## **SIEMENS**

Data sheet 3LD2003-0TK51



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, 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	1 ON - 0 OFF			
operation				
type of switch	front mounted			
design of the actuating element	Short rotary knob			
color of the actuating element	black			
design of handle	rotary operating mechanism, black			
type of the driving mechanism motor drive	No			
General technical data				
number of poles	3			
size of switch disconnector	1			
mechanical service life (operating cycles) typical	100 000			
electrical endurance (operating cycles)				
• at AC-23 A at 690 V	6 000			
operating frequency maximum	50 1/h			
degree of pollution	3			
Voltage				
insulation voltage rated value	690 V			
surge voltage resistance rated value	6 kV			
operating voltage				
at AC rated value	690 V			
operating frequency rated value				
• minimum	50 Hz			
maximum	60 Hz			
Protection class				
protection class IP	IP65			
degree of protection NEMA rating	1, 3R, 4X, 12			
protection class IP on the front	IP65			
Dissipation				
power loss [W] for rated value of the current at AC in hot operating state per pole	0.5 W			
Current				
operational current rated value	16 A			
operational current				
<ul> <li>at 40 °C rated value</li> </ul>	16 A			
<ul> <li>at 45 °C rated value</li> </ul>	16 A			
<ul> <li>at 50 °C rated value</li> </ul>	16 A			
● at 55 °C rated value	16 A			

• at AC rated value	16 A
Main circuit	
operational current	
• at AC-21 at 690 V rated value	16 A
<ul> <li>at AC-21 A at 240 V rated value</li> </ul>	16 A
<ul> <li>at AC-21 A at 400 V rated value</li> </ul>	16 A
<ul> <li>at AC-21 A at 440 V rated value</li> </ul>	16 A
<ul><li>at AC-23 A at 400 V rated value</li></ul>	16 A
operating power	
<ul><li>at AC-23 A at 240 V rated value</li></ul>	4 kW
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	8 kW
<ul> <li>at AC-23 A at 440 V rated value</li> </ul>	7.5 kW
<ul><li>at AC-23 A at 690 V rated value</li></ul>	8 kW
• at AC-3 at 240 V rated value	3 kW
• at AC-3 at 400 V rated value	6 kW
at AC-3 at 690 V rated value	5.5 kW
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 insulation voltage of the auxiliary switch rated value	10 A 500 V
Suitability	000 V
suitability for use	
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
• safety switch	Yes
maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	Yes
product feature can be locked into OFF position accessories	Yes
accessories	Yes
accessories product extension optional	Yes No
accessories	
accessories  product extension optional  motor drive	No
accessories  product extension optional	No No 3
product extension optional	No No
accessories  product extension optional	No No 3
product extension optional	No No 3
product extension optional	No No 3
product extension optional	No No 3 3
product extension optional	No No 3 3 0
product extension optional	No No 3 3 0
product extension optional	No No 3 3 4 8 mm
product extension optional	No No 3 3 0
product extension optional	No No 3 3 0 3 4 8 mm
product extension optional	No No 3 3 0 3 4 8 mm
product extension optional	No No 3 3 4 8 mm  50 kA 3 kA 3 kA
product extension optional  motor drive voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks  Short circuit  conditional short-circuit current with line-side fuse protection at 690 V by gG fuse rated value let-through current with closed switch at 240 V for combination switch + gG fuse maximum at 440 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum	No No 3 3 0 3 4 8 mm
product extension optional	No No 3 3 4 8 mm  50 kA 3 kA 3 kA
product extension optional  motor drive voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks  Short circuit  conditional short-circuit current with line-side fuse protection at 690 V by gG fuse rated value let-through current with closed switch at 240 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum	No No 3 3 4 8 mm  50 kA 3 kA 3 kA
product extension optional         • motor drive             • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks  Short circuit  conditional short-circuit current with line-side fuse protection             • at 690 V by gG fuse rated value let-through current with closed switch             • at 240 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum	No No 3 3 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA
product extension optional         • motor drive             • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks  Short circuit  conditional short-circuit current with line-side fuse protection             • at 690 V by gG fuse rated value let-through current with closed switch             • at 240 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 240 V for combination switch + gG fuse maximum             • at 240 V for combination switch + gG fuse maximum             • at 240 V for combination switch + gG fuse maximum             • at 240 V for combination switch + gG fuse maximum	No No 3 3 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA
product extension optional	No No 3 3 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s
product extension optional	No No 3 3 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s
product extension optional	No No 3 3 3 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s
product extension optional         • motor drive             • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks  Short circuit  conditional short-circuit current with line-side fuse protection             • at 690 V by gG fuse rated value let-through current with closed switch             • at 240 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum	No No 3 3 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA 3 kA 5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A

according UL				
operational current at AC according to UL 508/UL 60947-	16 A			
4-1 rated value	10 A			
operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value	600 V			
active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value	7.5			
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	10			
short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	5 kA			
continuous current of upstream fuse according to UL rated value	50 A			
type of fuse according to UL	RK5			
Connections				
AWG number as coded connectable conductor cross section solid				
• maximum	10			
• minimum	18			
type of connectable conductor cross-sections for copper conductor				
• solid	1x (16mm²)			
<ul> <li>finely stranded with core end processing</li> </ul>	1x (14mm²)			
<ul><li>stranded</li></ul>	1x (16mm²)			
type of connectable conductor cross-sections for auxiliary contacts				
• solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)			
<ul> <li>finely stranded with core end processing</li> </ul>	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²			
• stranded	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)			
type of electrical connection				
for main current circuit	box terminal			
for auxiliary contacts	connection terminals			
Mechanical Design				
height	84 mm			
width	67 mm			
depth	92.5 mm			
type of device	fixed mounting			
fastening method	Built-in unit fixed-mounted version			
fastening method				
4-hole front mounting	Yes			
front mounting with central attachment	No 			
• rail mounting	No			
net weight	188 g			
Environmental conditions				
ambient temperature during operation	25.00			
• minimum	-25 °C			
maximum     ambient temperature during storage	55 °C			
ambient temperature during storage  • minimum	25 °C			
minimum     maximum	-25 °C 55 °C			
General Product Approval				



Confirmation







Miscellaneous

General Product Approval  Declaration of Conformity	Test Certificates	Marine / Shipping	
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Special Test Certificate





other

**Miscellaneous** 

Environmental Confirmations

## **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=3LD2003-0TK51

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-0TK51

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

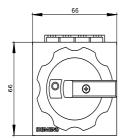
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2003-0TK51

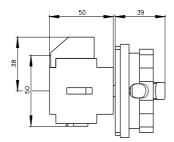
**CAx-Online-Generator** 

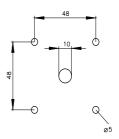
http://www.siemens.com/cax

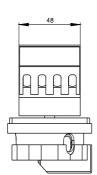
**Tender specifications** 

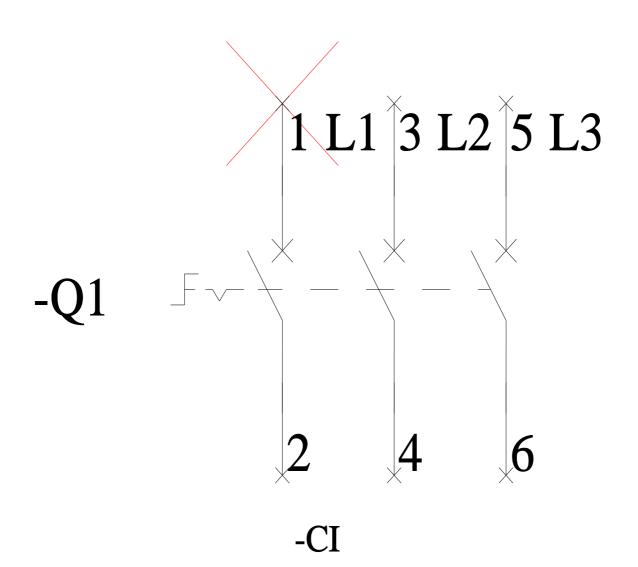
http://www.siemens.com/specifications

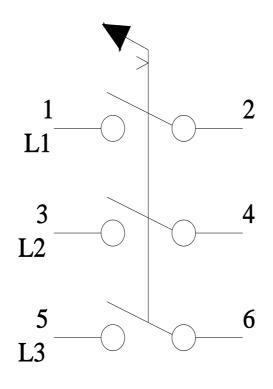












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