## **SIEMENS**

Data sheet 3LD2504-1TL53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4- pole, lu: 63 A, operating power / at AC-23 A 400 V: 22 kW, front-mounted, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle

Model	
Product brand name	SENTRON
Product designation	3LD Switch disconnector
Design of the product	EMERGENCY-STOP switch
Display version / for switch position indicator manual operation	1 ON - 0 OFF
'	Chart ratany knah
Design of the operating mechanism	Short rotary knob
Design of handle	rotary operating mechanism, red/yellow
Type of the driving mechanism / motor drive	No

General technical data	
Number of poles	4
Type of device	fixed mounting
Type of switch	front mounted
Size of switch disconnector	3
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

Lat the count 10t value / with along day its / at 440 \/ /	04 1400 -
Let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	21 kA2.s
Mechanical service life (switching cycles) / typical	100 000
Operating frequency / maximum	50 1/h
Type of fuse / according to UL	RK5
Voltage	
Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	6 kV
Current / at AC / rated value	63 A
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
<ul> <li>at AC / at 50/60 Hz / acc. to UL 508 / rated value</li> </ul>	600 V
Active power [hp] / at AC	
• at 480 V / acc. to UL 508 / rated value	40
• at 600 V / acc. to UL 508 / rated value	50
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	4.5 W
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> </ul>	
• for rated value of the current / at AC / in hot	4.5 W 4.5 W
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> </ul>	
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul>	
for rated value of the current / at AC / in hot operating state / per pole     per conductor / typical  Current	
for rated value of the current / at AC / in hot operating state / per pole     per conductor / typical  Current  Operating current	4.5 W
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current Operating current <ul> <li>at AC-23 A / at 690 V / rated value</li> </ul>	4.5 W 22 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>operating current</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> </ul>	4.5 W  22 A 43 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>Operating current</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> </ul>	4.5 W  22 A  43 A  63 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>Operating current</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> </ul> at AC-21 / at 690 V / rated value	4.5 W  22 A  43 A  63 A  63 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 / at 240 V / rated value</li> </ul>	4.5 W  22 A  43 A  63 A  63 A  63 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>Operating current</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 / at 240 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> </ul>	4.5 W  22 A  43 A  63 A  63 A  63 A  63 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> </ul>	4.5 W  22 A  43 A  63 A  63 A  63 A  63 A  63 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>Operating current</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> <li>at AC-22 A / at 440 V / rated value</li> </ul>	4.5 W  22 A  43 A  63 A  63 A  63 A  63 A  63 A  63 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>Operating current</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> <li>at AC-22 A / at 440 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> </ul>	4.5 W  22 A  43 A  63 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> <li>at AC-22 A / at 440 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> </ul>	4.5 W  22 A  43 A  63 A  63 A  63 A  63 A  63 A  63 A  43 A
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> Current <ul> <li>Operating current</li> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 / at 240 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> <li>at AC-22 A / at 440 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> <li>at AC-23 A / at 440 V / rated value</li> <li>at AC-23 A / at 440 V / rated value</li> <li>at AC-23 A / at 440 V / rated value</li> </ul>	22 A 43 A 63 A 6

Let-through current / with closed switch	
• at 440 V / for combination switch + gG fuse /	6 kA
maximum	
• at 690 V / for combination switch + gG fuse /	6 kA
maximum permissible	
Short-time withstand current (Icw)	
<ul><li>limited to 1 s / rated value</li></ul>	1 260 A
• at 690 V / limited to 1 s / rated value	1 260 A
Main circuit	
Operating frequency	
• initial value	50 Hz
• Full-scale value	60 Hz
Operating power	
• at AC-23 A / at 240 V / rated value	11 kW
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	22 kW
• at AC-23 A / at 400 V / rated value	22 kW
• at AC-23 A / at 440 V / rated value	22 kW
• at AC-23 A / at 690 V / rated value	18.5 kW
• at AC-3 / at 240 V / rated value	11 kW
• at AC-3 / at 400 V / rated value	18.5 kW
• at AC-3 / at 690 V / rated value	15 kW
Operating 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 /	500 V
maximum	
Continuous current / of the auxiliary contact / rated	10 A
value	
Insulation voltage / of the auxiliary switch / rated	500 V
value	
Suitability	
Suitability for use	
Main switch	Yes
<ul><li>switch disconnector</li></ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	Yes
safety switch	Yes
maintenance/repair switch	Yes
Appearance	
Color / of the actuating element	red

Product details	
Product function / can be locked into OFF	Yes
position	
Number of bracket locks / maximum	3
Hasp thickness / of the bracket locks / minimum	4 mm
Hasp thickness / of the bracket locks / maximum	8 mm
Short circuit	
Short-time withstand current (SCCR) / at 600 V / acc.	5 kA
to UL 508	
Conditional short-circuit current / with line-side fuse protection	
• at 690 V / by gG fuse / rated value	50 kA
Number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
Number of connectable NO contacts / for auxiliary contacts / attachable / maximum	2
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 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: 63 A
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
Mechanical Design	
Height	106 mm
Width	90 mm
Depth	110.5 mm
Mounting type	Built-in unit fixed-mounted version
Mounting type	
• front mounting with 4-hole attachment	Yes
<ul> <li>front mounting with central attachment</li> </ul>	No
• rail mounting	No
Net weight	490 g

## Ambient temperature / during operation -25 °C • minimum 55 °C • maximum Ambient temperature / during storage / minimum -25 °C

## Certificates

Reference code

S • acc. to DIN EN 61346-2 SF • acc. to DIN EN 81346-2

**Test Certific-General Product Approval Declaration of** other Conformity ates









Special Test Certificate

**Environmental Con**firmations

## 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=3LD2504-1TL53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-1TL53

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-1TL53">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-1TL53</a>

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications











