Product note

Fuse-switch-disconnector for secondary substations, 400 A – 630 A
Kabeldon SLDL 2, SLDL 2-1P, SLDL 3, SLDL 3-1P

Fuse-switch-disconnector with 3-pole or 1-pole breaking for 400 A or 630 A. Utilization category according to IEC 60947-3. Degree of protection IP2X according to IEC 60529.

A. 3-pole SLDL

B. 1-pole SLDL

Figure	Product designation	Breaking	Number of modules
A	SLDL 2, SLDL 3	3-pole	8
B	SLDL 2-1P, SLDL 3-1P	1-pole	8

Design
Kabeldon SLDL fuse-switch-disconnectors are available in four variants for use in substations and low voltage switchgears with Kabeldon busbar system.

- The cable can be connected in apparatus either with clamps or cable lugs.
- Fuse replacement: fuses are released by pressing on the spring-loaded buttons on the side of the cover.
- SLDL can be positioned in any order irrespective of the rated current.
- Terminal connectors for connection to a temporary outlet for example.
- Space for gauge holder on the top of SLDL.
- Installed and connected to the busbar system in a single step.
- SLDL can be connected live.
- SLDL has a height* of 806–965 mm and a 100 mm (8 modules) width. 1 module=12,5 mm.
- Complete with clear symbols, lead sealing capability and lockable covers allowing visual inspection of fuses.

Outer casing
The outer casing of the fuse-switch-disconnector is made from glass fiber reinforced plastic with a halogen-free flame retardant. It meets the strength requirements of the European standard for use in compact secondary substations CSS.

Reversible lower part
Allows also connection of the cable from above. The opening angle of the front piece remains unchanged.

Cover with handle
Opening angle 90°.
- The cover for SLDL has a 3-pole fuse-holder.
- The cover for SLDL 2-1P and SLDL 3-1P have three 1-pole fuse-holders with detachable handles.

Integrated touch guard
The cable connection is protected against accidental contact.

Bolt connection against phase busbar
- The bolt connections on the rear of the device for simultaneous mechanical and electrical connection to the three phase busbars.
- The design allows visual inspection of the state of the bolt connection after assembly.

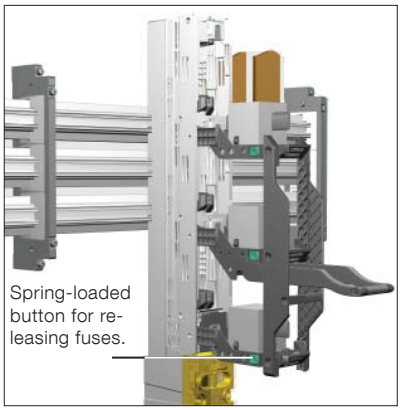
Busbar system
SLDL fits Kabeldon busbar system, substations and low voltage switchgears. The distance between phase busbars is 85 mm. Degree of protection is IP2X.

* SLDL has a height of 806–965 mm and consequently it is too high for being used in our enclosures.

Electrical testing of SLDL.

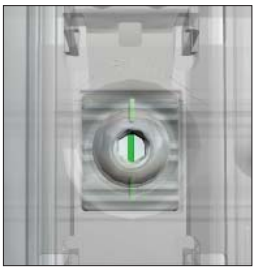
SLDL in a substation.

SLDL in a switchgear room.



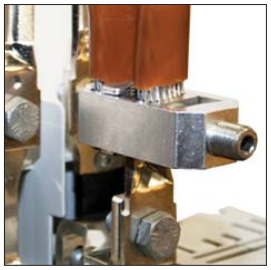
Exchange of fuses.

Handle for parallel operation.



Visual inspection of bolt connections' mode after installation.

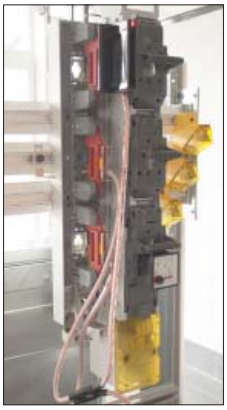
Insulating hand tool when tightening the bolt connection.



Terminal clamps for connection of a cable.

A current transformer mounted on terminal plate.

Protective hood used when connecting cable from above.



Earthing device.

Temporary electrical output connected on the fuse.

The auxiliary switch indicates whether the unit is switched or interrupted.

Ammeter label holder for mounting on the top of the apparatus.

Switching devices with dependent manual operation, uninterrupted duty		SLDL 2			SLDL 2-1P			SLDL 3			SLDL 3-1P		
Rated operational voltage, U_e	V	400	690 [1]	1000 [1]	400	690 [1]	1000 [1]	400	690 [1]	1000 [1]	400	690 [1]	1000 [1]
Rated insulation voltage, U_i	V	1000			1000			1000			1000		
Rated impulse withstand voltage, U_{imp}	kV	8			8			8			8		
Rated operational current, I_e and rated conventional thermal current, I_{th} [2]	A	400	400	100	400	400	100	630	500	100	630	500	100
Utilization category according to IEC 60947-3		AC-23B	AC-22B	AC-21B	AC-23B	AC-22B	AC-21B	AC-23B	AC-22B	AC-21B	AC-23B	AC-22B	AC-21B
Rated short-time withstand current, I_{cw}	kA_{eff}	10,3/1s			10,3/1s			10,3/1s			10,3/1s		
Rated peak withstand current, I_{pk}	kA_{topp}	21,0			21,0			21,0			21,0		
Rated conditional fused short-circuit current, I_{cf}	kA_{eff}	50	50	28	50	50	28	50	50	28	50	50	28
	max A	400	400	100	400	400	100	630	500	100	630	500	100
Degree of protection according to IEC 60529		IP2X			IP2X			IP2X			IP2X		
Connectable conductor cross-section, Cu/Al with terminal clamps TCS/TCD[3]	mm^2	35–240			35–240			35–240			35–240		
		2 x 95–240			2 x 95–240			2 x 95–240			2 x 95–240		

Remarks:
1) To be used only in dry environment.
2) Fuse with power dissipation according to IEC 60269-2-1.
3) The apparatus can also be connected with cable lug.

Tightening torque	Cable connection	SLDL
	mm^2	Nm
Tightening torque against busbars	–	15
Tightening torque for cable	50–300	25
Tightening torque for terminal clamp or cable lug	–	35

For additional information please see:
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