## **SIEMENS**

Data sheet 3LD3048-1TL51



Load disconnector 3LD3, lu 16 A Main switch 3-pole + N Rated operating capacity at AC-23 A at 400V 7.5kW floor mounting Basic switch with door coupling Central hole mounting 22.5mm Rotating drive black 66 x 66 mm with auxiliary switch 1OE + 1S

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	4
number of poles / note	4
type of device	fixed mounting
type of switch	Floor mounting with door coupling
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	
• at 40 °C / rated value	16 A
<ul> <li>at 45 °C / rated value</li> </ul>	16 A
<ul> <li>at 50 °C / rated value</li> </ul>	16 A
<ul> <li>at 55 °C / rated value</li> </ul>	16 A

e at AC / rated value	16 A
at AC / rated value     at AC 22 A / at 400 V / rated value	16 A 16 A
• at AC-23 A / at 400 V / rated value	
• at AC-21 / at 690 V / rated value	16 A
• at AC-21 A / at 240 V / rated value	16 A
at AC-21 A / at 440 V / rated value	16 A
operational current / of upstream fuse / rated value	16 A
let-through current / with closed switch	0.1.4
<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	
Main circuit	
operating power	
at AC-23 A / at 240 V / rated value	3 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
• 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	6 kW
• at AC-3 / at 490 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
	300 V
Suitability	
suitability for use	Voc
• main switch	Yes
switch disconnector      SMED OF NOV OFF      The Property of the second of the s	Yes
EMERGENCY OFF switch	No
safety switch	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
special product feature	Can be locked in zero position
product extension / optional	
<ul> <li>motor drive</li> </ul>	No
	110
voltage trigger	No
voltage trigger  Short circuit	
Short circuit conditional short-circuit current / with line-side fuse	
Short circuit conditional short-circuit current / with line-side fuse protection	No
Short circuit  conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value	10 kA
Short circuit  conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value	No
Short circuit  conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value	10 kA
Short circuit  conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL	10 kA
conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	10 kA 6 kA
conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL 60947-4-1 / rated value  operating voltage / at AC / at 50/60 Hz / according to UL	10 kA 6 kA
conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL 60947-4-1 / rated value  operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value	10 kA 6 kA 16 A 600 V
conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL 60947-4-1 / rated value  operating voltage / at AC / at 50/60 Hz / according to UL	10 kA 6 kA
conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL 60947-4-1 / rated value  operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value  active power [hp] / at AC / at 480 V / according to UL	10 kA 6 kA 16 A 600 V
Short circuit  conditional short-circuit current / with line-side fuse protection  • at 440 V / by gG fuse / rated value  • at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL 60947-4-1 / rated value  operating voltage / at AC / at 50/60 Hz / 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	10 kA 6 kA 16 A 600 V 7.5

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
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	4
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 (2.5 to 16 mm²)
<ul><li>finely stranded / with core end processing</li></ul>	1x (2.516 mm²)
• stranded	1x (2.5 to 16 mm²)
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	Box 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
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A
<u>·</u>	
Mechanical Design	
Mechanical Design height	60 mm
Mechanical Design height width	60 mm
Mechanical Design height width depth	60 mm 380 mm
Mechanical Design height width depth fastening method	60 mm
Mechanical Design height width depth fastening method fastening method	60 mm 380 mm Built-in unit fixed-mounted version
Mechanical Design height width depth fastening method fastening method  • 4-hole front mounting	60 mm 380 mm Built-in unit fixed-mounted version
height width depth fastening method fastening method  • 4-hole front mounting • front mounting with central attachment	60 mm 380 mm Built-in unit fixed-mounted version  No Yes
height width depth fastening method fastening method  • 4-hole front mounting • front mounting with central attachment • rail mounting	60 mm 380 mm Built-in unit fixed-mounted version  No Yes Yes
height width depth fastening method fastening method  • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	60 mm 380 mm Built-in unit fixed-mounted version  No Yes
height width depth fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight  Environmental conditions	60 mm 380 mm Built-in unit fixed-mounted version  No Yes Yes
height width depth fastening method fastening method  • 4-hole front mounting • front mounting with central attachment • rail mounting net weight  Environmental conditions ambient temperature / during operation	60 mm 380 mm Built-in unit fixed-mounted version  No Yes Yes 300 g
height width depth fastening method fastening method  • 4-hole front mounting • front mounting with central attachment • rail mounting net weight  Environmental conditions  ambient temperature / during operation • minimum	60 mm 380 mm Built-in unit fixed-mounted version  No Yes Yes 300 g
height width depth fastening method fastening method  • 4-hole front mounting • front mounting with central attachment • rail mounting net weight  Environmental conditions ambient temperature / during operation • minimum • maximum	60 mm 380 mm Built-in unit fixed-mounted version  No Yes Yes 300 g  -25 °C 55 °C
height width depth fastening method fastening method  • 4-hole front mounting • front mounting with central attachment • rail mounting net weight  Environmental conditions  ambient temperature / during operation • minimum	60 mm 380 mm Built-in unit fixed-mounted version  No Yes Yes 300 g

Confirmation











other

## **Miscellaneous**

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=3LD3048-1TL51

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3LD3048-1TL51">https://support.industry.siemens.com/cs/ww/en/ps/3LD3048-1TL51</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD3048-1TL51">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD3048-1TL51</a>

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications

