## **SIEMENS**

Data sheet 3LD2103-3VK51



SENTRON, Switch disconnector 3LD, main switch, 6-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, front-mounted, 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	6	
size of switch disconnector	2	
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	1.1 W	
Current		
operational current / rated value	25 A	
operational current		
<ul> <li>at 40 °C / rated value</li> </ul>	25 A	
• at 45 °C / rated value	25 A	

• at 50 °C / rated value	25 /
	25 A
at 55 °C / rated value     at 6C / rated value	25 A
at AC / rated value  Main circuit	25 A
Main circuit	
operational current	05.4
• at AC-21 / at 690 V / rated value	25 A
<ul> <li>at AC-21 A / at 240 V / rated value</li> </ul>	25 A
• at AC-21 A / at 400 V / rated value	25 A
• at AC-21 A / at 440 V / rated value	25 A
at AC-23 A / at 400 V / rated value	20 A
operating power	E MAI
• at AC-23 A / at 240 V / rated value	5 kW 10 kW
• at AC-23 A / at 400 V / rated value	
• at AC-23 A / at 440 V / rated value	9.5 kW
• at AC-23 A / at 690 V / rated value	10 kW
<ul><li>at AC-3 / at 240 V / rated value</li><li>at AC-3 / at 400 V / rated value</li></ul>	4 kW 8 kW
<ul><li>at AC-3 / at 400 V / rated value</li><li>at AC-3 / at 690 V / rated value</li></ul>	8 KVV 7.5 kW
	I .U INVV
Auxiliary circuit	0
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	0
number of NO contacts / for auxiliary contacts 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     FMEROENOV OFF withh	Yes
EMERGENCY OFF switch	No
safety switch	Yes
<ul><li>safety switch</li><li>maintenance/repair switch</li></ul>	
<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
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
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  product extension / optional     motor drive	Yes Yes  Yes  No
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  product extension / optional     motor drive     voltage trigger	Yes Yes  Yes  No No
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  product extension / optional     motor drive     voltage trigger  number of connectable NC contacts / for auxiliary contacts / attachable / maximum	Yes Yes  Yes  No No No 3
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  product extension / optional     motor drive     voltage trigger  number of connectable NC contacts / for auxiliary contacts	Yes Yes  Yes  No No
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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	Yes Yes  Yes  No No No 3
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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	Yes Yes  Yes  No No No 3
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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	Yes Yes  No No No 3 3
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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 connectable CO contacts / for auxiliary contacts / attachable / maximum  number of bracket locks / maximum	Yes Yes  No No No 3 3 0
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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  hasp thickness / of the bracket locks	Yes Yes  No No No 3 3 0
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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	Yes Yes  No No No 3 3 0
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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	Yes Yes  No No No 3 3 4 8 mm
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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	Yes Yes  No No No 3 3 4 8 mm
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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 /	Yes Yes  No No No 3 3 4 8 mm
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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     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 /	Yes Yes  No No No 3 3 4 8 mm
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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  at 690 V / for combination switch + gG fuse / maximum permissible  12t value / with closed switch / at 240 V / for combination	Yes Yes  No No No 3 3 4 8 mm
safety switch     maintenance/repair switch  Product details  product feature / can be locked into OFF position  accessories  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  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 permissible	Yes Yes  No No No 3 3 0 3 4 8 mm  50 kA 3.5 kA 4 kA

I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 25 A
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	25 A
according UL	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	25 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	10
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	15
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	8
• minimum	14
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1,516mm²)
<ul> <li>finely stranded / with core end processing</li> </ul>	1x (1,510mm²)
• stranded	1x (1,516mm²)
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 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
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	
<ul> <li>4-hole front mounting</li> </ul>	Yes
<ul> <li>front mounting with central attachment</li> </ul>	No
rail mounting	No
net weight	382 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	



Confirmation









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

other





Special Test Certificate





Environmental Confirmations

other

Miscellaneous

## **Further information**

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=3LD2103-3VK51

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3LD2103-3VK51

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

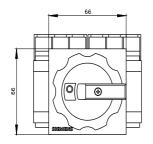
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2103-3VK51

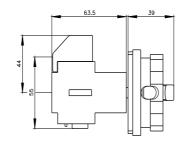
**CAx-Online-Generator** 

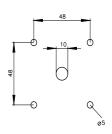
http://www.siemens.com/cax

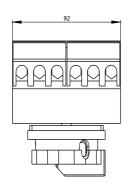
Tender specifications

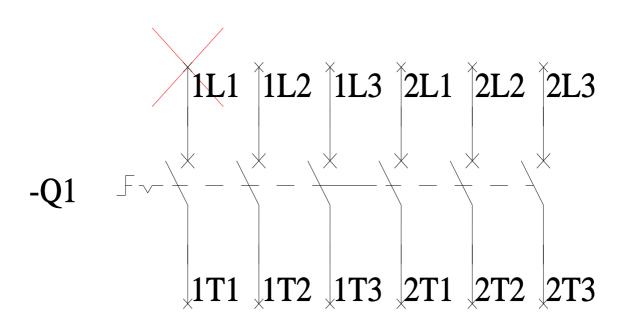
http://www.siemens.com/specifications











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