# SIEMENS

### Data sheet

### 3LD2003-1TL51



SENTRON, Switch disconnector 3LD, main switch, 4-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	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	4	
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	
Main circuit		
operational current		
• 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 400 V rated value	16 A	
• at AC-21 A at 440 V rated value	16 A	

at AC-23 A at 400 V rated value	16 A
operating power	4 13 14
at AC-23 A at 240 V rated value	4 kW
at AC-23 A at 400 V rated value	8 kW
at AC-23 A at 440 V rated value	7.5 kW
• at AC-23 A at 690 V rated value	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	2
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
suitability for use switch disconnector	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	Ver
product feature can be locked into OFF position	Yes
accessories	
product extension optional	
motor drive	No
voltage trigger	No
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
number of bracket locks maximum	3
hasp thickness of the bracket locks	4 8 mm
Short circuit	
conditional short-circuit current with line-side fuse protection	
<ul> <li>at 690 V by gG fuse rated value</li> </ul>	50 kA
let-through current with closed switch	
• at 240 V for combination switch + gG fuse maximum	3 kA
• at 440 V for combination switch + gG fuse maximum	3 kA
<ul> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	3 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	2.5 kA2.s
• at 440 V for combination switch + gG fuse maximum	2.5 kA2.s
at 690 V for combination switch + gG fuse maximum	3 kA2.s
design of the fuse link	
for short-circuit protection of the main circuit required	fuse gL/gG: 20 A
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
operational current of upstream fuse rated value	00.4
a second s	20 A
according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	16 A
operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value	16 A 600 V
operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value	16 A 600 V 7.5
operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value active power [hp] at AC at 480 V according to UL 508/UL	16 A 600 V

UL 508/UL 60947-4-1	
continuous current of upstream fuse according to UL rated	50 A
value	
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid maximum	
•	10
•	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)
• stranded	1x (16mm²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
<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	No.
4-hole front mounting	Yes
front mounting with central attachment     roil mounting	No
rail mounting     net weight	No 218 g
Environmental conditions	210 y
<ul> <li>ambient temperature during operation</li> <li>minimum</li> </ul>	-25 °C
• maximum	-25 °C
ambient temperature during storage	
minimum	-25 °C
• maximum	55 °C
Approvals Certificates	
General Product Approval	
	Confirmation
CCC EG-Konf.	
General Product Approval Marine / Ship	ping other
	Llovds <u>Miscellaneous</u> <u>Confirmation</u>
	URS
Environment	
Environmental Con- firmations firmations	

#### 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=3LD2003-1TL51

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-1TL51

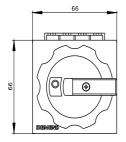
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2003-1TL51

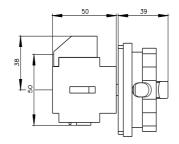
CAx-Online-Generator

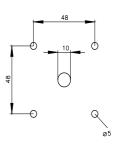
http://www.siemens.com/cax

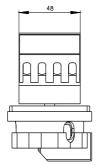
Tender specifications

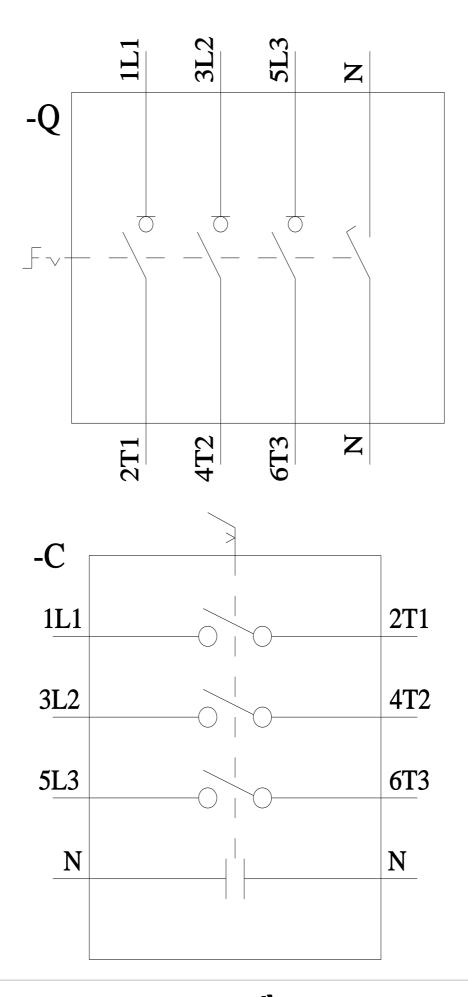
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