## **SIEMENS**

Data sheet 3LD2054-1TP51



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, Central mounting 22.5 mm 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	3 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	
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]		
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> </ul>	0.5 W	
<ul> <li>per conductor / typical</li> </ul>	1 W	
Current		
operational current		
<ul> <li>at 40 °C / rated value</li> </ul>	16 A	
<ul> <li>at 45 °C / rated value</li> </ul>	16 A	
<ul><li>at 50 °C / rated value</li></ul>	16 A	
at 55 °C / rated value	16 A	

	40.4
at AC / rated value	16 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	16 A
<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
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	
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	3 kA
• at 690 V / for combination switch + gG fuse /	3 kA
maximum permissible	J M
Main circuit	
operating power	
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  at AC-3 / at 400 V / rated value	6 kW
at AC-3 / at 400 V / rated value      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	
<ul><li>main switch</li></ul>	Yes
e awitch disconnector	V
<ul> <li>switch disconnector</li> </ul>	Yes
<ul><li>switch disconnector</li><li>EMERGENCY OFF switch</li></ul>	No No
EMERGENCY OFF switch	No
<ul><li>EMERGENCY OFF switch</li><li>safety switch</li></ul>	No Yes
<ul><li>EMERGENCY OFF switch</li><li>safety switch</li><li>maintenance/repair switch</li></ul>	No Yes
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance	No Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element	No Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details	No Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details product feature	No Yes Yes black
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details  product feature     can be locked into OFF position	No Yes Yes black
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details product feature     can be locked into OFF position number of bracket locks / maximum	No Yes Yes Yes  black  Yes 3
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum	No Yes Yes  black  Yes  3 4 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details  product feature     can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum hasp thickness / of the bracket locks / maximum	No Yes Yes  black  Yes  3 4 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details  product feature     can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum hasp thickness / of the bracket locks / maximum product extension / optional	No Yes Yes  black  Yes  3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details product feature     can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum hasp thickness / of the bracket locks / maximum product extension / optional     motor drive	No Yes Yes  black  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional     motor drive     voltage trigger	No Yes Yes  black  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional     motor drive     voltage trigger  Short circuit	No Yes Yes  black  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum  product extension / optional     motor drive     voltage trigger  Short circuit conditional short-circuit current / with line-side fuse	No Yes Yes  black  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum  product extension / optional     motor drive     voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection	No Yes Yes  black  Yes 3 4 mm 8 mm  No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional          motor drive          voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection          at 690 V / by gG fuse / rated value	No Yes Yes  black  Yes 3 4 mm 8 mm  No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional          motor drive          voltage trigger  Short circuit     conditional short-circuit current / with line-side fuse protection          at 690 V / by gG fuse / rated value  according UL     operational current / at AC / according to UL 508/UL	No Yes Yes  black  Yes 3 4 mm 8 mm  No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature	No Yes Yes  black  Yes 3 4 mm 8 mm  No No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature	No Yes Yes  black  Yes 3 4 mm 8 mm  No No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum  product extension / optional     motor drive     voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection     at 690 V / by gG fuse / rated value  according UL     operational current / at AC / 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	No Yes Yes  black  Yes 3 4 mm 8 mm  No No No  To kA

continuous current / of upstream fuse / according to UL / rated value	50 A
type of fuse / according to UL	RK5
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	1
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	1
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)
<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	2x (0.75 2.5 mm²), 1x 4 mm²
<ul> <li>finely stranded / with core end processing</li> </ul>	2x (0.75 1.5 mm²), 1x 2.5 mm²
• stranded	2x (0.75 2.5 mm²), 1x 4 mm²
type of electrical connection	
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Requirements	
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	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	116.5 mm
fastening method	Built-in unit fixed-mounted version
fastening method	
4-hole front mounting	No
front mounting with central attachment	Yes
• rail mounting	No
net weight	217 g
Environmental conditions	
ambient temperature / during operation	07.00
• minimum	-25 °C
maximum  ambient temperature / during storage / minimum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	





Confirmation





Miscellaneous







Special Test Certificate



**Miscellaneous** 

other

Environmental Confirmations

## 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=3LD2054-1TP51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2054-1TP51

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2054-1TP51

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications

