Data sheet

SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for inch cable gland, rotary operating mechanism, black



odel		
Product brand name	SENTRON	
Product designation	3LD Switch disconnector	
Design of the product	Main switch	
Display version / for switch position indicator manual operation	1 ON - 0 OFF	
Design of the operating mechanism	Short rotary knob	
Design of handle	rotary operating mechanism, black	
Type of the driving mechanism / motor drive	No	

General technical data	I technical data		
Number of poles	3		
Number of poles / Note	N + PE		
Type of device	fixed mounting		
Type of switch	Molded-plastic enclosure for inch threaded joint		
Size of switch disconnector	2		
Electrical endurance (switching cycles) / at AC-23 A / at 690 V	6 000		
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s		

Let-through I2t value / with closed switch / at 440 V /	4 kA2.s	
for combination switch + gG fuse / maximum Mechanical service life (switching cycles) / typical	100 000	
Operating frequency / maximum	50 1/h	
Operating frequency / maximum	30 I/II	
Voltage		
Insulation voltage / rated value	690 V	
Surge voltage resistance / rated value	6 kV	
Current / at AC / rated value	25 A	
Operating voltage		
• at AC / at 50/60 Hz / rated value	690 V	
Protection class		
Protection class IP	IP65	
Protection class IP / on the front	IP65	
Dissipation		
Power loss [W]		
• for rated value of the current / at AC / in hot	1.1 W	
operating state / per pole		
• per conductor / typical	1.1 W	
Current		
Operating current		
 at AC-23 A / at 690 V / rated value 	11 A	
• at AC-23 A / at 400 V / rated value	20 A	
 at AC-22 A / at 690 V / rated value 	25 A	
● at AC-21 / at 690 V / rated value	25 A	
• at AC-21 A / at 240 V / rated value	25 A	
● at AC-21 A / at 440 V / rated value	25 A	
● at AC-22 A / at 240 V / rated value	25 A	
at AC-22 A / at 440 V / rated value	25 A	
• at AC-23 A / at 240 V / rated value	20 A	
• at AC-23 A / at 440 V / rated value	20 A	
Continuous current		
• rated value	25 A	
• at 40 °C / rated value	25 A	
• at 45 °C / rated value	25 A	
• at 50 °C / rated value	25 A	
• at 55 °C / rated value	25 A	
Operating current / of upstream fuse / rated value	25 A	
Let-through current / with closed switch	2071	
• at 440 V / for combination switch + gG fuse /	3.5 kA	
maximum	5.5	

 at 690 V / for combination switch + gG fuse / maximum permissible 	3.5 kA
Short-time withstand current (Icw)	
limited to 1 s / rated value	640 A
• at 690 V / limited to 1 s / rated value	640 A
Main circuit	
Operating frequency	
• initial value	50 Hz
Full-scale value	60 Hz
Operating power	
• at AC-23 A / at 240 V / rated value	5 kW
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	9.5 kW
• at AC-23 A / at 400 V / rated value	9.5 kW
• at AC-23 A / at 440 V / rated value	9.5 kW
• at AC-23 A / at 690 V / rated value	9.5 kW
• at AC-3 / at 240 V / rated value	4 kW
• at AC-3 / at 400 V / rated value	7.5 kW
• at AC-3 / at 690 V / rated value	7.5 kW
Operating current / rated value	25 A
Auxiliary circuit	
Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	0
Operating voltage / of auxiliary contacts / at AC / maximum	500 V
Continuous current / of the auxiliary contact / rated value	10 A
Insulation voltage / of the auxiliary switch / rated value	500 V
Suitability	
Suitability for use	
Main switch	Yes
• switch disconnector	Yes
EMERGENCY OFF switch	No
safety switch	Yes
• maintenance/repair switch	Yes
Appearance	
Color / of the actuating element	black
Product details	
Product function / can be locked into OFF position	Yes
Number of bracket locks / maximum	3

Lloop thickness / of the breeket leaks / minimum	4 mm
Hasp thickness / of the bracket locks / minimum	4 mm 8 mm
Hasp thickness / of the bracket locks / maximum	6 Hilli
Short circuit	
Conditional short-circuit current / with line-side fuse	
protection	
at 690 V / by gG fuse / rated value	50 kA
Number of connectable NC contacts / for auxiliary contacts / attachable / maximum	3
Number of connectable NO contacts / for auxiliary contacts / attachable / maximum	5
Number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
AWG number / as coded connectable conductor cross section / solid	
• maximum	8
• minimum	14
Type of electrical connection	
• for main current circuit	box terminal
• for auxiliary contacts	connection terminals
Paguiroments	
Requirements Design of the fuse link	
Requirements Design of the fuse link • for short-circuit protection of the main circuit / required	fuse gL/gG: 25 A
Design of the fuse link • for short-circuit protection of the main circuit /	fuse gL/gG: 25 A fuse gL/gG: 10 A
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required	
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch	
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design	fuse gL/gG: 10 A
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height	fuse gL/gG: 10 A 164 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width	fuse gL/gG: 10 A 164 mm 100 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth	fuse gL/gG: 10 A 164 mm 100 mm 118 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type	fuse gL/gG: 10 A 164 mm 100 mm 118 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type Mounting type	fuse gL/gG: 10 A 164 mm 100 mm 118 mm Complete unit in enclosure
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment	fuse gL/gG: 10 A 164 mm 100 mm 118 mm Complete unit in enclosure
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment	fuse gL/gG: 10 A 164 mm 100 mm 118 mm Complete unit in enclosure No Yes
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting	fuse gL/gG: 10 A 164 mm 100 mm 118 mm Complete unit in enclosure No Yes No
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Net weight	fuse gL/gG: 10 A 164 mm 100 mm 118 mm Complete unit in enclosure No Yes No
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Net weight Environmental conditions	fuse gL/gG: 10 A 164 mm 100 mm 118 mm Complete unit in enclosure No Yes No
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Net weight Environmental conditions Ambient temperature / during operation	fuse gL/gG: 10 A 164 mm 100 mm 118 mm Complete unit in enclosure No Yes No 475 g

Certificates

Reference code

• acc. to DIN EN 61346-2

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• acc. to DIN EN 81346-2 **General Product Approval**

Declaration of Conformity











Miscellaneous



Test Certific- ates	Shipping Ap- proval	other
Miscellaneous		Environmental Con-



firmations

LRS

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2164-0TB51-0US2

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-0TB51-0US2

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2164-0TB51-0US2

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











