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 actuating element	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			
mechanical service life (switching cycles) / typical	100 000			
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 / for combination switch + gG fuse / maximum	2.5 kA2.s			
operating frequency / maximum	50 1/h			
Voltage				
insulation voltage / rated value	690 V			
surge voltage resistance / rated value	6 kV			
operational current / at AC / rated value	16 A			
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			
 per conductor / typical 	0.5 W			
Current				
operational current				
• at AC-23 A / at 400 V / rated value	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
operational current / of upstream fuse / rated value	20 A
let-through current / with closed switch	
 at 440 V / for combination switch + gG fuse / maximum 	3 kA
 at 690 V / for combination switch + gG fuse / maximum permissible 	3 kA
Main circuit	
operating power	
• at AC-23 A / at 240 V / rated value	4 kW
• at AC-23 A / at 240 V / rated value	7.5 kW
• at AC-23 A / at 440 V / rated value	7.5 kW
	7.5 kW
• at AC-23 A / at 690 V / rated value	
• 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
operational 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
switch disconnector	Yes
EMERGENCY OFF switch	No
safety switch	Yes
maintenance/repair switch	Yes
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Appearance	black.
color / of the actuating element	black
Product details	
product function / can be locked into OFF position	Yes
number of bracket locks / maximum	3
hasp thickness / of the bracket locks / minimum	4 mm
hasp thickness / of the bracket locks / maximum	8 mm
product extension / optional	
motor drive	No
 voltage trigger 	No
Short circuit	
conditional short-circuit current / with line-side fuse	
protection	
•	50 kA
at 690 V / by gG fuse / rated value	50 kA
at 690 V / by gG fuse / rated value according UL	
at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	16 A
according UL 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
■ at 690 V / by gG fuse / rated value according UL 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
according UL 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	16 A 600 V
according UL 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 active power [hp] / at AC / at 600 V / according to UL	16 A 600 V 7.5

rated value	
type of fuse / according to UL	RK5
Number	Title
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 connectable conductor cross-sections / for copper conductor	
• solid	1x (16mm²)
finely stranded / with core end processing	1x (14mm²)
• stranded	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)
finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²
• stranded	lateral auxiliary switch 2x (0,75 \dots 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 \dots 2,5mm²)
type of electrical connection	
for main current circuit	box terminal
 for auxiliary contacts 	connection terminals
Requirements	
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
Mechanical Design	
height	84 mm
width	67 mm
depth	92.5 mm
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	217 g
Environmental conditions	
ambient temperature / during operation	
ambient temperature / during operation ● minimum	-25 °C
minimum maximum	55 °C
minimum maximum ambient temperature / during storage / minimum	
minimum maximum	55 °C
minimum maximum ambient temperature / during storage / minimum	55 °C
minimum maximum ambient temperature / during storage / minimum Certificates	55 °C
minimum maximum ambient temperature / during storage / minimum Certificates reference code	55 °C -25 °C













Declaration of Conformity	Test Certificates	Marine / Shipping		other	
	Special Test	Houde	Removes of	<u>Miscellaneous</u>	Environmental



Certificate





Confirmations

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

Tender specifications

http://www.siemens.com/specifications











