## **SIEMENS**

## **Data sheet**

3LD2164-0TB51-0US2



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for inch cable gland, rotary operating mechanism, black

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	
number of poles / note	N + PE	
type of device	fixed mounting	
type of switch	Molded-plastic enclosure for inch threaded joint	
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	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s	
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 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, 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>	1.1 W	
<ul> <li>per conductor / typical</li> </ul>	1 W	
Current		
operational current		
<ul> <li>at 40 °C / rated value</li> </ul>	25 A	
<ul> <li>at 45 °C / rated value</li> </ul>	25 A	
• at 50 °C / rated value	25 A	

a at EE °C / rated visiting	25 A
• at 55 °C / rated value	25 A
• at AC 23 A / at 400 V / rated value	25 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> </ul>	20 A 25 A
• at AC-21 / at 690 V / rated value • at AC-21 A / at 240 V / rated value	25 A
<ul> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> </ul>	25 A
operational current / of upstream fuse / rated value	25 A
let-through current / with closed switch	207
• at 440 V / for combination switch + gG fuse /	3.5 kA
maximum	0.0 NA
<ul> <li>at 690 V / for combination switch + gG fuse /</li> </ul>	4 kA
maximum permissible	
Main circuit	
operating power	
• at AC-23 A / at 240 V / rated value	5 kW
• at AC-23 A / at 400 V / rated value	10 kW
• at AC-23 A / at 440 V / rated value	9.5 kW
<ul> <li>at AC-23 A / at 690 V / rated value</li> </ul>	10 kW
• at AC-3 / at 240 V / rated value	4 kW
• at AC-3 / at 400 V / rated value	8 kW
at AC-3 / at 690 V / rated value	7.5 kW
operational current / rated value	25 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	V
• main switch	Yes
switch disconnector     FMEDGENOX OFF switch	Yes
EMERGENCY OFF switch     Septent switch	No You
safety switch     maintenance/repair quiteb	Yes
maintenance/repair switch	Yes
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	No
• motor drive	No No
voltage trigger  Short significant	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	25 A
60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL	600 V
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	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	5 kA

to UL 508/UL 60947-4-1	50.4
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	3
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	5
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
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	
<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: 25 A
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A
Mechanical Design	
height	164 mm
width	100 mm
depth	118 mm
fastening method	
lastering metriod	Complete unit in enclosure
fastening method	Complete unit in enclosure
	No
fastening method	
fastening method  • 4-hole front mounting	No
fastening method  • 4-hole front mounting  • front mounting with central attachment	No Yes
fastening method	No Yes No
fastening method	No Yes No
fastening method	No Yes No
fastening method	No Yes No 475 g
fastening method  • 4-hole front mounting  • front mounting with central attachment  • rail mounting  net weight  Environmental conditions  ambient temperature / during operation  • minimum	No Yes No 475 g









Miscellaneous



Declaration of Conformity Test Certificates Marine / Shipping other



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=3LD2164-0TB51-0US2

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-0TB51-0US2

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2164-0TB51-0US2

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications











