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	
 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
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 1001
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	
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
Suitability	
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
accessories	
product extension optional	
motor drive	No
voltage trigger	No
number of connectable NC contacts for auxiliary contacts	2
attachable maximum	
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	
• at 690 V by gG fuse rated value	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
 at 690 V for combination switch + gG fuse maximum permissible 	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	20 A
according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	16 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 cond	uctor cross section				
solid maximum					
•		10			
•		18	18		
type of connectable conductor cross-section conductor	ons for copper				
• solid		1x (16mm	1x (16mm²)		
 finely stranded with core end proces 	ssing	1x (14mm²)			
stranded		1x (16mm²)			
type of connectable conductor cross-section contacts	ons for auxiliary				
• solid		lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)			
• finely stranded with core end proces	ssing	lateral auxiliary switch 2x (0,75 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ²			
• stranded		lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)			
type of electrical connection					
 for main current circuit 		box termina	I		
 for auxiliary contacts 		connection			
Mechanical Design					
height		84 mm			
width		67 mm			
depth					
			92.5 mm		
type of device			fixed mounting Built-in unit fixed-mounted version		
fastening method		Built-in unit	fixed-mounted ve	ersion	
fastening method					
• 4-hole front mounting		Yes			
 front mounting with central attachment 	ent	No			
rail mounting		No			
net weight		218 g			
Environmental conditions					
ambient temperature during operation					
• minimum		-25 °C			
• maximum		55 °C			
ambient temperature during storage					
• minimum		-25 °C			
• maximum		55 °C			
Approvals Certificates					
General Product Approval					
Contrait i roudor Approval					
	Confirmatio	<u>n</u>	(m)	Ē	
EG-Konf.			ccc	UL	VDE
General Product Approval	Marine / Shipp	ing		other	
Manager and Annual States and Annual St				NAC 11	
	煮煮		Llovd's	Miscellaneous	Confirmation
	DATE		Register		
L 11 L	DNV		LRS		
Environment					
Environmental Con- Environmental	<u>Con-</u>				
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

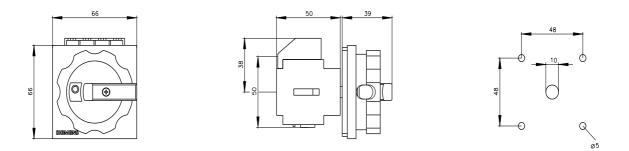
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-1TL51

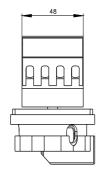
CAx-Online-Generator

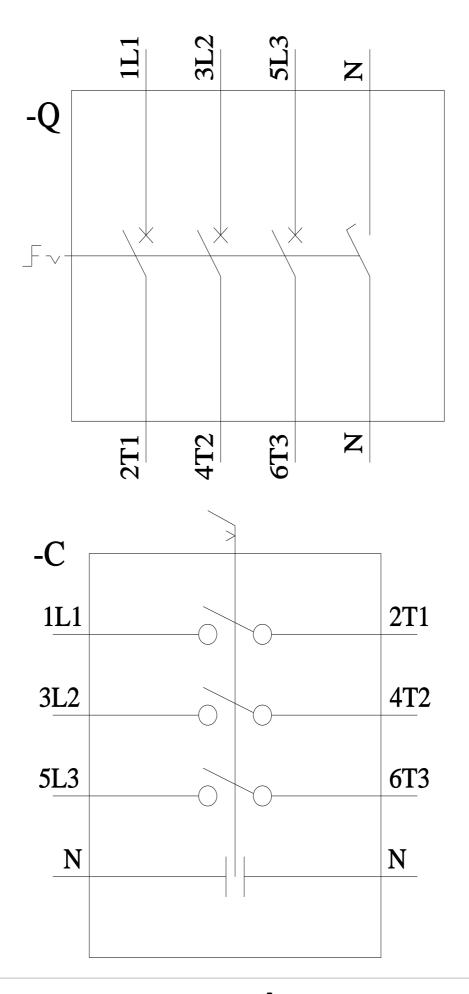
http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







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