## **SIEMENS**

Data sheet 3LD2504-0TK51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 63 A, Operating power / at AC-23 A at 400 V: 22 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
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	3
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	21 kA2.s
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	21 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]	
for rated value of the current / at AC / in hot operating state / per pole	4.5 W
per conductor / typical	5 W
Current	
operational current	
• at 40 °C / rated value	63 A
• at 45 °C / rated value	63 A
<ul> <li>at 50 °C / rated value</li> </ul>	63 A
• at 55 °C / rated value	63 A

<ul><li>at AC / rated value</li></ul>	63 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	43 A
<ul><li>at AC-21 / at 690 V / rated value</li></ul>	63 A
<ul><li>at AC-21 A / at 240 V / rated value</li></ul>	63 A
<ul><li>at AC-21 A / at 440 V / rated value</li></ul>	63 A
operational current / of upstream fuse / rated value	63 A
let-through current / with closed switch	
<ul> <li>at 440 V / for combination switch + gG fuse /</li> </ul>	6 kA
maximum	
<ul> <li>at 690 V / for combination switch + gG fuse /</li> </ul>	6 kA
maximum permissible	
Main circuit	
operating power	
<ul><li>at AC-23 A / at 240 V / rated value</li></ul>	11 kW
<ul><li>at AC-23 A / at 400 V / rated value</li></ul>	22 kW
<ul><li>at AC-23 A / at 440 V / rated value</li></ul>	22 kW
<ul><li>at AC-23 A / at 690 V / rated value</li></ul>	19 kW
<ul><li>at AC-3 / at 240 V / rated value</li></ul>	11 kW
<ul><li>at AC-3 / at 400 V / rated value</li></ul>	19 kW
• at AC-3 / at 690 V / rated value	15 kW
operational current / rated value	63 A
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
insulation voltage / of the auxiliary switch / rated value	500 V
Suitability	
suitability for use	
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
	Yes
safety switch     maintenance/repair switch	Yes
maintenance/repair switch	165
Appearance	
color / of the actuating element	black
Product details	
product feature	
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	
<ul> <li>motor drive</li> </ul>	No
<ul> <li>voltage trigger</li> </ul>	No
Short circuit	
conditional short-circuit current / with line-side fuse protection	
• at 690 V / by gG fuse / rated value	50 kA
according UL	
operational current / at AC / according to UL 508/UL	63 A
60947-4-1 / rated value	
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	40
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	50
short-time with stand 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	175 A	
type of fuse / according to UL	RK5	
Number		
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	3	
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	3	
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0	
Connections		
AWG number / as coded connectable conductor cross section / solid		
• maximum	6	
• minimum	14	
type of connectable conductor cross-sections / for copper conductor		
• solid	1x (2,535mm²)	
<ul> <li>finely stranded / with core end processing</li> </ul>	1x (2.516 mm²)	
• stranded	1x (2,535mm²)	
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 4mm switch 1x (0,75 2,5mm²)	²; front auxiliary
type of electrical connection		
<ul> <li>for main current circuit</li> </ul>	box terminal	
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals	
Requirements		
design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 63 A	
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A	
Mechanical Design		
height	106 mm	
width	90 mm	
depth	110.5 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	405 g	
Environmental conditions		
ambient temperature / during operation		
minimum	-25 °C	
• maximum	55 °C	
ambient temperature / during storage / minimum	-25 °C	
ambient temperature / during storage / minimum	20 0	Declaration of
General Product Approval		Declaration of Conformity





Confirmation







Dec	laration	of
Con	formity	

## 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=3LD2504-0TK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-0TK51

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-0TK51

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications

