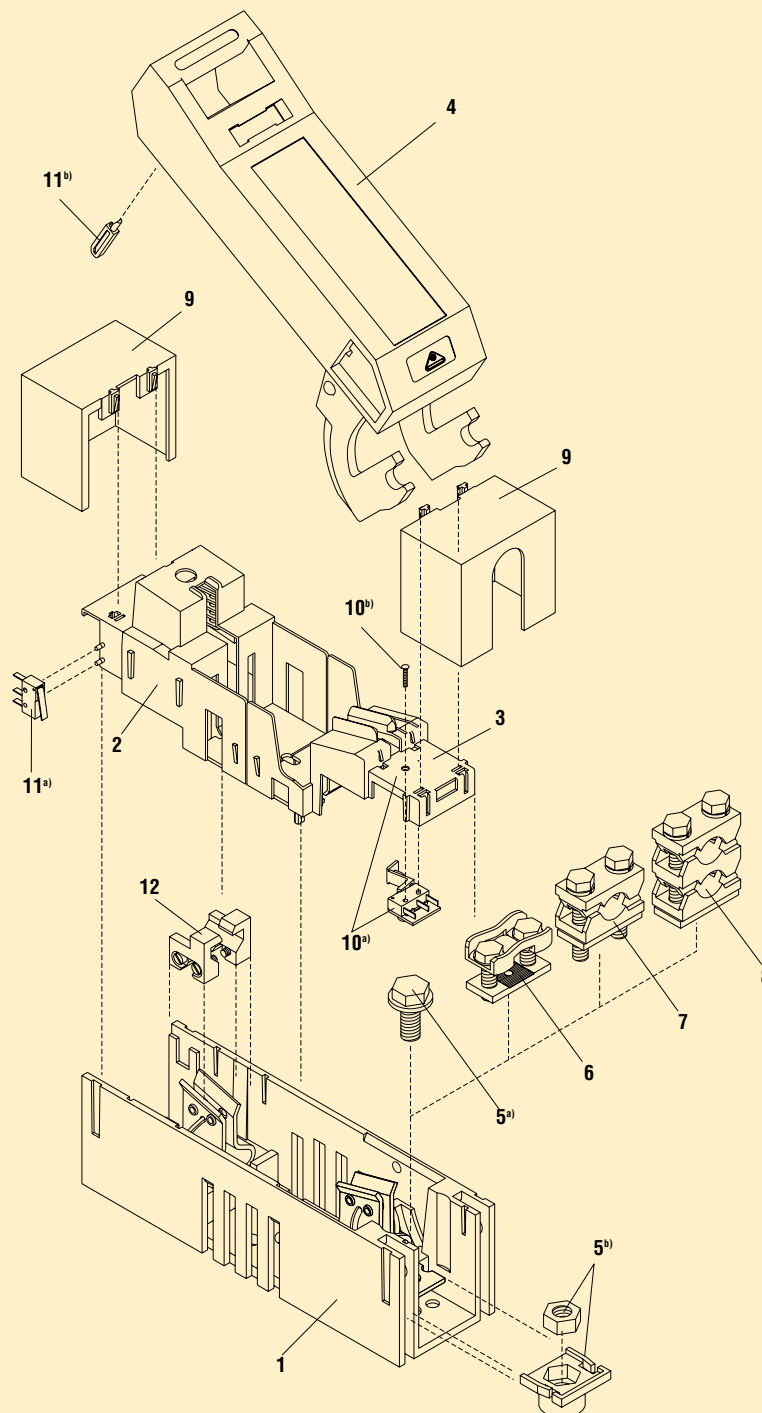
The “9” series LV HRC fuse switch-disconnectors of the DIN sizes 00-4a are suitable for surface mounting on mounting plates and for direct mounting on busbars. The different sizes are available as 1-pole, 2-pole, 3-pole and 4-pole versions.

- Surface mounting
- Busbar mounting
- 1-pole, 2-pole, 3-pole and 4-pole
- Retrofittable cable connections
- Fuse monitor
- Position indication
- DIN rail fixing parts

Product group	Product type	
1-pole / surface mounting, AC 690V 2-pole / surface mounting, DC 440V 3-pole / surface mounting, AC 690V 4-pole / surface mounting, AC 690V 1-pole / busbar mounting, AC 690V 3-pole / busbar mounting, AC 690V 3-pole / surface mounting/splitted design/AC 690V 3-pole / surface mounting, AC 1200V	Sizes 00 - 4a / 160A – 1600A	Page 09-04
	Sizes 00 - 3 / 160A – 630A	09-06
	Sizes 00 - 4a / 160A – 1600A	09-08
	Sizes 00 - 3 / 160A – 630A	09-10
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LV HRC fuse switch-disconnectors, size 1

Example: Surface mounting with accessories, 1-pole



Basic construction

- 1 Base of disconnector U-LTL1-1
- 2 Protective cover, top BO-LTL1-1
- 3 Protective cover, bottom BU-LTL1-1
- 4 Swing-in device D-LTL1-1/9

Connection accessories

- 5^{a)} Screw terminal F-LTL1-M10
- 6 Clamp-type terminal S1
- 7 V terminal clamp P1
- 8 Double V-terminal clamp P12

Covering accessories (Protection against contact)

- 9 Handle protection, top and bottom GOU-LTL1-1

Accessories for mechanical fuse monitoring Position indicator, "ON"

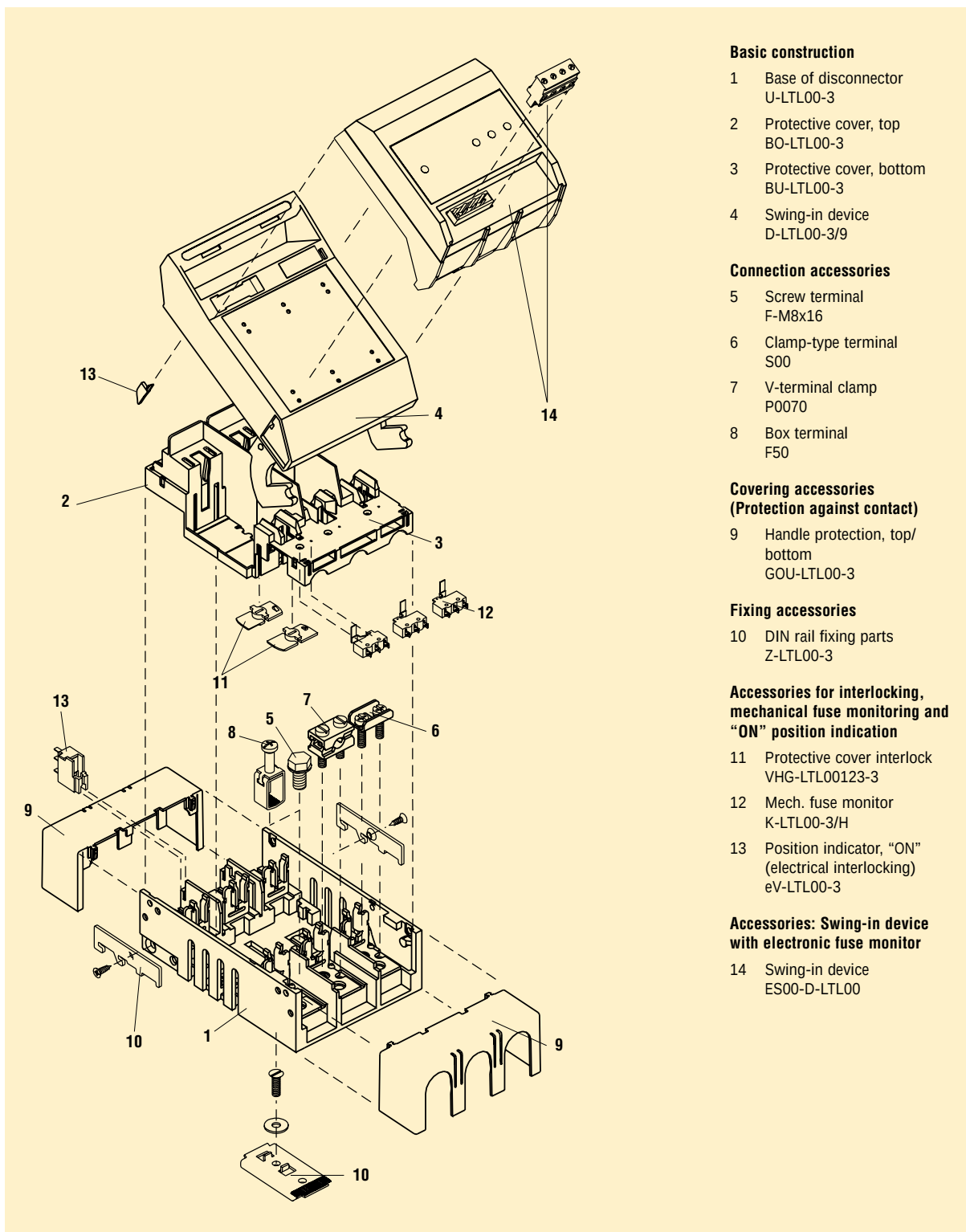
- 10^{a)} Mech. fuse monitor K-LTL1-1/H
- 11^{a)} Position indicator, "ON" (electrical interlocking) eV-LTL123-1

LV HRC fuse switch-disconnectors with quasi-instantaneous circuit

- 12 Quasi-instantaneous circuit LTL1-1/9/Q

LV HRC fuse switch-disconnectors, size 00

Example: Surface mounting with accessories, 3-pole



Basic construction

- 1 Base of disconnector U-LTL00-3
- 2 Protective cover, top BO-LTL00-3
- 3 Protective cover, bottom BU-LTL00-3
- 4 Swing-in device D-LTL00-3/9

Connection accessories

- 5 Screw terminal F-M8x16
- 6 Clamp-type terminal S00
- 7 V-terminal clamp P0070
- 8 Box terminal F50

Covering accessories (Protection against contact)

- 9 Handle protection, top/bottom GOU-LTL00-3

Fixing accessories

- 10 DIN rail fixing parts Z-LTL00-3

Accessories for interlocking, mechanical fuse monitoring and "ON" position indication

- 11 Protective cover interlock VH-G-LTL00123-3
- 12 Mech. fuse monitor K-LTL00-3/H
- 13 Position indicator, "ON" (electrical interlocking) eV-LTL00-3

Accessories: Swing-in device with electronic fuse monitor

- 14 Swing-in device ES00-D-LTL00

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

CJO|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

Distribution and instrument cabinets

Powerlizer system electronics

Product definition

LV HRC fuse switch-disconnectors in accordance with EN 60947-3 with swing-in device for accommodating one LV HRC fuse-link in accordance with DIN 43620, sizes 00/160A to 4a/1600A.

Applications

Switchgear for system, cable and motor protection in

alternating and direct current systems. The disconnectors are frequently used in battery-powered direct current systems such as UPS systems.

Operational principle

Using a manually-operated swing-in device, the LV HRC fuse-link is swung in (making operation) and pulled out (breaking operation).

Product construction

Swing-in device made of halogen-free self-extinguishing plastics. Split latch-on contact cover. Standard disconnectors are equipped with screw terminals, but can be retrofitted with direct-connection terminals.



Size	Rated operational current (A)	Std.P	Type	Article No.
			LTL...	
Size 00	160	1	00-1/9	T5911012
Size 1	250	1	1-1/9	T1911033
Size 3	630	1	3-1/9	T3911033
Size 4a	1250	1	4A-1X/1250/8	T4311007
Size 4a	1600	1	4A-1X/1600/8	T4311008

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

Switch-
disconnector
fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnector
(SALIT)

Terminals

LV
HRC strip-
fuseways

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

C|O|S|M|O®-
60mm Busbar
System

Current
transformers

Consumer
supply technology

Distribution
and instrument
cabinets

Powerlizer
system electronics

Product definition

LV HRC fuse switch-disconnectors in accordance with EN 60947-3 with swing-in device for accommodating 2 LV HRC fuse-links in accordance with DIN 43620, sizes 00/160A to 3/630A.

Applications

Switchgear for system, cable and motor protection in direct current systems. The disconnectors are frequently used in bat-

tery-powered direct current systems such as UPS systems.

Operational principle

Using manually-operated swing-in devices, the LV HRC fuse-links are swung in (making operation) and pulled out (breaking operation).

Product construction

Swing-in device made of halogen-free self-extinguishing plastics. Split

latch-on contact cover. Standard disconnectors are equipped with screw terminals, but can be retrofitted with direct-connection terminals.



Size	Rated operational current (A)	Std.P	Type	Article No.
			LTL...	
Size 00	160	1	00-2/9	T5911013
Size 1	250	1	1-2/9	T1911039
Size 3	630	1	3-2/9	T3911035

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

Switch-
disconnector
fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnector
(SALIT)

Terminals

LV
HRC strip-
fuseways

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

C|O|S|M|O®-
60mm Busbar
System

Current
transformers

Consumer
supply technology

Distribution
and instrument
cabinets

Powerlizer
system electronics

Product definition

LV HRC fuse switch-disconnectors in accordance with EN 60947-3 with swing-in device for accommodating 3 LV HRC fuse-links in accordance with DIN 43620, sizes 00-4a / 160A-1600A.

Applications

Switchgear for system, cable and motor protection in

three-phase systems up to 690V AC. The disconnectors are fitted in switchgear cabinets or insulating cases.

Operational principle

Using manually-operated swing-in devices, the LV HRC fuse-links are swung in (making operation) and pulled out (breaking operation).

Product construction

Swing-in device made of halogen-free self-extinguishing plastics. Size 00 and 1 disconnectors with seal. Split latch-on contact cover. Standard disconnectors are equipped with bolt connections, but can be retrofitted with direct-connection terminals.



Size	Rated operational current (A)	Switched poles	Electronic fuse monitor	Quasi-instantaneous circuit	Std.P	Type	Article No.
						LTL...	
Size 00	160	3-pole	Without	Without	1	00-3/9	T5999035
Size 00	160	3-pole	With	Without	1	00-3/9/ES00	T5711200
Size 1	250	3-pole	Without	Without	1	1-3/9	T1999001
Size 1	250	3-pole	With	Without	1	1-3/9/ES00	T1711200
Size 2	400	3-pole	Without	Without	1	2-3/9	T2999001
Size 2	400	3-pole	With	Without	1	2-3/9/ES00	T2711200
Size 3	630	3-pole	Without	Without	1	3-3/9	T3999001
Size 3	630	3-pole	With	Without	1	3-3/9/ES00	T3711200
Size 4a	1250	1-pole	Without	Without	1	4A-3X/1250/8	T4311009
Size 4a	1250	3-pole	Without	With	1	4A-3X3/1250/8/Q	T4311022
Size 4a	1600	1-pole	Without	Without	1	4A-3X/1600/8	T4311010
Size 4a	1600	1-pole	Without	With	1	4A-3X/1600/8/Q	T4311044
Size 4a	1250	3-pole	Without	Without	1	4A-3X3/1250/8	T4311011
Size 4a	1250	1-pole	Without	With	1	4A-3X/1250/8/Q	T4311043
Size 4a	1600	3-pole	Without	Without	1	4A-3X3/1600/8	T4311012
Size 4a	1600	3-pole	Without	With	1	4A-3X3/1600/8/Q	T4311046

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

C|O|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

Distribution and instrument cabinets

Powerlizer system electronics

Product definition

LV HRC fuse switch-disconnectors in accordance with EN 60947-3 with swing-in device for accommodating 4 LV HRC fuse-links in accordance with DIN 43620 or 3 LV HRC fuse-links and one disconnecting blade, sizes 00-3 / 160A-630A.

Applications

Switchgear for system, cable and motor protection in three-phase networks (TN-S networks, separate N and PE conductors).

Operational principle

Using manually-operated swing-in devices, the LV HRC fuse-links are swung in (making operation) and pulled out (breaking opera-

tion). All 4 poles are switched simultaneously.

Product construction

Swing-in device made of halogen-free self-extinguishing plastics. Split latch-on contact cover. Standard disconnectors are equipped with screw terminals, but can be retrofitted with direct-connection terminals.



Size	Rated operational current (A)	Std.P	Type	Article No.
			LTL...	
Size 00	160	1	00-4/9	T5911014
Size 1	250	1	1-4/9	T1911036
Size 3	630	1	3-4/9	T3911037

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

Switch-
disconnector
fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnector
(SALIT)

Terminals

LV
HRC strip-
fuseways

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

C|O|S|M|O®-
60mm Busbar
System

Current
transformers

Consumer
supply technology

Distribution
and instrument
cabinets

Powerlizer
system electronics

Product definition

LV HRC fuse switch-disconnectors in accordance with EN 60947-3 with swing-in device for accommodating one LV HRC fuse-link in accordance with DIN 43620, size 00/160A for screw-fixing or clipping on busbars.

Applications

Switchgear for system, cable and motor protection in alternating and direct current systems. The disconnectors are fre-

quently used in battery-powered direct current systems such as UPS systems.

NOTE: Not for use with 3-pole busbar systems (observe clearances and creepage distances).

Operational principle

Using a manually-operated swing-in device, the LV HRC fuse-link is swung in (making operation) and pulled out (breaking operation). The disconnectors are supplied directly from the busbar. Bolt connections or

optional direct-connection terminals are used for output.

Product construction

Swing-in device made of halogen-free self-extinguishing plastics. Split latch-on contact cover. The disconnectors are mounted directly on the busbar with M8 screws or with busbar terminals. Bolt connections or optional direct-connection terminals are available for cable outlet.



Size	Rated operational current (A)	Type of connection	Outgoing connection	Busbar fixing	Std.P	Type	Article No.
LTL...							
Size 00	160	Flat termination	Top	Screw	1	00-1/AO	T5410502
Size 00	160	Flat termination	Bottom	Screw	1	00-1/AU	T5401503
Size 00	160	Box terminal	Top	Screw	1	00-1/F70/AO	T5470506
Size 00	160	Box terminal	Bottom	Screw	1	00-1/F70/AU	T5407507
Size 00	160	Box terminal	Top	Terminal	1	00-1/F70/SK/AO	T5470504
Size 00	160	Box terminal	Bottom	Terminal	1	00-1/F70/SK/AU	T5407505
Size 00	160	Flat termination	Top	Terminal	1	00-1/SK/AO	T5410500
Size 00	160	Flat termination	Bottom	Terminal	1	00-1/SK/AU	T5401501
Size 1	250	Flat termination	Top	Screw	1	1-1/AO	T1410502
Size 1	250	Flat termination	Bottom	Screw	1	1-1/AU	T1401503
Size 1	250	Flat termination	Top	Terminal	1	1-1/SK/AO	T1410500
Size 3	630	Flat termination	Top	Screw	1	3-1/AO	T3410502
Size 3	630	Flat termination	Bottom	Screw	1	3-1/AU	T3401503
Size 3	630	Flat termination	Top	Terminal	1	3-1/SK/AO	T3410500
Size 4a	1600	Flat termination	Top	Screw	1	4A-1/AO	T4410500
Size 4a	1600	Flat termination	Bottom	Screw	1	4A-1/AU	T4401501

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

C|O|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

Distribution and instrument cabinets

Powerlizer system electronics

Product definition

LV HRC fuse switch-disconnectors in accordance with EN 60947-3 with swing-in device for accommodating 3 LV HRC fuse-links in accordance with DIN 43620, sizes 000-3, 160A-630A. They are directly contacted on busbars with 40, 50, 60 and 100mm distance between busbar centres.

Applications

Switchgear for system, cable and motor protection in

three-phase systems up to AC690V. The disconnectors are fitted in switchgear cabinets or insulating cases with a busbar system of 40, 50, 60 or 100mm distance between busbar centres.

Operational principle

The devices are fixed on the busbars. Using manually-operated swing-in devices, the LV HRC fuse-links are swung in (making operation) and pulled out (breaking operation).

Product construction

Swing-in device made of halogen-free self-extinguishing plastics. Size 00 and 1 disconnectors with seal. Sizes 00-3 with apertures for voltage testing. Split latch-on contact cover. Standard disconnectors are equipped with screw terminals, but can be retrofitted with direct-connection terminals. The rear contact system allows direct contacting on the busbars.



Size	Rated operational current (A)	Busbar distance	Outgoing connection	Type of connection	Electronic fuse monitor	Std.P	Type	Article No.
							LTL...	
Size 000	125	60	Bottom	F50	Without	1	000	T6407801
Size 00	160	40/50/60	Variable	Flat termination	Without	1	00-3/9/40-60	T5481000
Size 00	160	40/50/60	Variable	Flat termination	With	1	00-3/9/40-60/ES00	T5781000
Size 00	160	40/50/60	Variable	F70	Without	1	00-3/9/40-60/F70	T5487001
Size 00	160	40/50/60	Variable	F70	With	1	00-3/9/40-60/F70/ES00	T5787001
Size 00	160	60	Top	Flat termination	Without	1	00-3/9/6005/AO	T5490648
Size 00	160	60	Bottom	Flat termination	Without	1	00-3/9/6005/AU	T5409647
Size 00	160	60	Top	Flat termination	Without	1	00-3/9/6010/AO	T5490650
Size 00	160	60	Bottom	Flat termination	Without	1	00-3/9/6010/AU	T5409649
Size 1	250	100	Top	Flat termination	Without	1	1-3/9/100/AO	T1410704
Size 1	250	100	Top	Flat termination	With	1	1-3/9/100/AO/ES00	T1710002
Size 1	250	100	Bottom	Flat termination	Without	1	1-3/9/100/AU	T1401700
Size 1	250	100	Bottom	Flat termination	With	1	1-3/9/100/AU/ES00	T1701003
Size 1	250	60	Top	Flat termination	Without	1	1-3/9/60/AO	T1410707
Size 1	250	60	Top	Flat termination	With	1	1-3/9/60/AO/ES00	T1710000
Size 1	250	60	Bottom	Flat termination	Without	1	1-3/9/60/AU	T1401708
Size 1	250	60	Bottom	Flat termination	With	1	1-3/9/60/AU/ES00	T1701001
Size 2	400	100	Top	Flat termination	Without	1	2-3/9/100/AO	T2410706
Size 2	400	100	Top	Flat termination	With	1	2-3/9/100/AO/ES00	T2710002
Size 2	400	100	Bottom	Flat termination	Without	1	2-3/9/100/AU	T2401700
Size 2	400	100	Bottom	Flat termination	With	1	2-3/9/100/AU/ES00	T2701003
Size 2	400	60	Top	Flat termination	Without	1	2-3/9/60/AO	T2410707
Size 2	400	60	Top	Flat termination	With	1	2-3/9/60/AO/ES00	T2710000
Size 2	400	60	Bottom	Flat termination	Without	1	2-3/9/60/AU	T2401708
Size 2	400	60	Bottom	Flat termination	With	1	2-3/9/60/AU/ES00	T2701001
Size 3	630	100	Top	Flat termination	Without	1	3-3/9/100/AO	T3410703
Size 3	630	100	Top	Flat termination	With	1	3-3/9/100/AO/ES00	T3710000
Size 3	630	100	Bottom	Flat termination	Without	1	3-3/9/100/AU	T3401700
Size 3	630	100	Bottom	Flat termination	With	1	3-3/9/100/AU/ES00	T3701001

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

CJO|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

Distribution and instrument cabinets

Powerlizer system electronics

**Current distribution
components**

**LV HRC fuse switch-dis-
connectors**

**3-pole / surface moun-
ting, divided shape /
AC 690V**

**Sizes 00-3 /
160A-630A**

Product definition

LV HRC fuse switch-disconnectors in accordance with EN 60947-3 with swing-in device for accommodating 3 LV HRC fuse-links in accordance with DIN 43620, sizes 00-3 / 160A-630A.

Applications

Switching unit for protection of control units mounted on slide-in chassis. In this series, the basic chassis is divided so that the three upper contacts (infeed contacts) are

mounted on a fixed chassis and the three lower contacts are on a slide-in chassis.

It must be possible to replace this slide-in chassis, which is equipped with sensitive control units, quickly in the case of a fault. This can be done by switching off this LV HRC load-disconnect fuse without the need to disconnect any cables. Typical application: the chemical industry.

Operational principle

Using manually-operated swing-in devices, the LV

HRC fuse-links are swung in (making operation) and pulled out (breaking operation).

Product construction

Swinging unit made of halogen-free, self-extinguishing plastic materials. Sizes 00 and 1 with sealing-facility. Mounting contacts with flange connections, optionally modifiable for use of direct-connection terminals. Snap-on contact covers, switch rack divided.



Size	Rated operational current (A)	Switched poles	Std.P	Type	Article No.
				LTL...	
Size 00	160	3-pole	1	00AG-3/9	T5911085
Size 1	250	3-pole	1	1AG-3/9	T1911052
Size 2	400	3-pole	1	2AG-3/9	T2911038
Size 3	630	3-pole	1	3AG-3/9	T3911051

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

Switch-
disconnect
fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnect
(SALIT)

Terminals

LV
HRC strip-
fuseways

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

C|O|S|M|O®-
60mm Busbar
System

Current
transformers

Consumer
supply technology

Distribution
and instrument
cabinets

Powerlizer
system electronics

Product definition

LV HRC fuse-disconnectors are not covered by any existing standard. The higher voltage requires a longer version, which is achieved with the divided rack. A prerequisite for this special version is that LV HRC fuse links or isolating blades made by the same manufacturer must be used.

Applications

Fuse unit for the protection of equipment and cables in three-phase and DC systems. Frequently used in

the long-distance transmission of power, such as to remote agricultural companies. Also used in DC systems with voltages of up to 1000V, such as electroplating companies and railway systems. No load-disconnect facility.

Operational principle

Using manually-operated swing-in devices, the LV HRC fuse-links are swung in (making operation) and pulled out (breaking operation).

Product construction

Swinging unit made of transparent acrylic glass with screwed-on handle and metal hinges. Connection contacts made of silver-plated electrical copper mounted on a ceramic base. On sizes 1 and 2, the contacts are covered by insulating shrouds to prevent accidental contact. On size 3, they are surrounded by insulating walls. Cables are connected with the aid of screw terminals. The isolating chassis is in two parts. It is made of steel and electrically zinc-plated.



Size	Rated operational current (A)	Switched poles	Mechanical fuse monitor	Std.P	Type	Article No.
					TL...	
Size 1	250	3-pole	Without	1	1-3/1200	T1611007
Size 1	250	3-pole	With	1	1-3/1200/K	T1611005
Size 2	400	3-pole	Without	1	2-3/1200	T2611008
Size 2	400	3-pole	With	1	2-3/1200/K	T2611010
Size 3	630	3-pole	Without	1	3-3/1200	T3611009

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

Switch-
disconnect
fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnect
(SALIT)

Terminals

LV
HRC strip-
fuseways

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

C|O|S|M|O®-
60mm Busbar
System

Current
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Consumer
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Distribution
and instrument
cabinets

Powerlizer
system electronics

Product definition**CLAMP-TYPE TERMINAL**

Direct-connection terminal - clamp-type terminal for Cu conductor and ribbon conductor connection.

V-TERMINAL CLAMP

Direct-connection terminal - V-terminal clamp for Cu conductor and Al conductor connection.

OUTPUT INDICATOR

Output indicator for indication of connected or disconnected state.

MECHANICAL FUSE MONITOR

In conjunction with LV HRC fuse-links with striker, the mechanical fuse monitor indicates fuse failure. The striker actuates a microswitch when the fuse-link is disconnected. The microswitch then passes the failure signal to a control centre.

OVERREACHING PROTECTION

The upper and lower latch-on overreaching protection covers the connection contacts or cable lugs or bare protruding conductors. The live parts are covered probe-safe.

HANDLE PROTECTION FOR BLADES

The overreaching protection for the contact blades of the

LV HRC fuse-links is movably fitted in the front plate.

When the front plate is swung out, the overreaching protection is swung out from the front plate on the face, thus covering the contact blades of the fuse-links probe-safe.

SHROUD

The latch-on covering panels cover the switchboard apertures and ensure IP30 protection in the connected state.

DIN RAIL FIXING PARTS

The retrofittable DIN rail fixing parts consist of two hang-up hooks and a slide. They allow size 00 LV HRC fuse switch-disconnectors to be fixed on two standard rails in accordance with EN 50022 with 100mm to 150mm distance between rail centres.

PROTECTIVE COVER INTERLOCK

The protective cover interlock can be latched into the protective covers. It is interlocked with the basic frame by a 90° turn of a screwdriver.

ELECTRONIC FUSE MONITORING

The electronic fuse monitoring feature ES00 can be used in the voltage range AC 400V to AC 690V. It is self-powered and the infeed can be at either end.

Applications

Direct-connection terminals replace cable lugs. They are suitable for Cu conductors, ribbon conductors and Cu busbars.

Mechanical fuse monitors are used for remote indication of fuse failure.

The overreaching protection prevents accidental contact with live parts.

The overreaching protection for the contact blades of the LV HRC fuse-links is used for supply from below. It prevents accidental contact with the live contact blades of the fuse-links when the front plate is not entirely closed.

Covering panels are used for panel mounting. They ensure complete covering of the panel cutouts and thus IP30 protection.

The DIN rail fixing parts for size 00 LV HRC fuse switch-disconnectors are used in control cabinets in combination with miniature circuit-breakers and in distribution systems in which only standard rails in accordance with EN 50022 are integrated.

Protective cover interlocks ensure that the covers can only be removed by a tool, thus complying with BGV A2 requirements.

	Flat termination	Std.P	Type	Article No.	
	Size 00	3	F-LTL00-M8	K9910001	
	Size 1	3	F-LTL1-M10	K9910007	
	Size 2	3	F-LTL2-M10	K9910008	
	Size 3	3	F-LTL3-M10	K9910010	
	Clamp-type terminal	Std.P	Type	Article No.	Switch-disconnector-fuses (SASIL) LV HRC system
	Size 00/1,5-70 mm ² Cu (also for GU00)	3	S00-Z	K5041013	Switch-disconnector fuses (SASIL) BS system
	Size 1	3	S1	K1011005	
	Size 2	3	S2	K2011005	
	Size 3	3	S3	K3011005	
	V-terminal clamp	Std.P	Type	Article No.	Switch-disconnector-fuses (SASIT) DIN and BS systems
	Size 00/10-70 mm ² Al/Cu	3	P0070-Z	K5141038	Switch-disconnector (SALIT)
	Size 1	3	P1	K1111001	
	Size 2	3	P2	K2111001	
	Size 3	3	P3	K3111001	
	V-terminal clamp for 2-wire connection	Std.P	Type	Article No.	Terminals
	Size 1 (no „K“ version)	3	P12	K1112002	LV HRC strip-fuseways
	Size 2 (no „K“ version)	3	P22	K2112002	
	Size 3 (no „K“ version)	3	P32	K3112002	
	Direct-connection terminal	Std.P	Type	Article No.	LV HRC strip-type fuse switch-disconnectors
	Size 4a, 3-wire connection, 95-150 mm ² , Al/Cu	1	K3G/3/AF40-50	K3203015	LV HRC fuse-bases
	Size 4a, 4-wire connection, 95-150 mm ² , Al/Cu	1	K3G/4/AF40-50	K3204016	
	Size 4a, 2-wire connection, 120-300 mm ² , Al/Cu	1	KV2HG-F/2/300/AF40-50	K2322064	
	Position indicator	Std.P	Type	Article No.	LV HRC fuse switch-disconnectors
	Size 00, 1- and 3-pole	1	EV-LTL00-3	T8520048	C/O/S/M/O® - 60mm Busbar System
	Sizes 1-3, 1-pole	1	EV-LTL123-1	T8920049	
	Sizes 1-3, 3-pole	1	EV-LTL123-3	T8920004	
	Position indicator mechanical fuse monitor	Std.P	Type	Article No.	Current transformers
	Size 4a (1- and 3pole)	1	K/EV-LTL4a	T8420057	Consumer supply technology
	Mechanical fuse monitor 1-pole	Std.P	Type	Article No.	Distribution and instrument cabinets
	Size 00	1	K-LTL00-1/H	T8520003	Powerlizer system electronics
	Size 1 (no „P12“)	1	K-LTL1-1/H	T8120050	
	Size 3 (no „P32“)	1	K-LTL3-1/H	T8320051	

	Mechanical fuse monitor 3-pole	Std.P	Type	Article No.
	Size 00	1	K-LTL00-3/H	T8520029
	Size 1, 3 (no „P12“)	1	K-LTL1-3/H	T8120030
	Size 2 (no „P22“)	1	K-LTL2-3/H	T8220031
	Size 3, (no „P32“)	1	K-LTL3-3/H	T8320032

	Handle protection 3-pole, surface mounting	Std.P	Type	Article No.
	Size 00, top or bottom	1	LTL00-3	T8590523
	Size 1, top	1	GO-LTL1-3	T8190184
	Size 2, top	1	GO-LTL2-3	T8290219
	Size 3, top (also for busbar mounting)	1	GO-LTL3-3	T8390223
	Size 1, bottom	1	GU-LTL1-3	T8190185
	Size 2, bottom	1	GU-LTL2-3	T8290220
	Size 3, bottom, (also for busbar mounting)	1	GU-LTL3-3	T8390224

	Handle protection 3-pole, busbar mounting	Std.P	Type	Article No.
	Size 00, top, system-measurement 195mm	1	GO-LTL00-3/195	T8590462
	Size 00, top, extended, system-measurement 230mm	1	GOV-LTL00-3/230	T8590459
	Size 2, top	1	GOV-LTL2-3	T8290219
	Size 1, top, extended	1	GOV-LTL1-3	T8190226
	Size 00, bottom, system-measurement 195mm	1	GU-LTL00-3/195	T8590463
	Size 2, bottom	1	GUV-LTL2-3	T8290220
	Size 00, bottom, extended, system-measurement 230mm	1	GUV-LTL00-3/230	T8590460
	Size 1, bottom, extended	1	GUV-LTL1-3	T8190227
	Size 2, extension top/bottom	1	GV-LTL2-3	T8290305

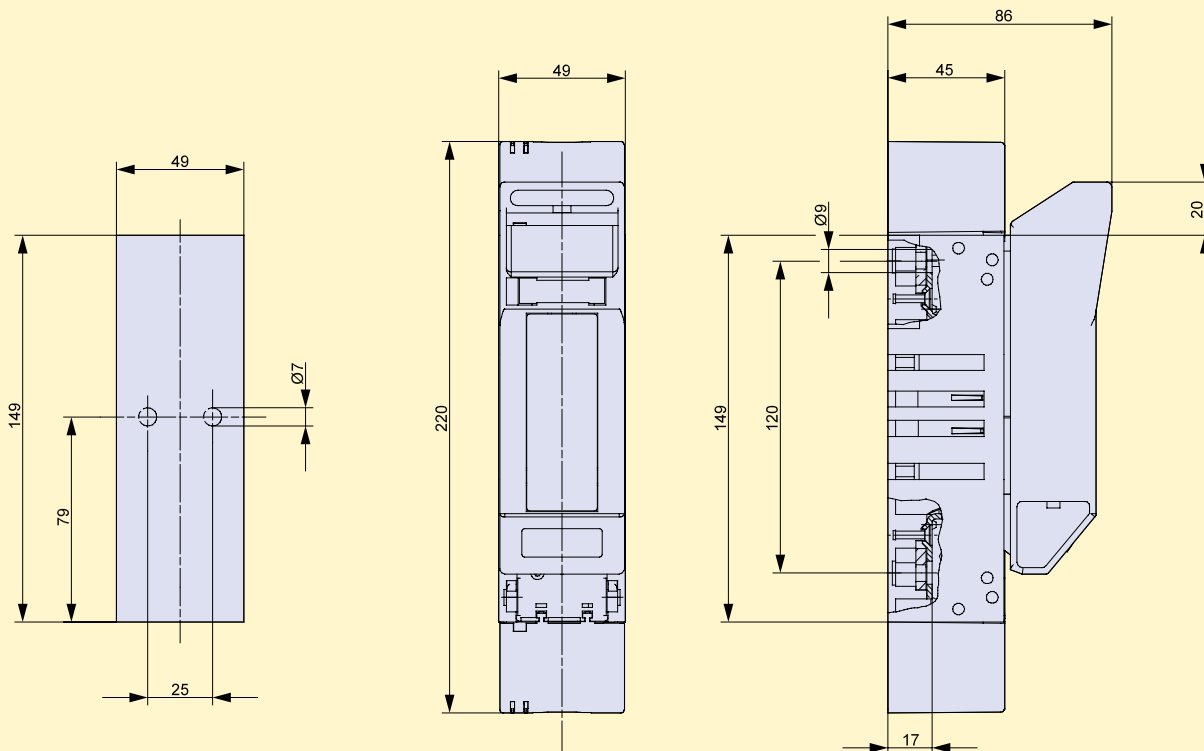
	Handle protection 1-pole, surface- and busbar mounting	Std.P	Type	Article No.
	Size 00, top or bottom	1	GOU-LTL00-1	T8590524
	Size 1, top or bottom	1	GOU-LTL1-1	T8190394
	Size 3, top or bottom	1	GOU-LTL3-1	T8390405

	Electronic fuse monitor 3-pole	Std.P	Type	Article No.
	Size 00	1	ES00-LTL00	T8578100
	Size 1	1	ES00-LTL1	T8178101
	Size 2	1	ES00-LTL2	T8278102
	Size 3	1	ES00-LTL3	T8378103
	Size 4a	1	ES00-LTL4a	T8478104

	DIN rail fixing parts	Std.P	Type	Article No.
	Size 00 (100mm-150mm DIN rail distance)	1	Z-LTL00-3	T8530011

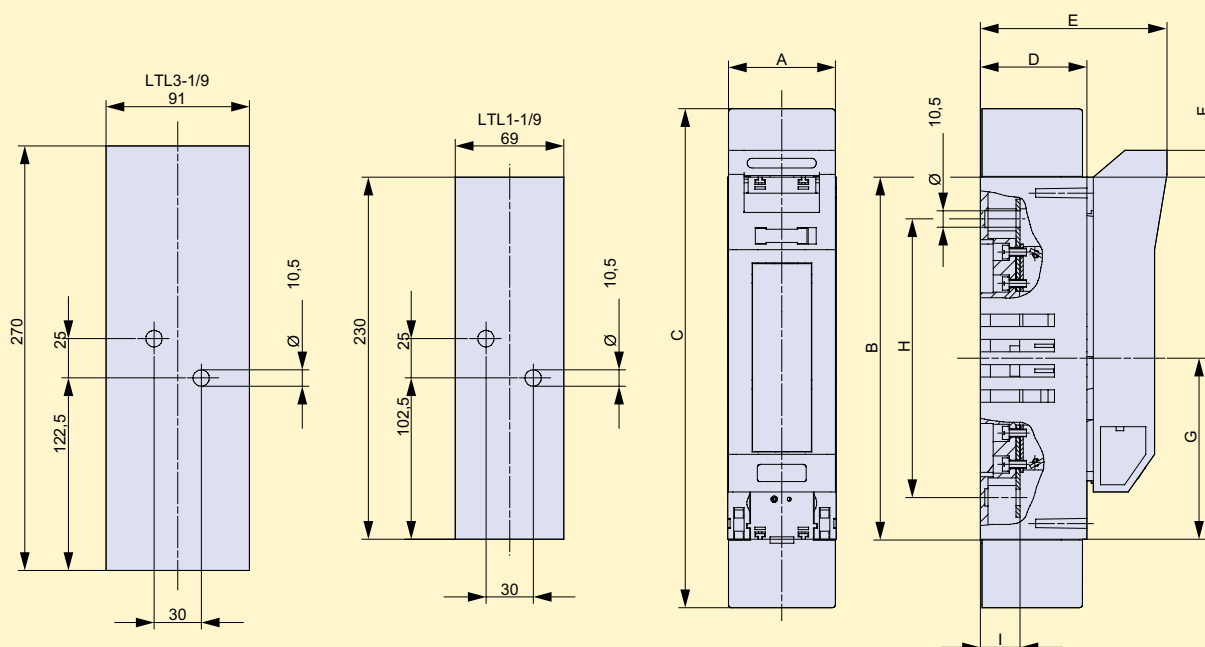
	Swing-in device for earthing 3-pole	Std.P	Type	Article No.
	Size 4a, earthing at the top	1	D-E-LTL4A-3/8/EO	T8460040
	Size 4a, earthing at the bottom	1	D-E-LTL4A-3/8/EU	T8460041

	Swing-in device for earthing	Std.P	Type	Article No.	
	Size 4a, earthing at the top	1	D-E-LTL4A-1/8/EO	T8460203	
	Size 4a, earthing at the bottom	1	D-E-LTL4A-1/8/EU	T8460204	
	Shroud raised	Std.P	Type	Article No.	Switch-disconnector-fuses (SASIL) LV HRC system
	Size 00, H10, L220, W125	1	A001	T8540002	
	Size 00, H10, L220, W115, 60mm depth	1	A004	T8540005	
	Size 1, H10,5, L300, W205	1	A101	T8140019	Switch-disconnector-fuses (SASIL) BS system
	Size 1, H10,5, L330, W230 for version „W“	1	A103	T8140021	
	Size 2, H10,5, L300, W230	1	A201	T8240024	
	Size 3, H10,5, L300, W274	1	A301	T8340029	Switch-disconnector-fuses (SASIT) DIN and BS systems
	Size 3, H10,5, L330, W274 for version „W“	1	A303	T8340031	
	Shroud flat	Std.P	Type	Article No.	Switch-disconnector (SALIT)
	Size 00, L194, W125	1	A006	T8540001	
	Size 00, L216, W234,5	1	A009	T8540011	
	Size 00, L216, W234,5	1	A012	T8540015	
	Size 00, L190, W342	1	A030	T8540055	
	Shroud stepped	Std.P	Type	Article No.	Terminals
	Size 1, H13, L300, W205, 60mm depth	1	A108	T8140064	LV HRC strip-fuseways
	Size 2, H27, L300, W236	1	A206	T8240065	
	Size 3, H16, L300, W274	1	A305	T8340066	
	Handle protection for blades	Std.P	Type	Article No.	LV HRC strip-type fuse switch-disconnectors
	Size 1	1	GM-LTL1-3	T8190236	LV HRC fuse-bases
	Size 2	1	GM-LTL2-3	T8290237	
	Protective cover interlock	Std.P	Type	Article No.	LV HRC fuse switch-disconnectors
	Sizes 00-3	1	VHG-LTL00123-3	T8920024	
	Busbar adapter	Std.P	Type	Article No.	C O S M O®-60mm Busbar System
	Size 3, top connection / for use with T3999001	1	AL362/AO	T8350084	Current transformers
	Size 3, bottom connection / for use with T3999001	1	AL362/AU	T8350085	
	Cover	Std.P	Type	Article No.	Consumer supply technology
	Degree of protection IP30	5	A-IP30-LTL000	T8690527	Distribution and instrument cabinets
					Powerlizer system electronics



LTL00-1/9

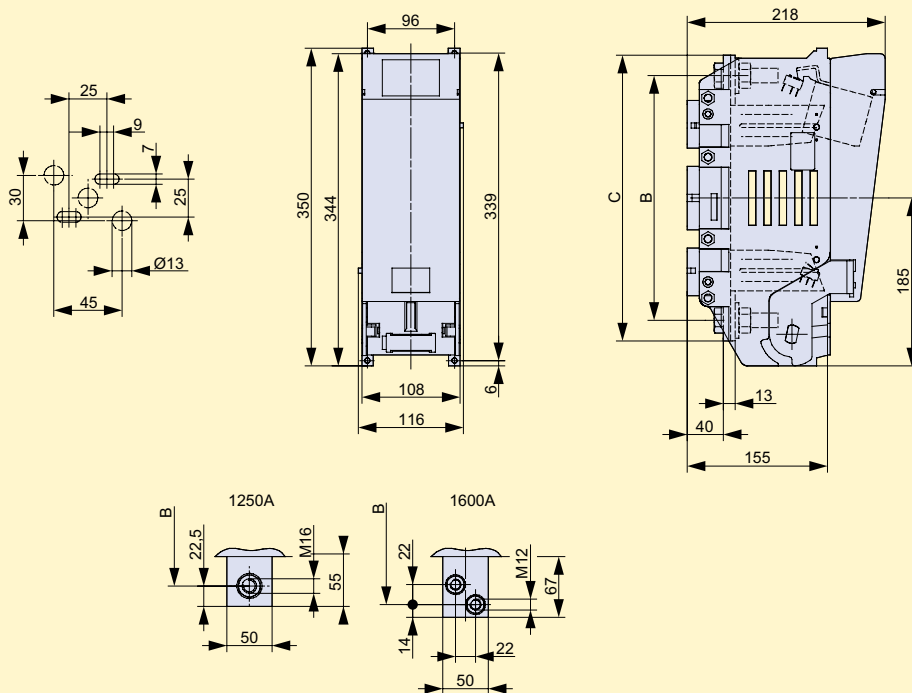
Ordering details see page 9-5



Typ	A	B	C	D	E	F	G	H	I
LTL1-1/9	69	230	317	68	119	16,5	115	177	25
LTL3-1/9	91	270	430	96	147	9	135	220,5	30,5

LTL1-1/9, LTL3-1/9

Ordering details see page 9-5



	B	C
1250A	270	315
1600A	311	339

LTL4A-1X/1250(1600)/8

Ordering details see page 9-5

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

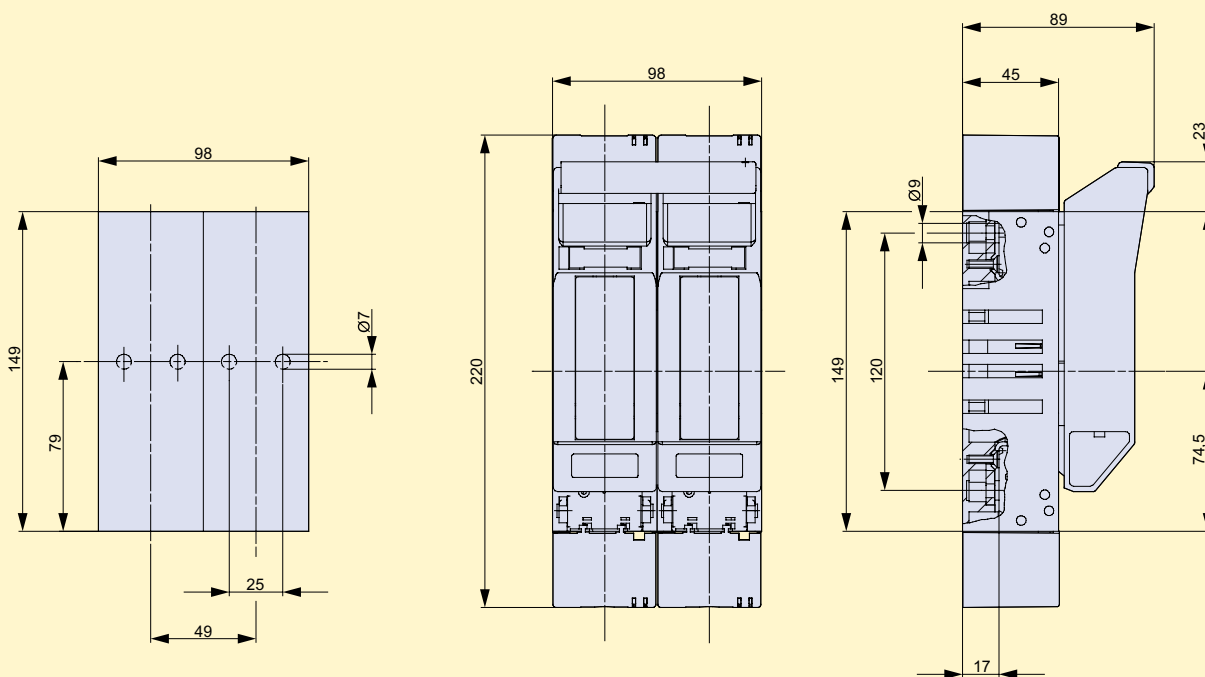
C|O|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

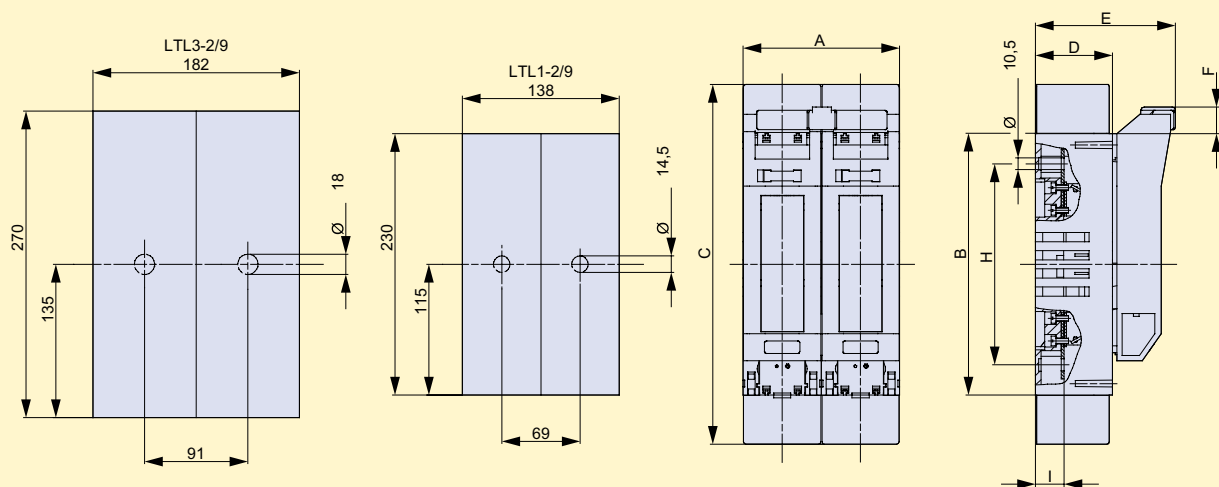
Distribution and instrument cabinets

Powerlizer system electronics



LTL00-2/9

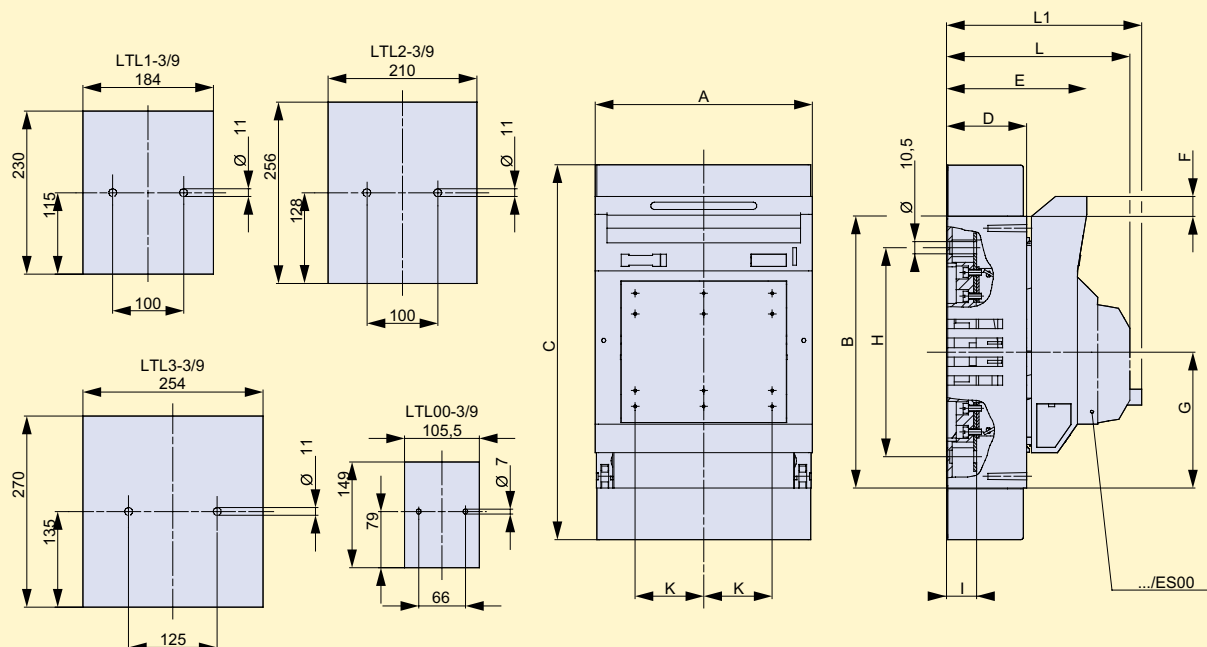
Ordering details see page 9-7



Typ	A	B	C	D	E	F	G	H	I
LTL1-2/9	138	230	317	68	123,5	23	115	177	25
LTL3-2/9	182	270	430	96	151,5	15,5	135	220,5	30,5

LTL1-2/9, LTL3-2/9

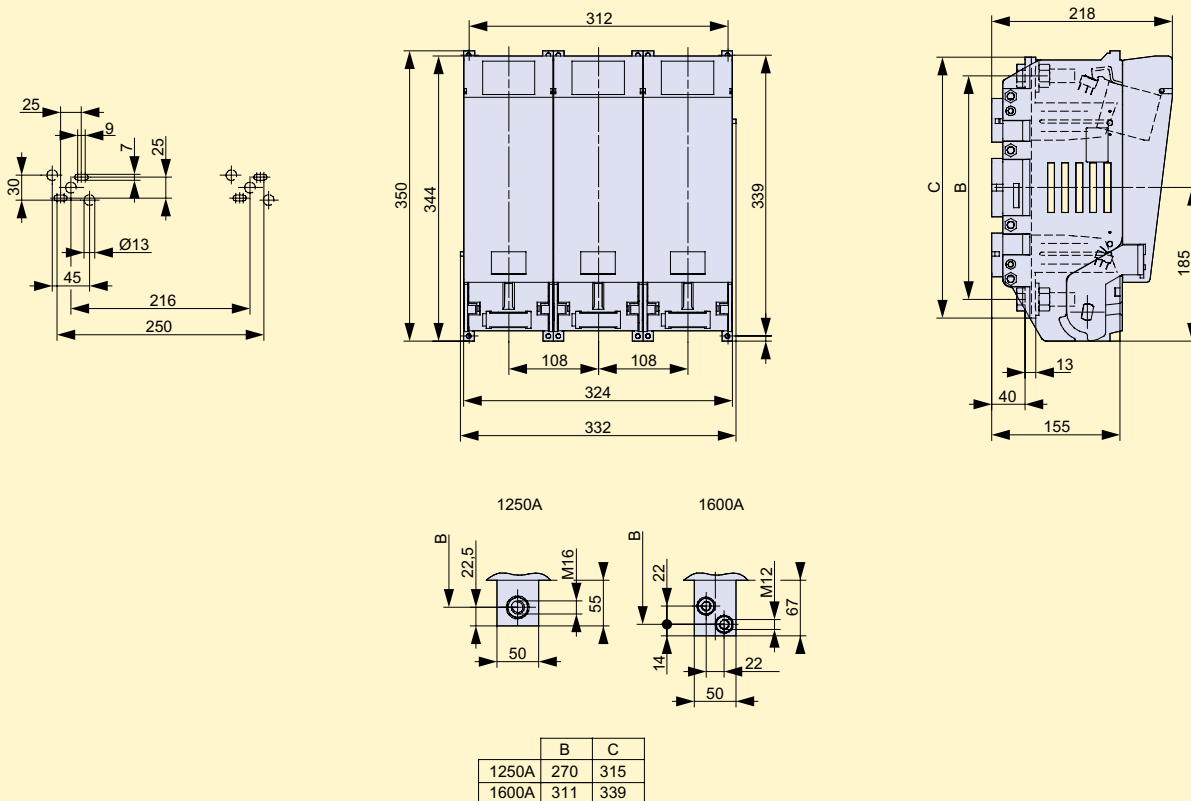
Ordering details see page 9-7



Typ	A	B	C	D	E	F	G	H	I	K	L	L1
LTL00-3/9	105,5	149	220	45	86	20,5	74,5	120	17	33	116	126
LTL1-3/9	184	230	317	68	119	16,5	115	177	25	58	149	159
LTL2-3/9	210	256	397	81	133	16,5	128	205	25	66	163	173
LTL3-3/9	254	270	430	96	147	9	135	220,5	30,5	82	177	187

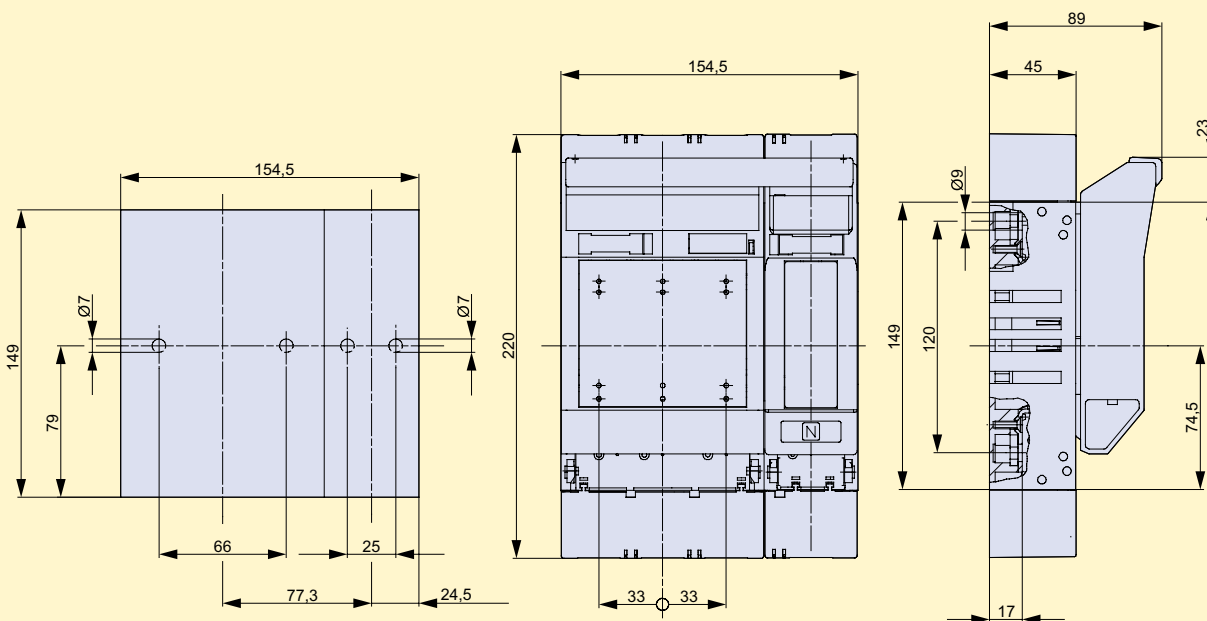
LTL...-3/9, LTL...-3/9/ES00

Ordering details see page 9-9



LTL4A-3x(3)/.../8/(Q)

Ordering details see page 9-9



LTL00-4/9

Ordering details see page 9-11

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

Switch-
disconnector
fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnector
(SALIT)

Terminals

LV
HRC strip-
fuseways

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

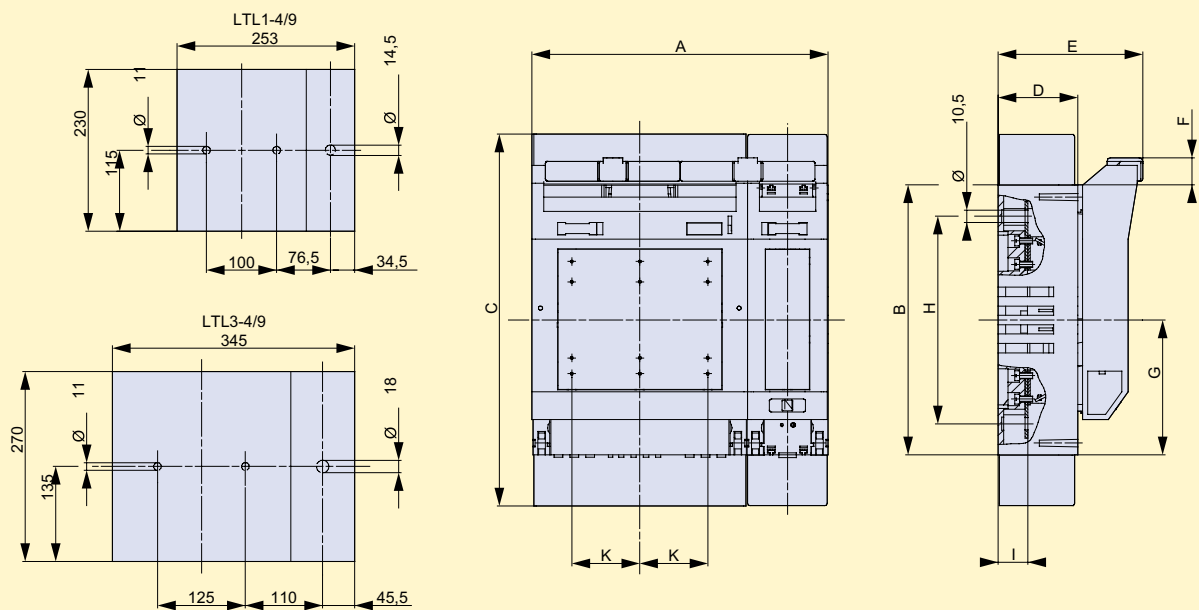
C|O|S|M|O®-
60mm Busbar
System

Current
transformers

Consumer
supply technology

Distribution
and instrument
cabinets

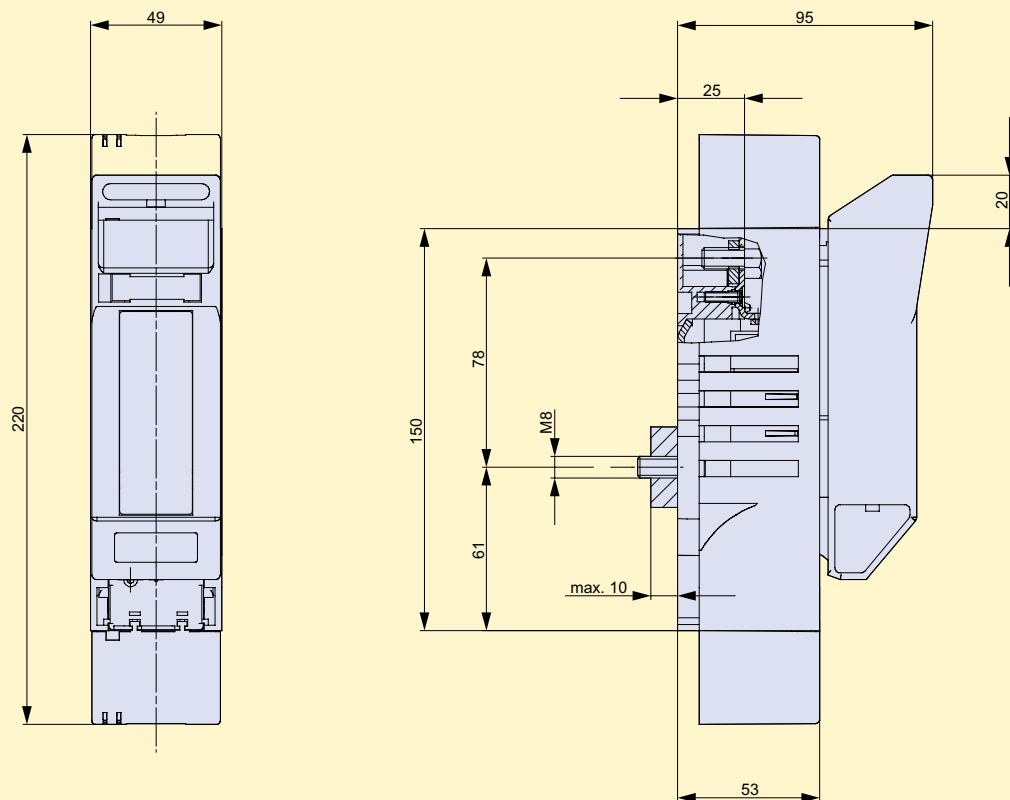
Powerlizer
system electronics



Typ	A	B	C	D	E	F	G	H	I	K
LTL1-4/9	253	230	317	68	123,5	23	115	177	25	58
LTL3-4/9	345	270	430	96	151,5	15,5	135	220,5	30,5	82

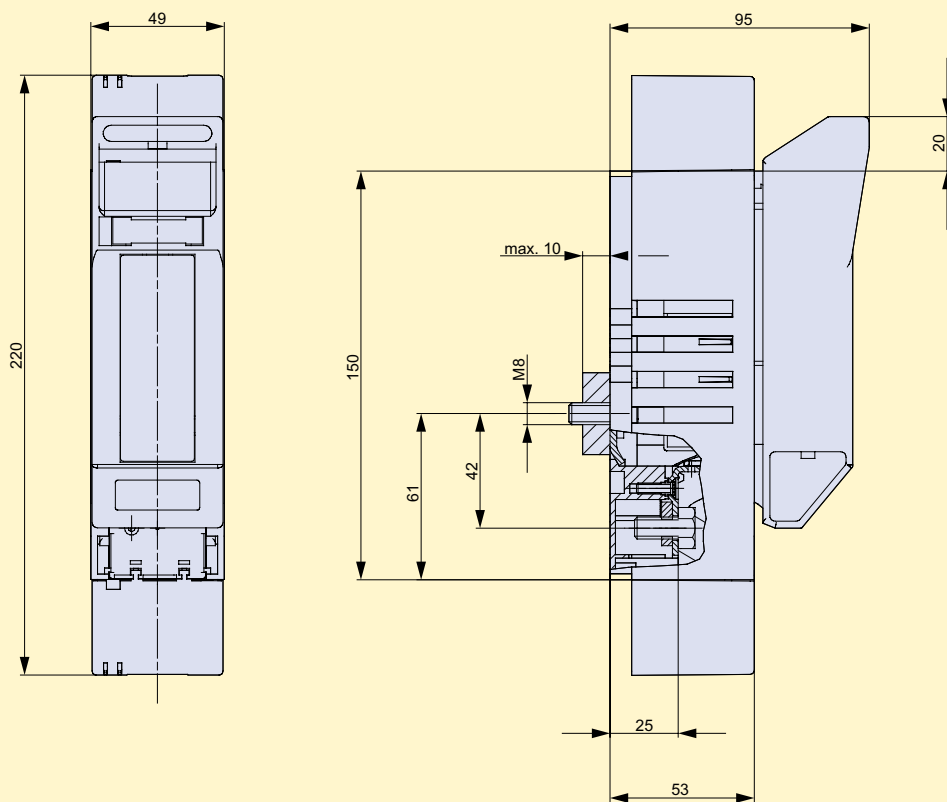
LTL1-4/9, LTL3-4/9

Ordering details see page 9-11



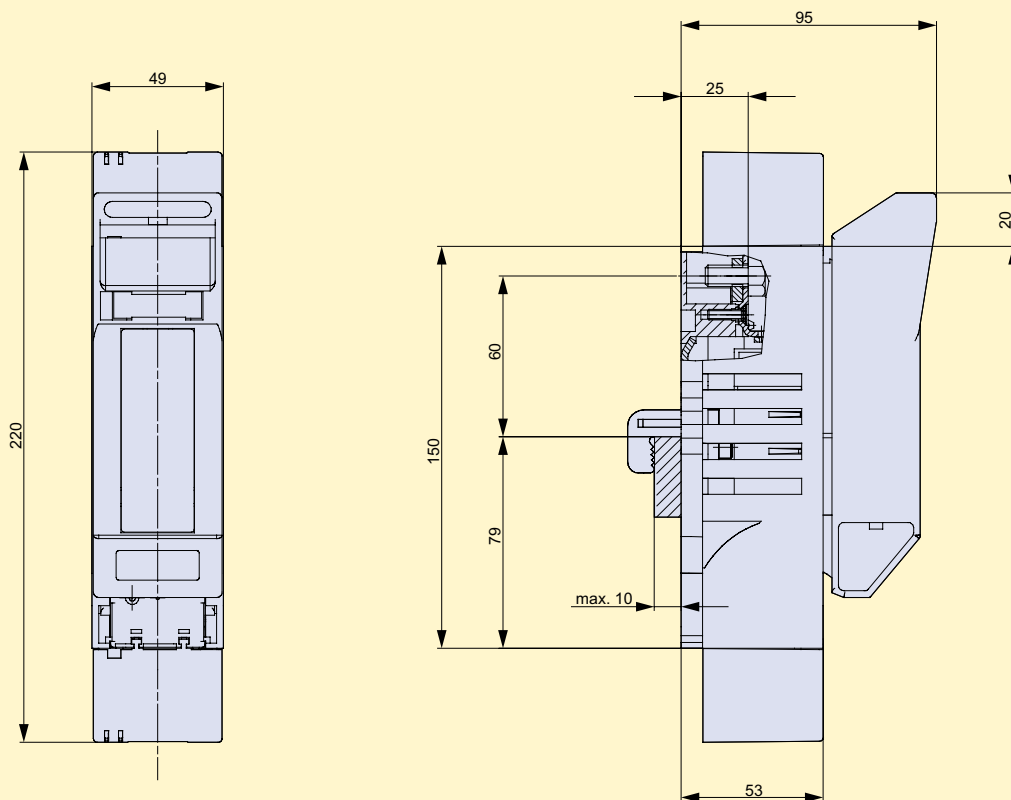
LTLoo-1/AO, LTLoo-1/F70/AO

Ordering details see page 9-13



LTL00-1/AU, LTL00-1/F70/AU

Ordering details see page 9-13



LTL00-1/F70/SK/AO

Ordering details see page 9-13

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

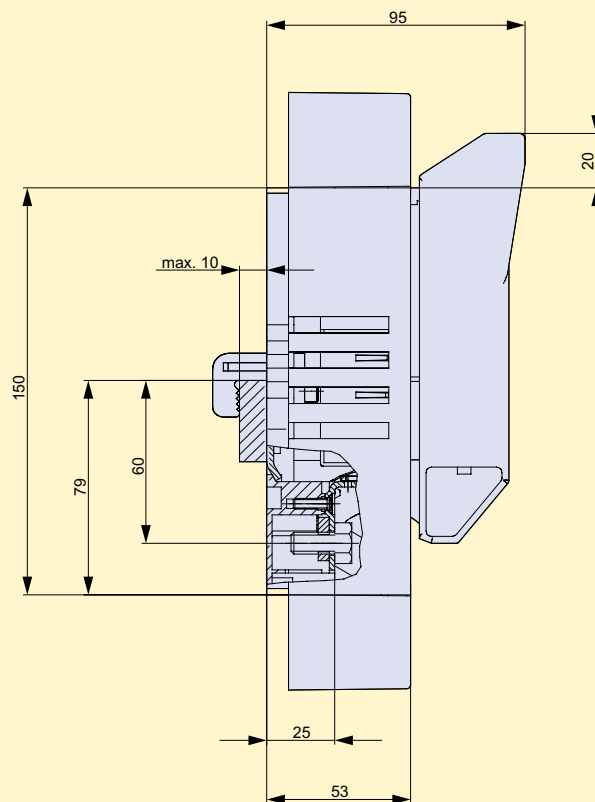
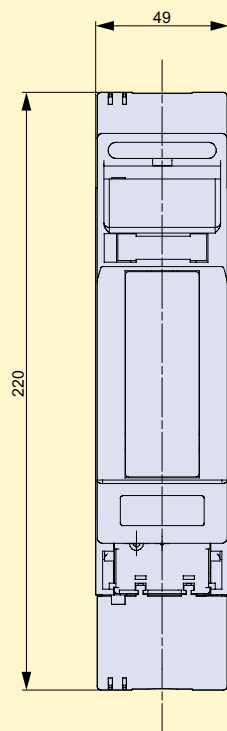
C|O|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

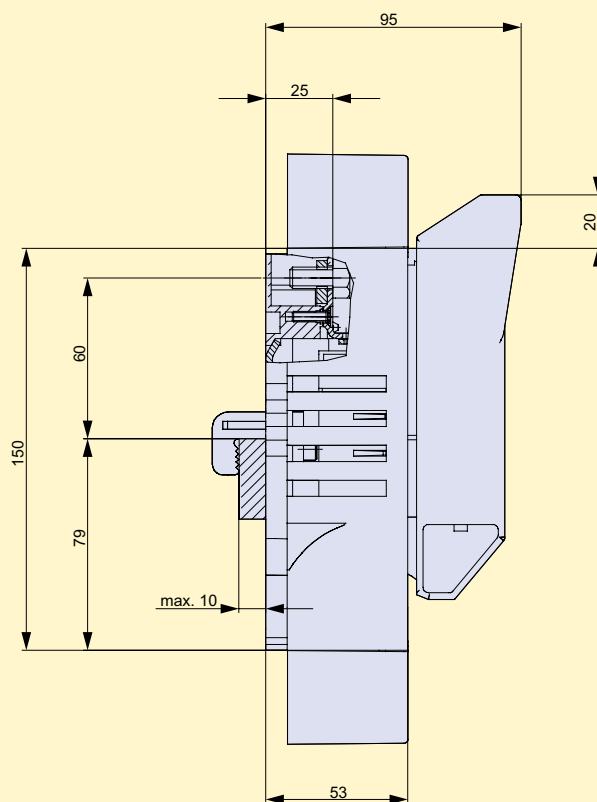
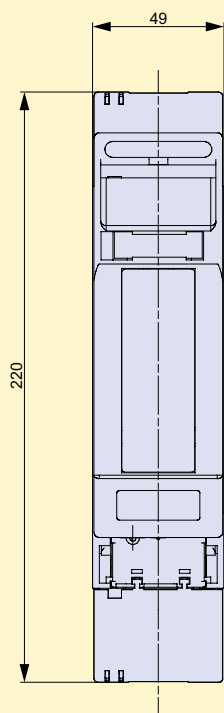
Distribution and instrument cabinets

Powerlizer system electronics



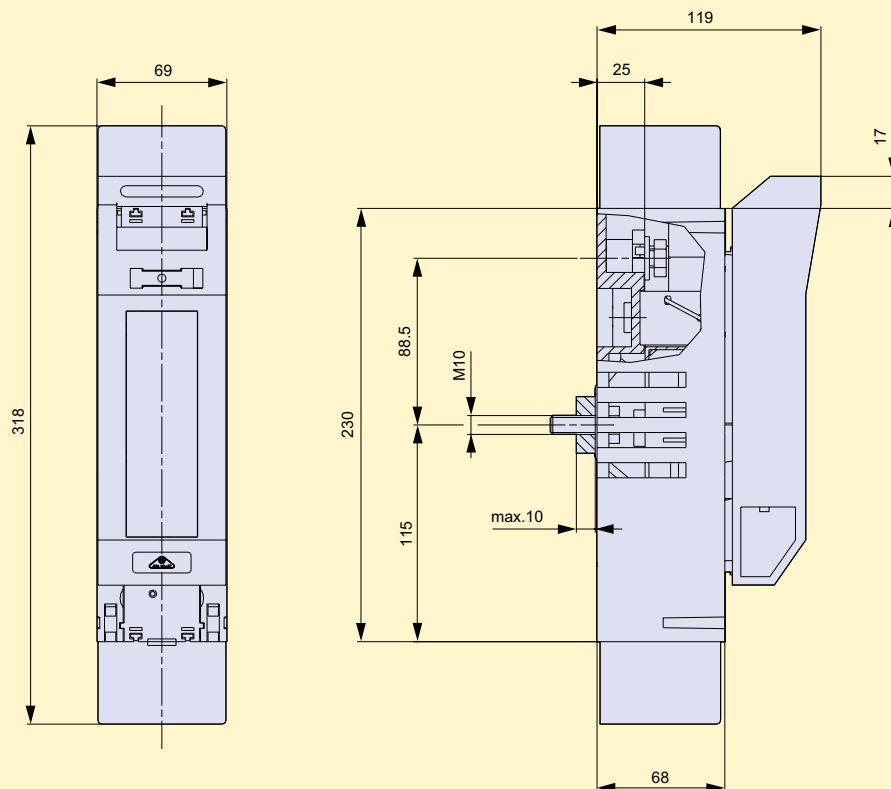
LTL00-1/(F70)SK/AU

Ordering details see page 9-13



LTL00-1/SK/A0

Ordering details see page 9-13



LTL1-1/AO

Ordering details see page 9-13

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

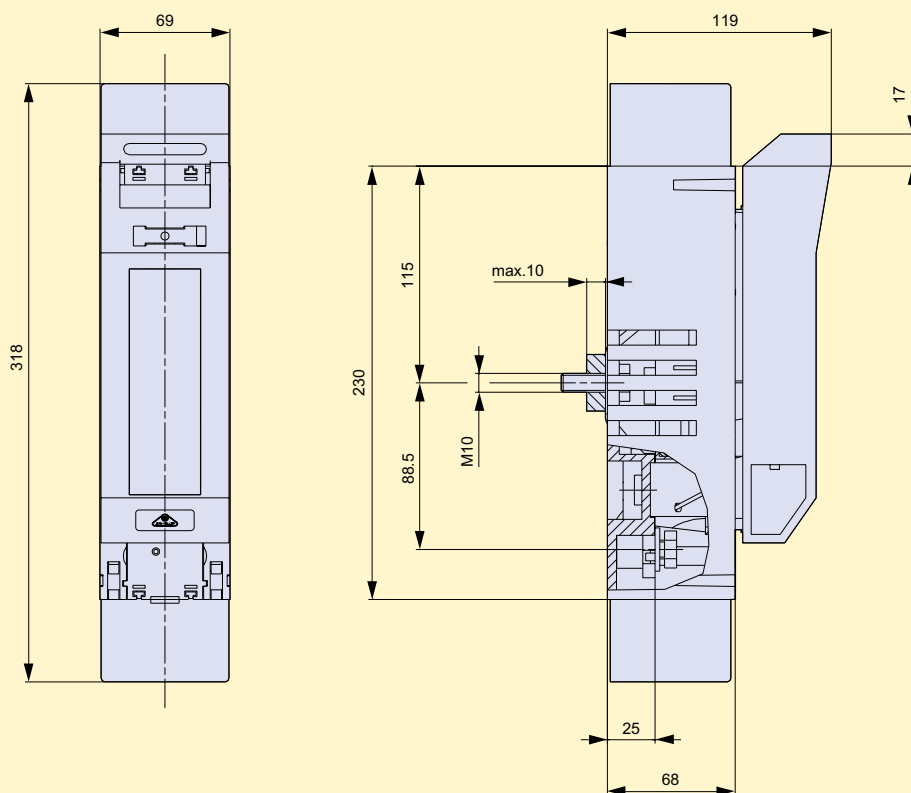
Switch-
disconnecter
fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnecter
(SALIT)

Terminals

LV
HRC strip-
fuseways



LTL1-1/AU

Ordering details see page 9-13

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

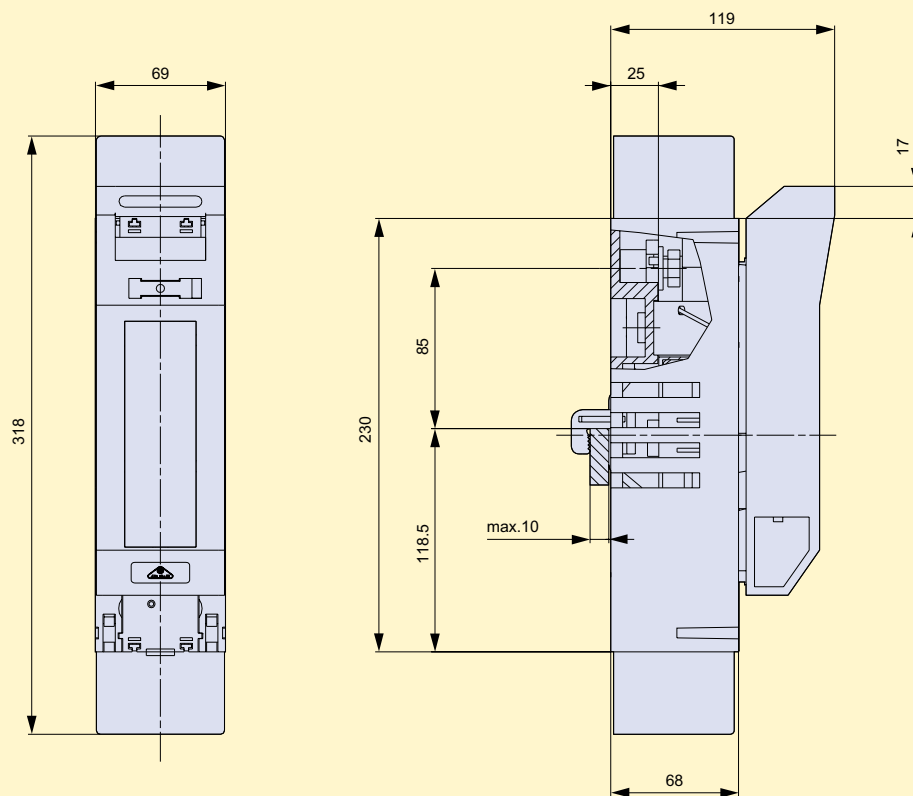
C|O|S|M|O®-
60mm Busbar
System

Current
transformers

Consumer
supply technology

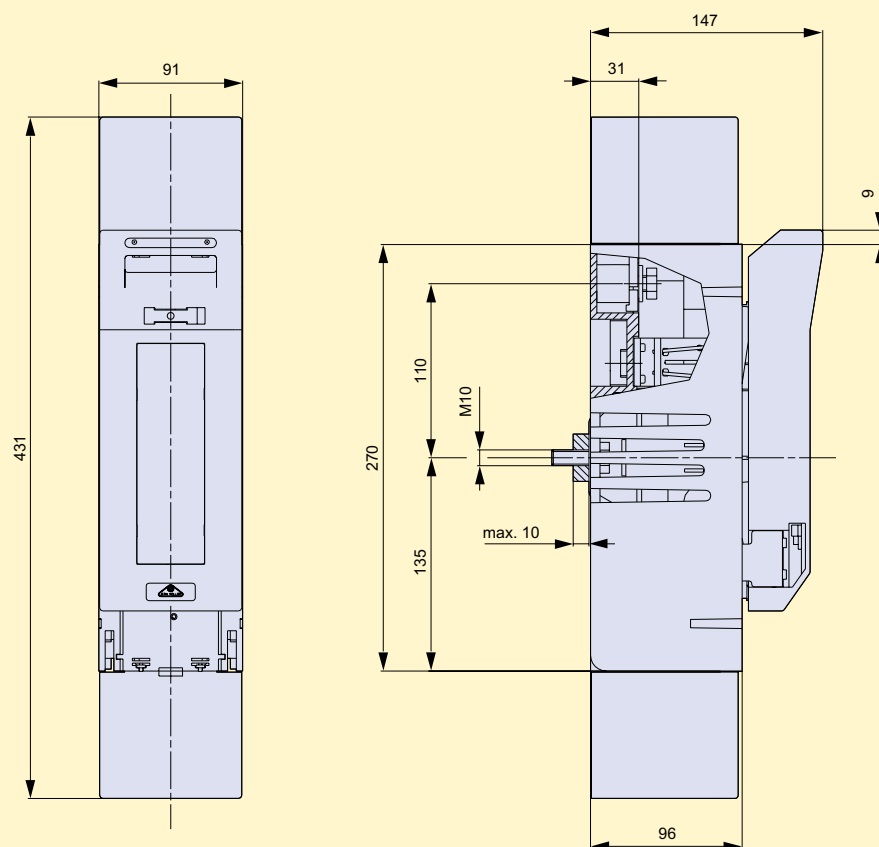
Distribution
and instrument
cabinets

Powerlizer
system electronics



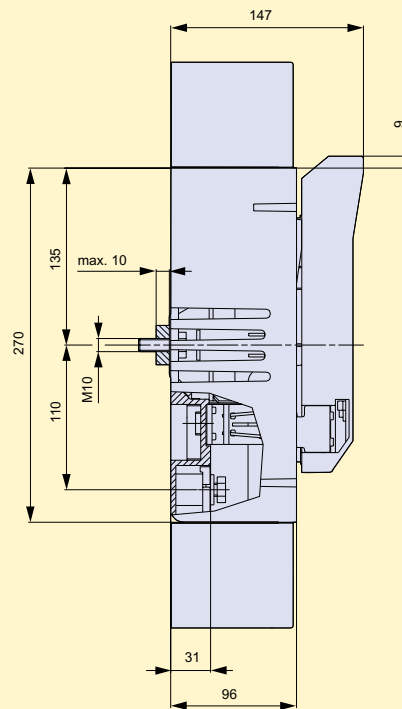
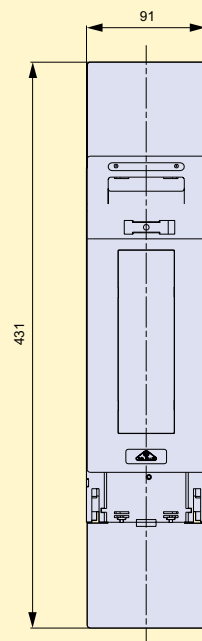
LTL1-1/SK/AO

Ordering details see page 9-13



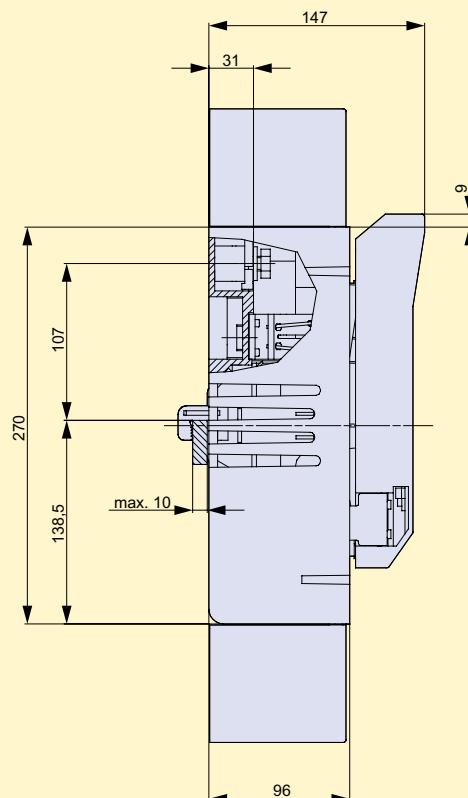
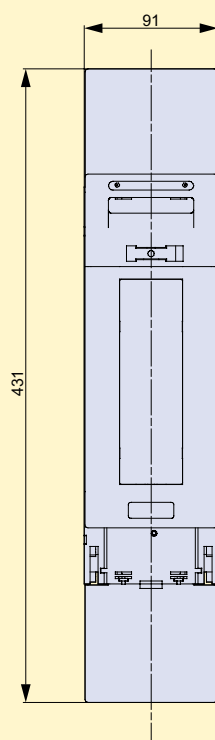
LTL3-1/AO

Ordering details see page 9-13



LTL3-1/AU

Ordering details see page 9-13



LTL3-1/SK/A0

Ordering details see page 9-13

Switch-dis-
connector-fuses
(SASIL) LV HRC
system

Switch-
disconnect-
or-fuses (SASIL)
BS system

Switch-disconnec-
tor-fuses (SASIT)
DIN and BS
systems

Switch-
disconnect-
(SALIT)

Terminals

LV
HRC strip-
fuseways

LV HRC
strip-type
fuse switch-
disconnectors

LV HRC
fuse-
bases

LV HRC
fuse switch-
disconnectors

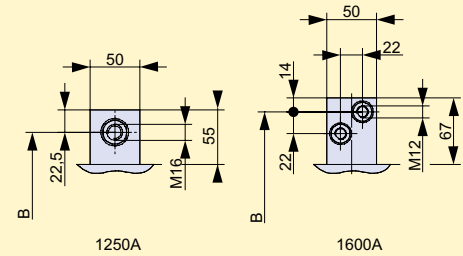
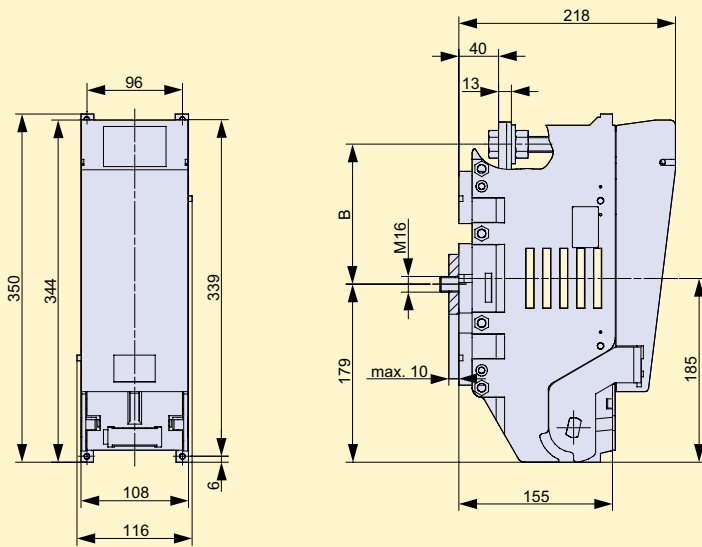
C|O|S|M|O® -
60mm Busbar
System

Current
transformers

Consumer
supply technology

Distribution
and instrument
cabinets

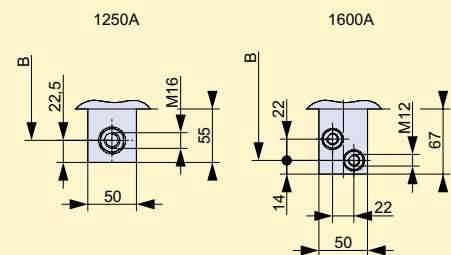
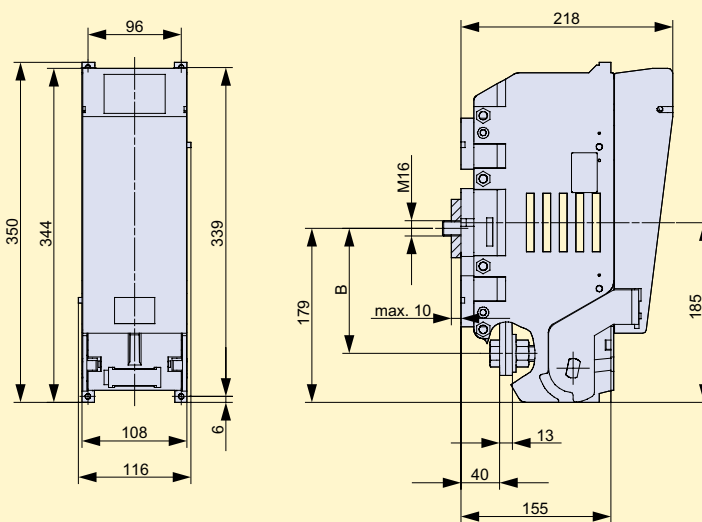
Powerlizer
system electronics



	B
1250A	141
1600A	162

LTL4A-1/AO

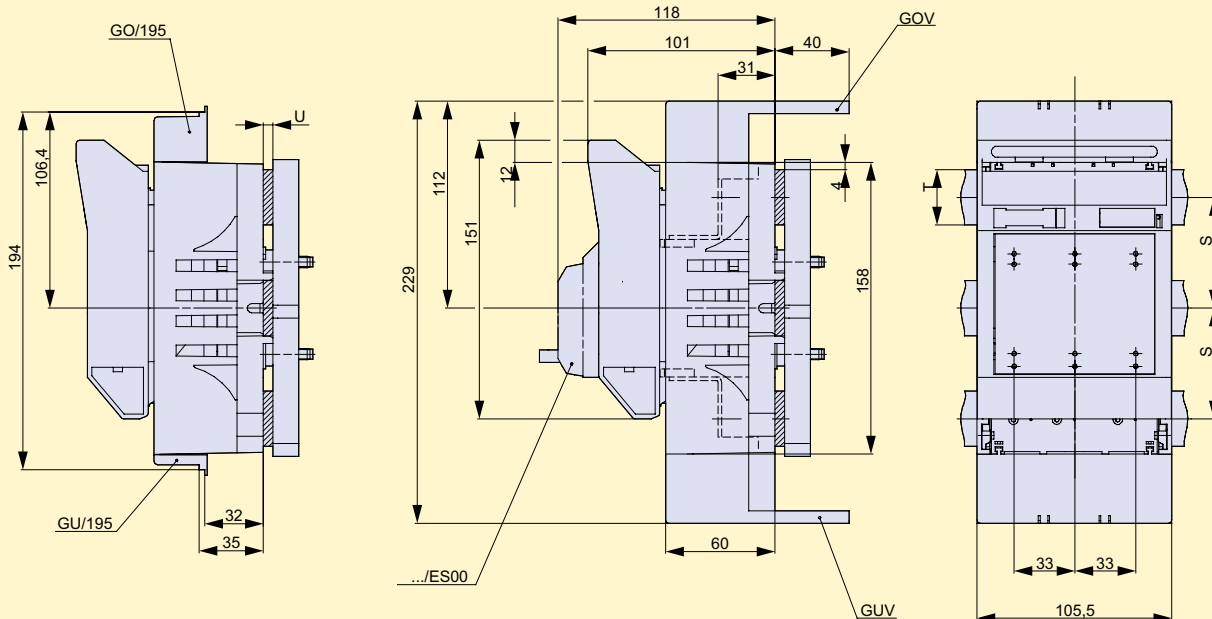
Ordering details see page 9-13



	B
1250A	129
1600A	149

LTL4A-1/AU

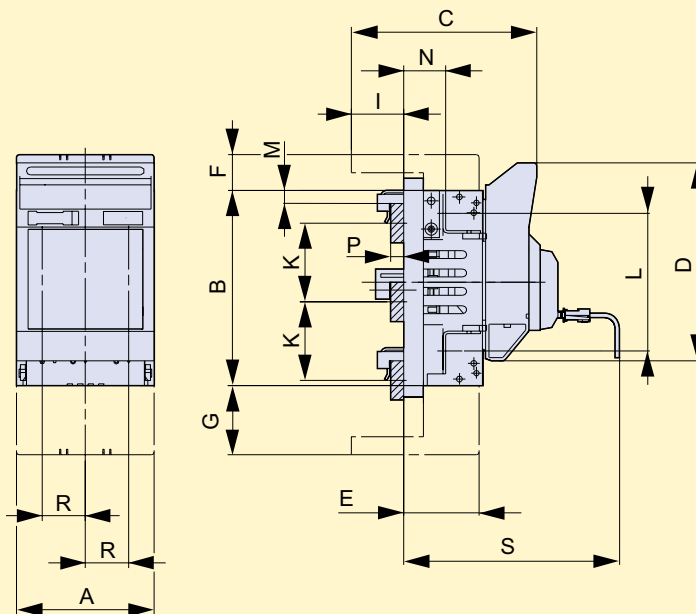
Ordering details see page 9-13



Typ	S	T	U
LTL00-3/9/40-60	40	12	5-10
	50	20	5-15
	60	20-30	5-10

LTL00-3/9/40-60/(F70)/(ES00)

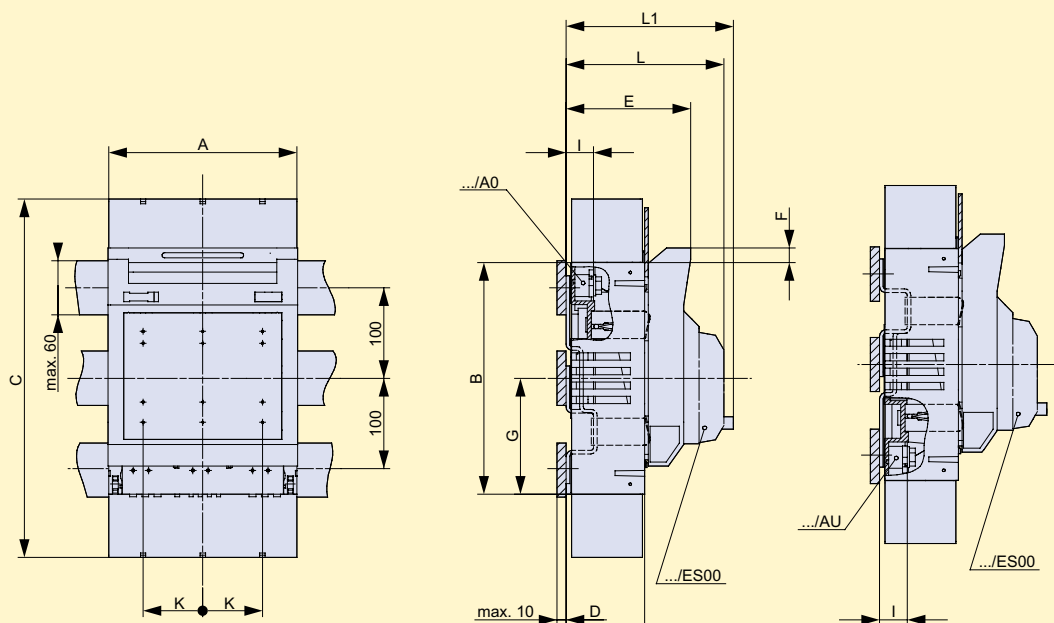
Ordering details see page 9-15



Typ	A	B	C	D	E	F	G	I	K	L	M	N	P	R	S
LTL00-3/9/6005	105	149	102	151	58	27.25	52.75	40	60	120	10	32	5	33	222
LTL00-3/9/6010	105	149	102	151	58	27.25	52.75	40	60	120	10	32	10	33	222

LTL00-3/9/6005(6010)/AO(AU)

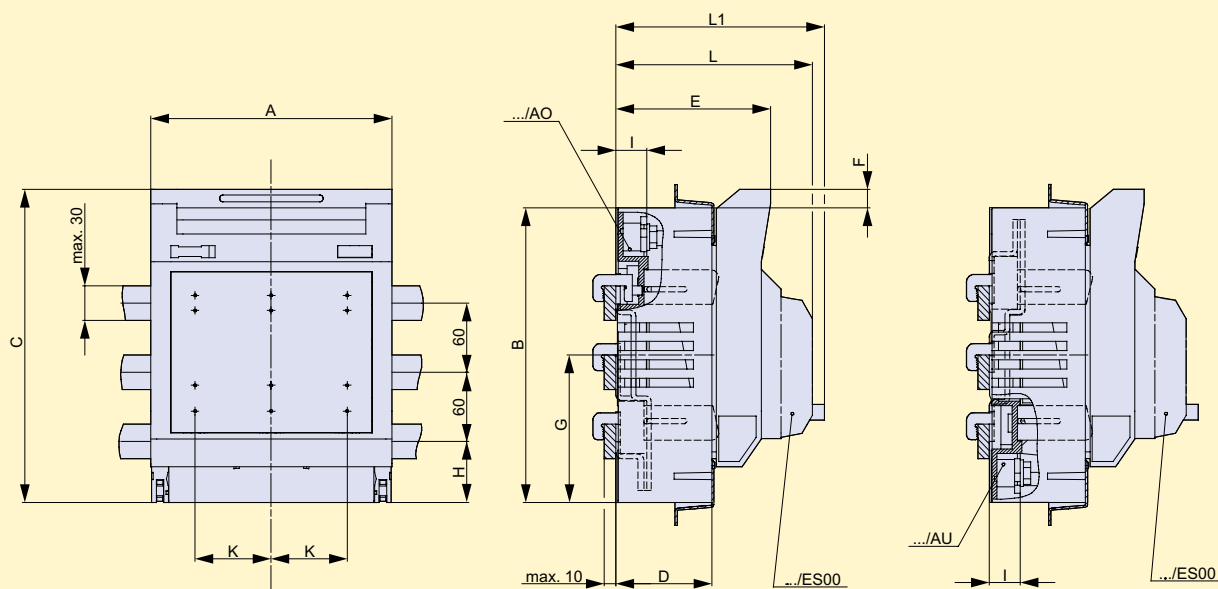
Ordering details see page 9-15



Typ	A	B	C	D	E	F	G	I	K	L	L1
LTL1-3/9/100	184	230	250	74	126	16,5	115	30,5	58	155	165
LTL2-3/9/100	210	256	275	87	142	16,5	128	30,5	66	174	184
LTL3-3/9/100	254	270	283	104	150	9	135	37	82	176	186

LTL...-3/9/100/AO(AU)/(ES00)

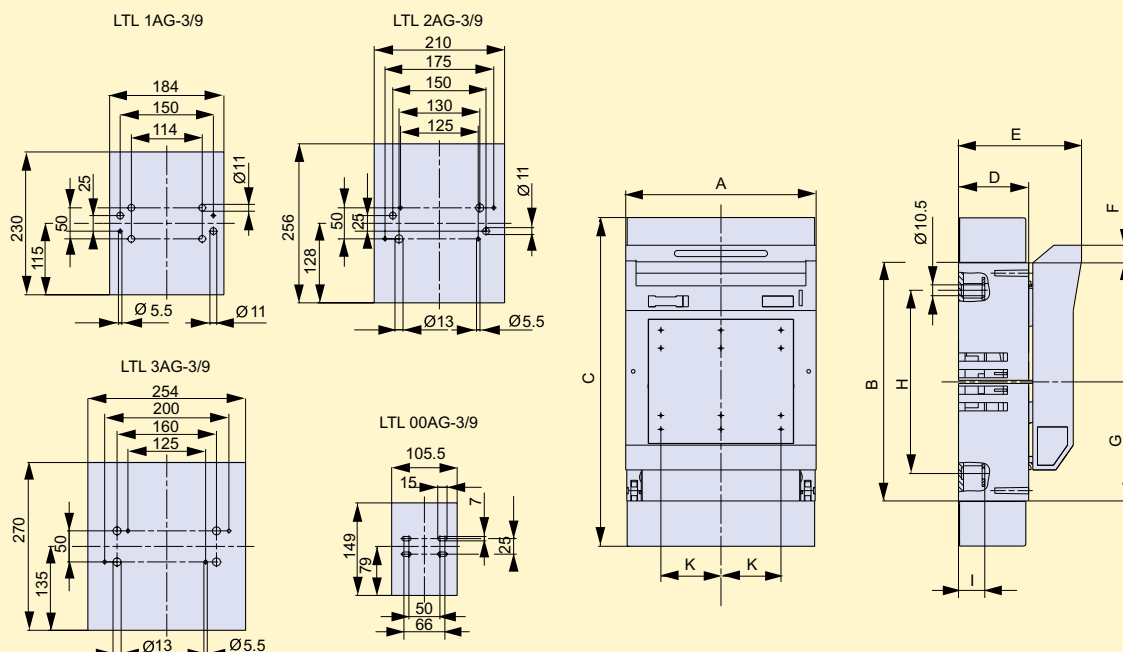
Ordering details see page 9-15



Typ	A	B	C	D	E	F	G	H	I	J	K	L	L1
LTL1-3/9/60	184	230	247	70	121	16,5	115	42	27	55	58	151	161
LTL2-3/9/60	210	256	272	83	135	16,5	128	53	27	55	66	165	175

LTL...-3/9/60/AO(AU)/(ES00)

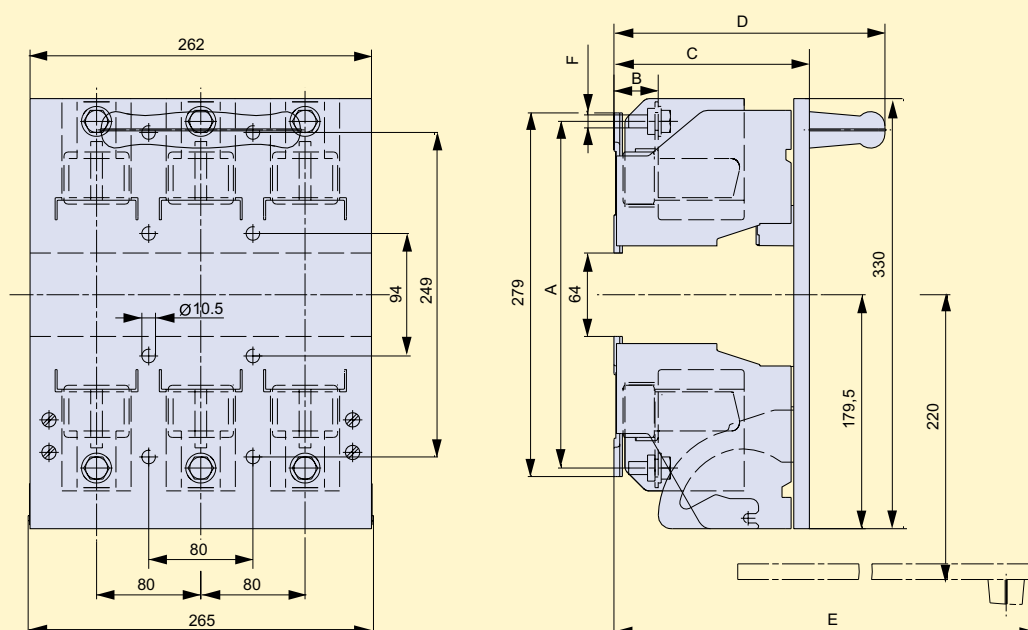
Ordering details see page 9-15



Typ	A	B	C	D	E	F	G	H	I	K
LTL00AG-3/9	105,5	149	220	45	86	20,5	74,5	120	17	33
LTL1AG-3/9	184	230	317	68	119	16,5	115	177	25	58
LTL2AG-3/9	210	256	397	81	133	16,5	128	205	25	66
LTL3AG-3/9	254	270	430	96	147	9	135	220,5	30,5	82

LTL...AG-3/9

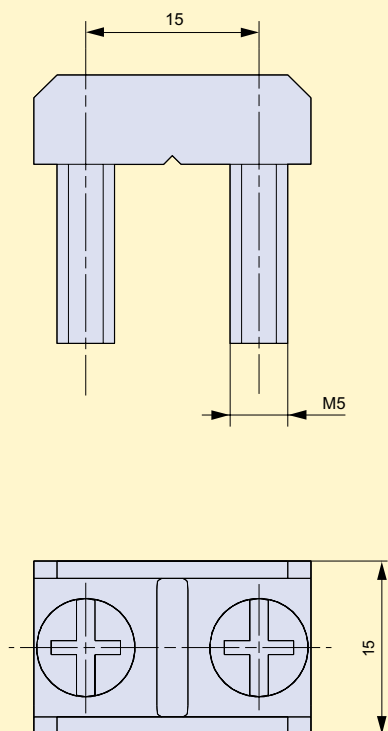
Ordering details see page 9-17



Typ	Current	A	B	C	D	E	F
TL1AG-3/1200	250A	241	34	130	188	410	M10
TL2AG-3/1200	400A	266	34	150	208	430	M10
TL3AG-3/1200	630A	277	35	150	208	430	M12

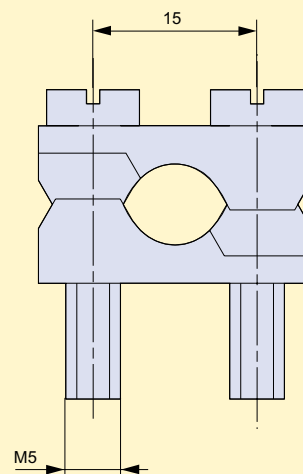
TL...-3/1200/(K)

Ordering details see page 9-19



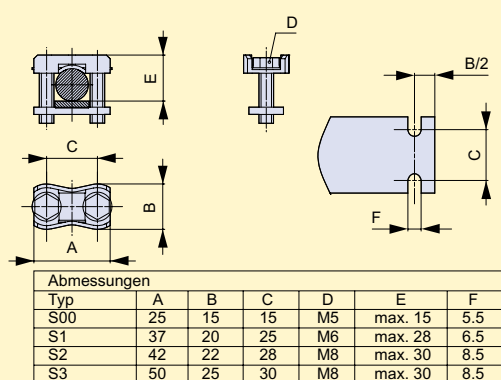
S00-Z

Ordering details see page 9-21



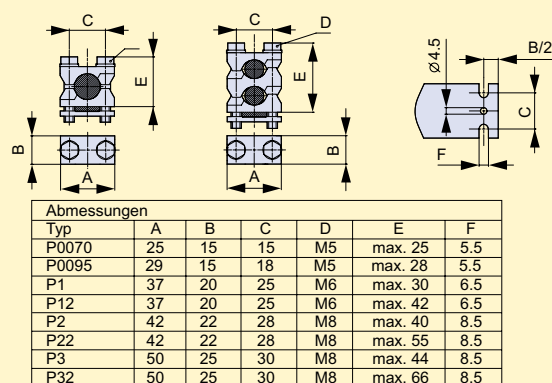
P0070-Z

Ordering details see page 9-21



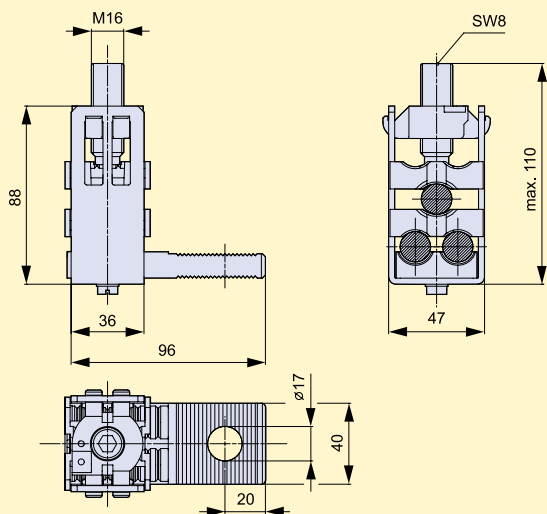
S00, S1, S2, S3

Ordering details see page 9-21



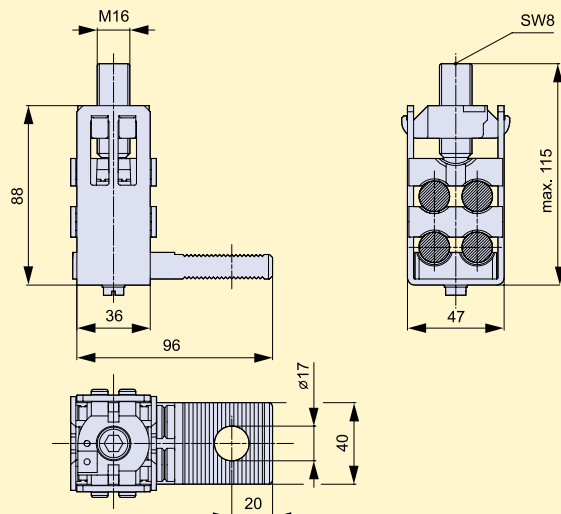
P1, P2, P3, P12, P22, P32

Ordering details see page 921



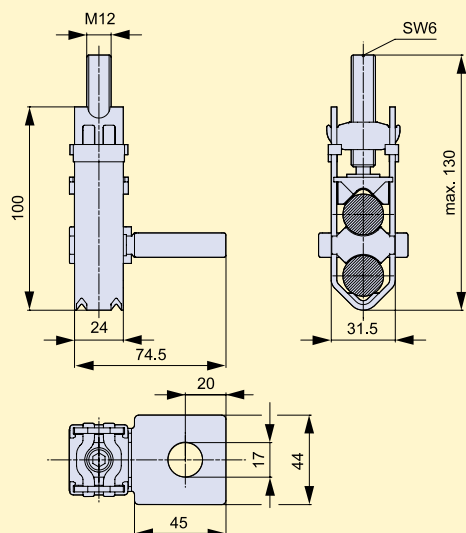
K3G/3/AF40-50

Ordering details see page 9-21



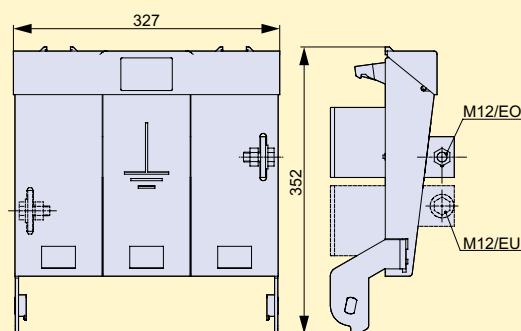
K3G/4/AF40-50

Ordering details see page 9-21



KV2HG-F/2/300/AF40-50

Ordering details see page 9-21



D-E-LTL4A-3/8/EO(EU)

Ordering details see page 9-22

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIL) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

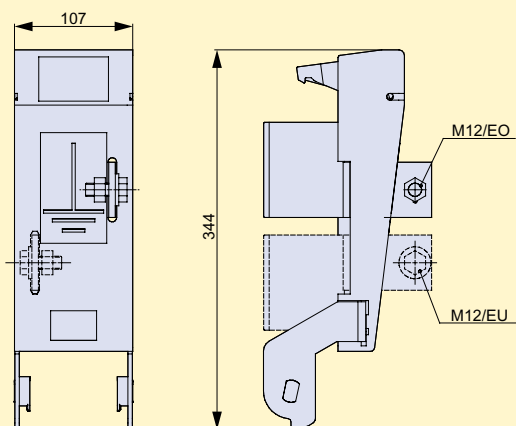
C|O|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

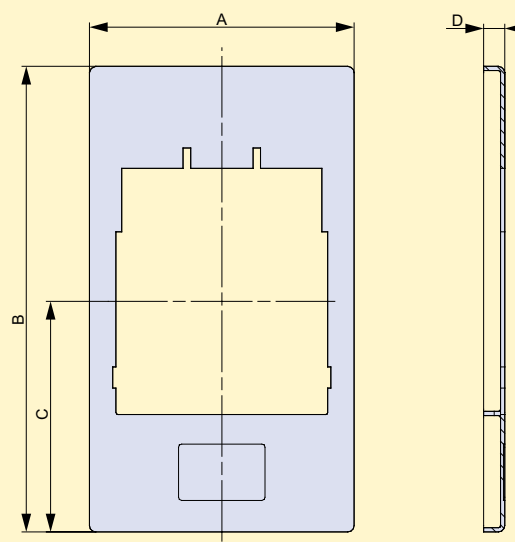
Distribution and instrument cabinets

Powerlizer system electronics



D-E-LTL4A-1/8/EO(EU)

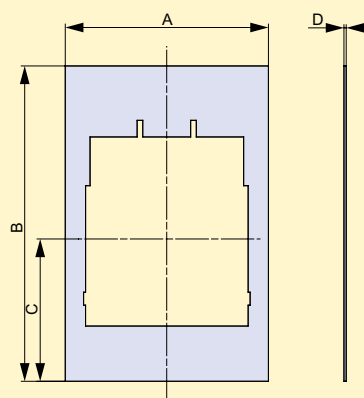
Ordering details see page 9-23



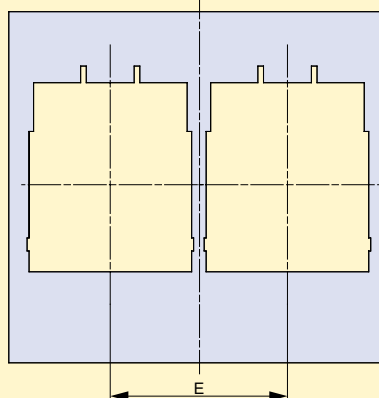
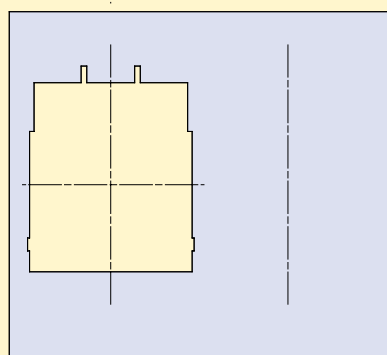
Typ	A	B	C	D
A001	125	220	109	10
A004	115	220	109	10
A101	205	300	143	10,5
A103	230	330	165	10,5
A201	230	300	143	10,5
A301	274	300	143	10,5
A303	274	330	165	10,5

A0..., A1..., A2..., A3...

Ordering details see page 9-23

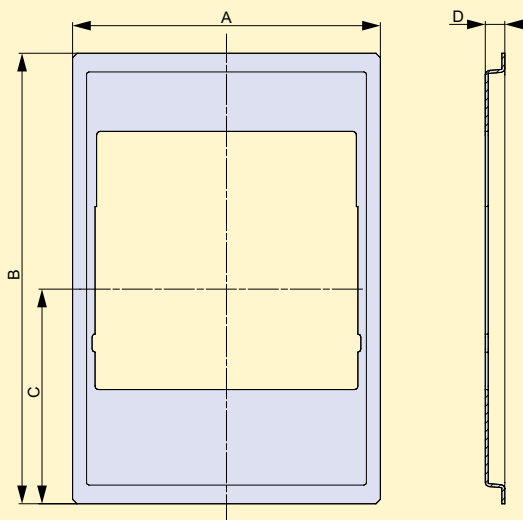


Typ	A	B	C	D	E
A006	125	194	87,5	1,5	
A009	235	220	109	1,5	109
A012	235	220	109	1,5	109
A030	342	190	87,5	1,5	2x106



A006, A009, A012, A030

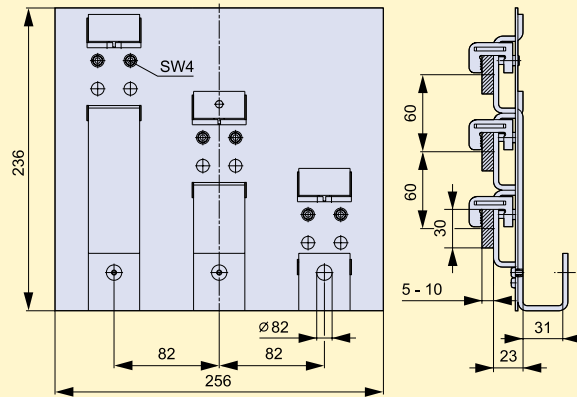
Ordering details see page 9-23



Typ	A	B	C	D
A108	205	300	143	13
A206	236	300	156	27
A305	274	300	143	16

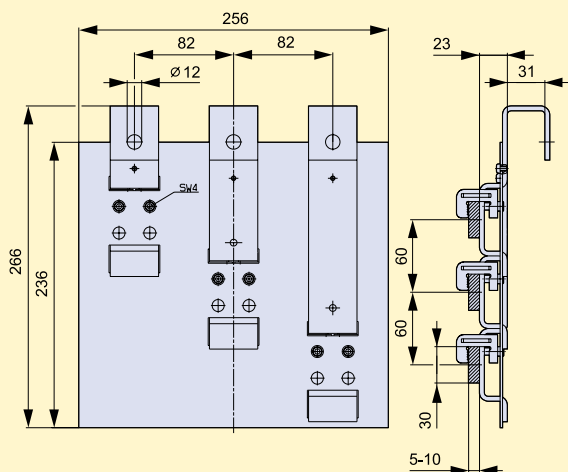
A108, A206, A305

Ordering details see page 9-23



AL362/AO

Ordering details see page 9-23



AL362/AU

Ordering details see page 9-23

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

CJO|S|M|O®-60mm Busbar System

Current transformers

Consumer supply technology

Distribution and instrument cabinets

Powerlizer system electronics

Technical data for fuse switch-disconnectors (in accordance with IEC/EN 60947-3 and VDE 0660 Part 107)

Type	LTL00-1/9 LTL00-2/9 LTL00-3/9 LTL00-3/9/40-60 LTL00-4/9 LTL00ag-3/9	LTL1-1/9 LTL1-2/9 LTL1-3/9 LTL1-3/9/60 LTL1-3/9/100 LTL1-4/9 LTL1ag-3/9
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Electrical characteristics	Rated operational voltage		U _e	V	AC500	AC690	DC220	DC440	AC500	AC690	DC220	DC440
	Rated operational current		I _e	A	160	100	160	100	250	200	250	200
	Conventional free air thermal current with fuses		I _{th}	A	160	100	160	100	250	200	250	200
	Conventional free air thermal current with solid links		I _{th}	A	210(TM00)				325(TM1)			
	Rated frequency		-	Hz	40-60	40-60	-	-	40-60	40-60	-	-
	Rated insulation voltage		U _i	V	AC750				AC750			
	Rated conditional short-circuit current		-	kA _{eff}	50	50	25	25	50	50	25	25
	Rated short-time withstand current (1sec)		I _{cw}	kA _{eff}	-	-	-	-	-	-	-	-
	Utilization category		-	-	AC-22B	AC-22B	DC-22B	DC-21B	AC-22B	AC-22B	DC-22B	DC-21B
	Rated making capacity		-	A	480	300	640	150	750	600	1000	300
	Rated breaking capacity		-	A	480	300	640	150	750	600	1000	300
	Rated impulse withstand voltage		U _{imp}	kV	8	8	8	8	8	8	8	8
	Operating cycles with current		-	-	200	300	200	300	200	200	200	200
Total power loss at I _{th} (without fuse) ³⁾		P _v	W	6.9	2.7	6.2	2.7	12.9	8.3	8.6	5.5	
Fuse-links	Size to DIN 43 620		-	-	00				1			
	Max. rated current (gL/gG)		I _N	A	160	100	160	100	250	200	250	200
	Max. permis. power loss per fuse-link ³⁾		P _v	W	12				23			
Mechanical characteristics	Operating cycles without current		-	-	1700				1400			
	Weight ¹⁾		-	kg	0.31/0.63/0.71/1.1				1.1/2.15/3.5/4.55			
	Busbar distance (3-pole)		-	mm	40/50/60				60/100			
Cable connection	Flat terminal	Bolt diameter	-	-	M8				M10			
		Cable lug (DIN 46 235)	-	mm ²	1 x 10 - 95 (max. width 25mm)				1 x 25 - 150			
		Flat bar	-	mm	20 x 10				30 x 10			
		Tightening torque	M _a	Nm	12 - 15				30 - 35			
	Terminal	Clamping cross-section	-	mm ²	S 00	1.5 - 70Cu/ribbon 6 x 9 x 0.8			S 1	25 - 150Cu/ribbon 6x16x0.8		
		Tightening torque	M _a	Nm								
	Terminal	Clamping cross-section	-	mm ²	P 00	10 - 70 Al/Cu			P 1	70 - 150 Al/Cu		
		Tightening torque	M _a	Nm								
	Terminal	Clamping cross-section	-	mm ²	P 00 - 95	35 x 95 Al/Cu			P 12	2 x 70 - 95 Al/Cu		
		Tightening torque	M _a	Nm								
	Terminal	Clamping cross-section	-	mm ²	Da	2 x 1.5 - 25 Al/Cu						
		Tightening torque	M _a	Nm								
	Terminal	Clamping cross-section	-	mm ²	F 50/ F 70	1.5 - 70Cu/ribbon 6 x 9 x 0.8						
Tightening torque		M _a	Nm	2.6								
Type of protection	Front side	Operational state	-	-	IP20				IP20			
	Device fitted	Front cover open	-	-	IP10				IP10			
Operating conditions	Ambient temperature ²⁾		T _u	°C	- 25 to + 55				- 25 to + 55			
	Rated operating mode		-	-	Continuous operation				Continuous operation			
	Actuation		-	-	Dependent manual operation				Dependent manual operation			
	Mounting position		-	-	Vertical, horizontal				Vertical, horizontal			
	Altitude		-	m	Up to 2000				Up to 2000			
	Pollution degree		-	-	3				3			
	Overvoltage category		-	-	III				III			

¹⁾Without packaging

²⁾35°C normal temperature, at 55°C with reduced operating current

³⁾Data for 3-pole version

Technical data for fuse switch-disconnectors (in accordance with IEC/EN 60947-3 and VDE 0660 Part 107)

Type	LTL2-3/9 LTL2ag-3/9	LTL3-1/9 LTL3-2/9 LTL3-3/9 LTL3-4/9 LTL3ag-3/9
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Electrical characteristics	Rated operational voltage	U _e	V	AC500	AC690	DC220	DC440	AC500	AC690	DC220	DC440
	Rated operational current	I _e	A	400	315	400	315	630	500	630	500
	Conventional free air thermal current with fuses	I _{th}	A	400	315	400	315	630	500	630	500
	Conventional free air thermal current with solid links	I _{th}	A	520 (TM2)				1000 (TM3)			
	Rated frequency	-	Hz	40-60	40-60	-	-	40-60	40-60	-	-
	Rated insulation voltage	U _i	V	AC750				AC750			
	Rated conditional short-circuit current	-	kA _{eff}	50	50	25	25	50	50	25	25
	Rated short-time withstand current (1sec)	I _{cw}	kA _{eff}	-	-	-	-	-	-	-	-
	Utilization category	-	-	AC-22B	AC-22B	DC-22B	DC-21B	AC-22B	AC-22B	DC-22B	DC-21B
	Rated making capacity	-	A	1200	945	1600	475	1890	1500	2520	750
	Rated breaking capacity	-	A	1200	945	1600	475	1890	1500	2520	750
	Rated impulse withstand voltage	U _{imp}	kV	8	8	8	8	8	8	8	8
	Operating cycles with current	-	-	200	200	200	200	200	200	200	200
	Total power loss at I _{th} (without fuse) ³⁾	P _v	W	27	16.7	18	11.2	52	32.8	34.6	21.8

Fuse-links	Size to DIN 43 620	-	-	2				3			
	Max. rated current (gL/gG)	I _N	A	400	315	400	315	630	500	630	500
	Max. permis. power loss per fuse-link ³⁾	P _v	W	34				48			

Mechanical characteristics	Operating cycles without current	-	-	800				800			
	Weight ¹⁾	-	kg	3.1				1.7/3.92/5.35/7.1			
	Busbar distance (3-pole)	-	mm	60/100				60/100			

Cable connection	Flat terminal	Bolt diameter	-	-	M10		M10			
		Cable lug (DIN 46 235)	-	mm ²	1 x 25-240		1 x 25-300			
		Flat bar	-	mm	30 x 10		40 x 10			
		Tightening torque	M _a	Nm	30 - 35		30 - 35			
	Terminal	Clamping cross-section	-	mm ²	S 2	25-240Cu/r. 10x16x0,8		S3	Band 11x21x 1	
		Tightening torque	M _a	Nm		23			23	
	Terminal	Clamping cross-section	-	mm ²	P2	120 - 240 Al/Cu		P3	120 - 300 Al/Cu	
		Tightening torque	M _a	Nm		11			11	
	Terminal	Clamping cross-section	-	mm ²	P22	2 x 120 - 150 Al/Cu		P32	2 x 120 - 240 Al/Cu	
		Tightening torque	M _a	Nm		11			11	

Type of protection	Front side	Operational state	-	-	IP20			IP20		
	Device fitted	Front cover open	-	-	IP10			IP10		

Operating conditions	Ambient temperature ²⁾	T _u	°C	-25 to +55			-25 to +55		
	Rated operating mode	-	-	Continuous operation			Continuous operation		
	Actuation	-	-	Dependent manual operation			Dependent manual operation		
	Mounting position	-	-	Vertical, horizontal			Vertical, horizontal		
	Altitude	-	m	Up to 2000			Up to 2000		
	Pollution degree	-	-	3			3		
	Overvoltage category	-	-	III			III		

¹⁾Without packaging

²⁾35°C normal temperature, at 55°C with reduced operating current

³⁾Data for 3-pole version

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

CJO|S|M|O® - 60mm Busbar System

Current transformers

Consumer supply technology

Distribution and instrument cabinets

Powerlizer system electronics

Technical data for fuse switch-disconnectors (in accordance with IEC/EN 60947-3 and VDE 0660 Part 107)

Type					LTL4a-1/1250 LTL4a-3/1250		LTL4a-1/1600 LTL4a-3/1600	
Electrical characteristics	Rated operational voltage		U _e	V	AC500		AC690	
	Rated operational current		I _e	A	1250		1000	
	Conventional free air thermal current with fuses		I _{th}	A	1250		1000	
	Conventional free air thermal current with solid links		I _{th}	A	1250		1600	
	Rated frequency		-	Hz	40 - 60		40 - 60	
	Rated insulation voltage		U _i	V	AC800		AC800	
	Rated conditional short-circuit current		-	kA _{eff}	80		80	
	Rated short-time withstand current (1sec)		I _{cw}	kA _{eff}	-		-	
	Utilization category		-	-	AC - 22B		AC - 21B	
	Rated making capacity		-	A	3750		1500	
	Rated breaking capacity		-	A	3750		1500	
	Rated impulse withstand voltage		U _{imp}	kV	8		8	
	Operating cycles with current		-	-	100		100	
Total power loss at I _{th} (without fuse) ³⁾		P _v	W	32		20.5		
Fuse-links	Size to DIN 43 620		-	-	4a		4a	
	Max. rated current (gL/gG)		I _N	A	1250		1000	
	Max. permis. power loss per fuse-link ³⁾		P _v	W	110		110	
Mechanical characteristics	Operating cycles without current		-	-	500		500	
	Weight ¹⁾		-	kg	5.3/15.7		5.3/15.7	
Cable connection	Flat terminal	Bolt diameter	-	-	1 x M16		2 x M12	
		Cable lug (DIN 46 235)	-	mm ²	400		-	
		Flat bar	-	mm	max. 80 x 30		max. 80 x 30	
		Tightening torque	M _a	Nm	50 - 60		35 - 40	
	Terminal	Clamping cross-section	-	mm ²	KV2HG/2/300/ AF40 - 50	2 x (95-300)	KV2HG/2/300/ AF40-50	2 x (95-300)
		Tightening torque	M _a	Nm		40		40
	Terminal	Clamping cross-section	-	mm ²	K3G/3/A40-50	3 x (95-150)	K3G/3/A40-50	3 x (95-150)
		Tightening torque	M _a	Nm		50		50
	Terminal	Clamping cross-section	-	mm ²	K3G/4/A40-50	4 x (95-150)	K3G/4/A40-50	4 x (95-150)
		Tightening torque	M _a	Nm		50		50
Type of protection	Front side	Operational state	-	-	IP20		IP20	
	Device fitted	Front cover open	-	-	IP10		IP10	
Operating conditions	Ambient temperature ²⁾		T _u	°C	- 25 to +55		- 25 to + 55	
	Rated operating mode		-	-	Continuous operation		Continuous operation	
	Actuation		-	-	Dependent manual operation		Dependent manual operation	
	Mounting position		-	-	Vertical		Vertical	
	Altitude		-	m	Up to 2000		Up to 2000	
	Pollution degree		-	-	3		3	
	Overvoltage category		-	-	III		III	

¹⁾Without packaging

²⁾35 °C normal temperature, at 55 °C with reduced operating current

³⁾Data for 3-pole version

Technical data for switch-disconnectors

Type				TL1 - 3/1200	TL2 - 3/1200	TL3 - 3/1200	
Electrical characteristics	Rated operational voltage	U _e	V	AC 1200	AC 1200	AC 1200	
	Rated operational current	I _e	A	250	400	630	
	Conventional free air thermal current with fuses	I _{th}	A	200	315	630	
	Conventional free air thermal current with solid links	I _{th}	A	325	520	1000	
	Rated frequency	-	Hz	40 - 60	40 - 60	40 - 60	
Fuse-links	Size to DIN 43 620	-	-	1	2	3	
	Max. rated current (gL/gG)	I _N	A	200	315	630	
	Max. permis. power loss per fuse-link	P _V	W	25	35	70	
Mechanical characteristics	Weight ¹⁾	-	kg	6.1	6.5	7.5	
Cable connection	Flat terminal	Bolt diameter	-	-	M10	M10	M12
		Cable lug (DIN 46 235)	-	mm ²	25 - 150	25 - 240	25 - 300
		Flat bar	-	mm	30 x 10	30 x 10	40 x 10
		Tightening torque	M _a	Nm	30 - 35	30 - 35	30 - 35
Type of protection	Front side	Operational state	-	-	IP 20	IP 20	IP 20
	Device fitted	Front cover open	-	-	IP 10	IP 10	IP 10
Operating conditions	Ambient temperature ²⁾	T _u	°C	-25 to +55	-25 to +55	-25 to +55	
	Rated operating mode	-	-	Cont. operation	Cont. operation	Cont. operation	
	Actuation	-	-	-	-	-	
	Mounting position	-	-	Vert./ horizontal	Vert./ horizontal	Vert./ horizontal	
	Altitude	-	m	Up to 2000	Up to 2000	Up to 2000	
	Pollution degree	-	-	3	3	3	
	Overvoltage category	-	-	III	III	III	

¹⁾Without packaging

²⁾35 °C normal temperature, at 55 °C with reduced operating current

Switch-disconnector-fuses (SASIL) LV HRC system

Switch-disconnector-fuses (SASIL) BS system

Switch-disconnector-fuses (SASIT) DIN and BS systems

Switch-disconnector (SALIT)

Terminals

LV HRC strip-fuseways

LV HRC strip-type fuse switch-disconnectors

LV HRC fuse-bases

LV HRC fuse switch-disconnectors

C|O|S|M|O® - 60mm Busbar System

Current transformers

Consumer supply technology

Distribution and instrument cabinets

Powerlizer system electronics

Technical data for fuse switch-disconnectors (in accordance with IEC/EN 60947-3 and VDE 0660 Part 107)

Type					LTL000-3/9/60...		
Electrical characteristics	Rated operational voltage		U _e	V	AC400	AC500	DC220
	Rated operational current		I _e	A	125	100	100
	Conventional free air thermal current with fuses		I _{th}	A	125	100	100
	Conventional free air thermal current with solid links		I _{th}	A	160(TM00)	160(TM00)	160(TM00)
	Rated frequency		-	Hz	40-60	40-60	-
	Rated insulation voltage		U _i	V	AC500	AC500	AC500
	Rated conditional short-circuit current		-	kA _{eff}	50	50	25
	Rated short-time withstand current (1sec)		I _{cw}	kA _{eff}	-	-	-
	Utilization category		-	-	AC-22B	AC-22B	DC-22B
	Rated making capacity		-	A	300	300	400
	Rated breaking capacity		-	A	300	300	400
	Rated impulse withstand voltage		U _{imp}	kV	8	8	8
	Operating cycles with current		-	-	300	300	300
Total power loss at I _{th} (without fuse) ³⁾		P _V	W	18	11.5	11.5	
Fuse-links	Size to DIN 43 620		-	-	000	000	000
	Max. rated current (gL/gG)		I _N	A	125	100	100
	Max. permis. power loss per fuse-link ³⁾		P _V	W	12	12	12
Mechanical characteristics	Operating cycles without current		-	-	1700		
	Weight ¹⁾		-	kg	0.57		
	Busbar distance (3-pole)		-	mm	60		
	Busbar thickness		-	mm	5 and 10		
	Busbar width		-	mm	20 and 30		
Cable connection	Flat terminal	Bolt diameter	-	-	-		
		Cable lug (DIN 46 235)	-	mm ²	-		
		Flat bar	-	mm	-		
		Tightening torque	M _a	Nm	-		
	Terminal	Clamping cross-section	-	mm ²	F 50	1.5-50Cu/ribbon 6 x 9 x 0.8	
		Tightening torque	M _a	Nm		2.6	
	Terminal	Clamping cross-section	-	mm ²		-	
		Tightening torque	M _a	Nm		-	
	Terminal	Clamping cross-section	-	mm ²		-	
		Tightening torque	M _a	Nm		-	
	Terminal	Clamping cross-section	-	mm ²		-	
		Tightening torque	M _a	Nm		-	
Type of protection	Front side	Operational state	-	-	IP20		
	Device fitted	Front cover open	-	-	IP10		
Operating conditions	Ambient temperature ²⁾		T _u	°C	-25 to +55		
	Rated operating mode		-	-	Continuous operation		
	Actuation		-	-	Dependent manual operation		
	Mounting position		-	-	Vertical, horizontal		
	Altitude		-	m	Up to 2000		
	Pollution degree		-	-	3		
	Overvoltage category		-	-	III		

¹⁾Without packaging

²⁾35°C normal temperature, at 55°C with reduced operating current

³⁾Data for 3-pole version

Powerlizer
system electronics