## **SIEMENS**

Data sheet 3LD2003-1TP51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 16 A, Operating power / at AC-23 A at 400 V: 7.5 kW, front-mounted, 1 NC, 1 NO, rotary operating mechanism, black, 4-hole mounting of the handle

Model	
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	
Number of poles	3
Type of device	fixed mounting
Type of switch	front mounted
Size of switch disconnector	1
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	2.5 kA2.s

Let-through I2t value / with closed switch / at 440 V /	2.5 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	50 I/II
Voltage	
Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	6 kV
Current / at AC / rated value	16 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	0.5 W
operating state / per pole	
• per conductor / typical	0.5 W
Current	
Operating current	
• at AC-23 A / at 690 V / rated value	9 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	16 A
<ul> <li>at AC-22 A / at 690 V / rated value</li> </ul>	16 A
• at AC-21 / at 690 V / rated value	16 A
• at AC-21 A / at 240 V / rated value	16 A
• at AC-21 A / at 440 V / rated value	16 A
● at AC-22 A / at 240 V / rated value	16 A
at AC-22 A / at 440 V / rated value	16 A
• at AC-23 A / at 240 V / rated value	16 A
at AC-23 A / at 440 V / rated value	16 A
Continuous current	
• rated value	16 A
● at 40 °C / rated value	16 A
● at 45 °C / rated value	16 A
● at 50 °C / rated value	16 A
• at 55 °C / rated value	16 A
Operating current / of upstream fuse / rated value	20 A
Let-through current / with closed switch	
• at 440 V / for combination switch + gG fuse /	3 kA

• at 690 V / for combination switch + gG fuse / maximum permissible	3 kA
Short-time withstand current (Icw)	
<ul><li>limited to 1 s / rated value</li></ul>	340 A
• at 690 V / limited to 1 s / rated value	340 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	4 kW
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	7.5 kW
• at AC-23 A / at 400 V / rated value	7.5 kW
• at AC-23 A / at 440 V / rated value	7.5 kW
• at AC-23 A / at 690 V / rated value	7.5 kW
• at AC-3 / at 240 V / rated value	3 kW
• at AC-3 / at 400 V / rated value	5.5 kW
• at AC-3 / at 690 V / rated value	5.5 kW
Operating current / rated value	16 A
Auxiliary circuit	
Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	1
Number of NO contacts / for auxiliary contacts	1
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
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	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

Llean this lynnag / of the hynnight lands / maining year	4
Hasp thickness / of the bracket locks / minimum	4 mm
Hasp thickness / of the bracket locks / maximum	8 mm
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	2
Number of connectable NO contacts / for auxiliary contacts / attachable / maximum	2
Number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
AWG number / as coded connectable conductor cross section / solid	
• maximum	10
• minimum	18
Type of electrical connection	
• for main current circuit	box terminal
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals
Requirements	
Requirements Design of the fuse link	
	fuse gL/gG: 20 A
Design of the fuse link  • for short-circuit protection of the main circuit /	fuse gL/gG: 20 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	
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 / 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 84 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  84 mm  67 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  84 mm  67 mm  92.5 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  84 mm  67 mm  92.5 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  84 mm  67 mm  92.5 mm  Built-in unit fixed-mounted version
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  84 mm  67 mm  92.5 mm  Built-in unit fixed-mounted version  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	fuse gL/gG: 10 A  84 mm 67 mm 92.5 mm Built-in unit fixed-mounted version  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	fuse gL/gG: 10 A  84 mm 67 mm 92.5 mm Built-in unit fixed-mounted version  Yes No 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  84 mm 67 mm 92.5 mm Built-in unit fixed-mounted version  Yes No 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  84 mm 67 mm 92.5 mm Built-in unit fixed-mounted version  Yes No 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  84 mm 67 mm 92.5 mm Built-in unit fixed-mounted version  Yes No No 217 g

## Certificates

Reference code

• acc. to DIN EN 61346-2

S SF

• acc. to DIN EN 81346-2

**General Product Approval** 

**Test Certific-**

ates









Miscellaneous

Special Test Certificate

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=3LD2003-1TP51

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-1TP51

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2003-1TP51

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications











