## SIEMENS

## Data sheet

## 3LD2003-2EP51



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, 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	4			
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			
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				
• at 40 °C / rated value	16 A			
<ul> <li>at 45 °C / rated value</li> </ul>				

	10.1
• at 50 °C / rated value	16 A
• at 55 °C / rated value	16 A
at AC / rated value	16 A
Main circuit	
operational current	
<ul> <li>at AC-21 / at 690 V / rated value</li> </ul>	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
• at AC-23 A / at 400 V / rated value	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	
main switch	Yes
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	No
EMERGENCY OFF switch     safety switch	No Yes
<ul> <li>safety switch</li> </ul>	Yes
<ul><li>safety switch</li><li>maintenance/repair switch</li></ul>	Yes
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> <li>Product details</li> </ul>	Yes Yes
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position	Yes Yes
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position accessories	Yes Yes
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  product extension / optional	Yes Yes Yes
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details <ul> <li>product feature / can be locked into OFF position</li> </ul> accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts</li> </ul>	Yes Yes Yes No
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> </ul>	Yes Yes Yes No No 1
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details <ul> <li>product feature / can be locked into OFF position</li> </ul> accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts</li> </ul>	Yes Yes Yes No No
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details <ul> <li>product feature / can be locked into OFF position</li> <li>accessories</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts</li> <li>/ attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts</li> </ul>	Yes Yes Yes No No 1
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts</li> </ul>	Yes Yes No No 1 1
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details <ul> <li>product feature / can be locked into OFF position</li> </ul> accessories <ul> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> </ul>	Yes Yes Yes No No 1 1 0
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> </ul>	Yes Yes Yes No No 1 1 0 3
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> </ul>	Yes Yes Yes No No 1 1 0 3
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details <ul> <li>product feature / can be locked into OFF position</li> <li>accessories</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks</li> </ul>	Yes Yes Yes No No 1 1 0 3
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks</li> </ul>	Yes Yes Yes No No 1 1 0 3 4 8 mm
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul>	Yes Yes Yes No No 1 1 0 3 4 8 mm
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>attachable / maximum</li> <li>attachable / by gG fuse / rated value</li> <li>let-through current / with closed switch</li> <li>at 240 V / for combination switch + gG fuse /</li> </ul>	Yes Yes No No 1 1 0 3 4 8 mm
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> <li>let-through current / with closed switch</li> <li>at 240 V / for combination switch + gG fuse / maximum</li> <li>at 440 V / for combination switch + gG fuse /</li> </ul>	Yes Yes Yes No No No 1 1 1 0 3 48 mm
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Product details product feature / can be locked into OFF position accessories product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> <li>let-through current / with closed switch</li> <li>at 240 V / for combination switch + gG fuse / maximum</li> <li>at 440 V / for combination switch + gG fuse / maximum</li> <li>at 690 V / by combination switch + gG fuse / maximum</li> </ul>	Yes Yes Yes No No No 1 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> <li>Product details</li> <li>product feature / can be locked into OFF position</li> <li>accessories</li> <li>product extension / optional <ul> <li>motor drive</li> <li>voltage trigger</li> </ul> </li> <li>number of connectable NC contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable NO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of connectable CO contacts / for auxiliary contacts / attachable / maximum</li> <li>number of bracket locks / maximum</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> <li>let-through current / with closed switch</li> <li>at 240 V / for combination switch + gG fuse / maximum</li> <li>at 440 V / for combination switch + gG fuse / maximum</li> <li>at 690 V / for combination switch + gG fuse / maximum</li> <li>at 690 V / for combination switch + gG fuse / maximum</li> <li>at 690 V / for combination switch + gG fuse / maximum</li> </ul>	Yes Yes Yes No No No 1 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA

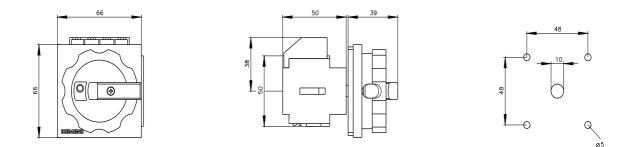
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	3 kA2.s		
design of the fuse link			
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 20 A		
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	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 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)		
stranded	1x (16mm²)		
type of connectable conductor cross-sections / for			
auxiliary contacts <ul> <li>solid</li> </ul>	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> )		
• finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup>		
• stranded	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> )		
type of electrical connection			
for main current circuit	box terminal		
<ul> <li>for auxiliary contacts</li> </ul>	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		
<ul> <li>front mounting with central attachment</li> </ul>	No		
rail mounting	No		
net weight	243 g		
Environmental conditions			
ambient temperature / during operation			
• minimum	-25 °C		
• maximum	55 °C		
ambient temperature / during storage			
• minimum	-25 °C		
• maximum	55 °C		
General Product Approval			

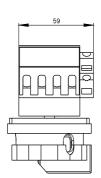
	<u>Confirmation</u>			VDE	<u>Miscellaneous</u>
General Product Approval	Declaration of Conf	ormity	Test Certificates	Marine / Shipping	other
EHC	UK CA	CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	Llovd's Register us	Environmental Con- firmations

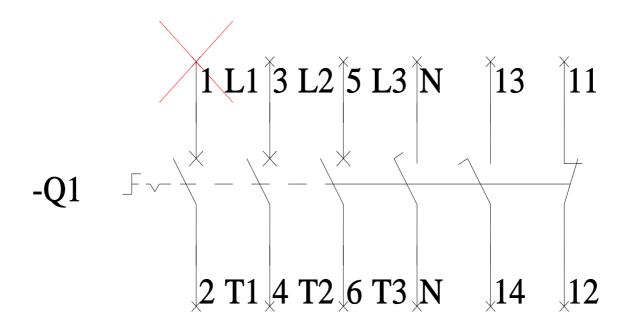
other

**Miscellaneous** 

	mation- and Downloadcenter (Catalogs, Brochures,) //www.siemens.com/lowvoltage/catalogs
Indus	stry Mall (Online ordering system) ://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2003-2EP51
Servi	ice&Support (Manuals, Certificates, Characteristics, FAQs,) ://support.industry.siemens.com/cs/ww/en/ps/3LD2003-2EP51
	e database (product images, 2D dimension drawings, 3D models, device circuit diagrams,) /www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-2EP51
	Online-Generator
	ler specifications /www.siemens.com/specifications

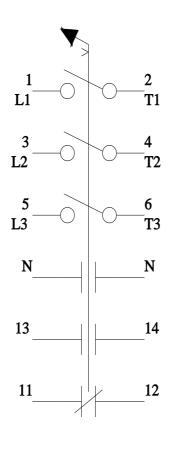






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