## **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		
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			
<ul> <li>at AC rated value</li> </ul>	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		
<ul> <li>at 55 °C rated value</li> </ul>	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
<ul> <li>at AC-3 at 240 V rated value</li> </ul>	3 kW
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	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	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	V
main switch	Yes
switch disconnector     FMEDCENCY OFF switch	Yes
EMERGENCY OFF switch     September 1997	No Yes
safety switch     maintenance/repair switch	Yes
maintenance/repair switch  Product details	165
Floudet details	
product facture can be lacked into OFF position	Voc
product feature can be locked into OFF position	Yes
accessories	Yes
accessories product extension optional	
accessories  product extension optional  motor drive	No
accessories  product extension optional  motor drive  voltage trigger	No No
product extension optional	No
accessories  product extension optional	No No 2
product extension optional	No No
product extension optional	No No 2
product extension optional	No No 2 2
product extension optional	No No 2 2 0
product extension optional	No No 2 2
product extension optional	No No 2 2 0
product extension optional	No No 2 2 0
product extension optional	No No 2 2 0 3 4 8 mm
product extension optional	No No 2 2 0
product extension optional	No No 2 2 0 3 4 8 mm
product extension optional	No No 2 2 0 3 4 8 mm
product extension optional	No No 2 2 0 3 4 8 mm
product extension optional	No No 2 2 0 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 2 2 0 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 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 2 2 0 3 4 8 mm  50 kA 3 kA 3 kA
product extension optional	No No 2 2 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA
product extension optional	No No 2 2 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA
product extension optional	No No 2 2 2 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s
product extension optional	No No 2 2 0 3 4 8 mm  50 kA 3 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 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 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 2 2 2 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
product extension optional	No No 2 2 2 0 3 4 8 mm  50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s
product extension optional	No No 2 2 2 0 3 4 8 mm  50 kA 3 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			
<ul> <li>for main current circuit</li> </ul>	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			
<ul> <li>4-hole front mounting</li> </ul>	Yes		
<ul> <li>front mounting with central attachment</li> </ul>	No		
<ul><li>rail mounting</li></ul>	No		
net weight	217 g		
Environmental conditions			
ambient temperature during operation			
• minimum	-25 °C		
• maximum	55 °C		
ambient temperature during storage	05.00		
• minimum	-25 °C		
• maximum	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

Environmental Confirmations

**Miscellaneous** 

## **Further information**

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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, ...)

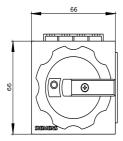
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2003-1TP51

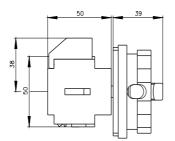
**CAx-Online-Generator** 

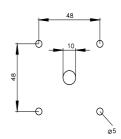
http://www.siemens.com/cax

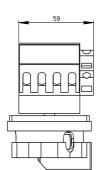
**Tender specifications** 

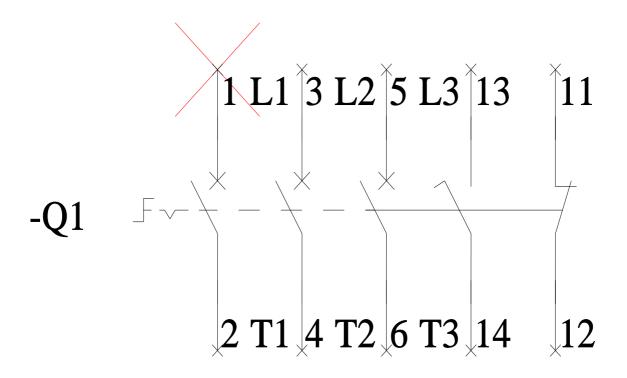
http://www.siemens.com/specifications











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