## 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
type of switch	front mounted
design of the actuating element	Short rotary knob
color of the actuating element	red
design of handle	rotary operating mechanism, red/yellow
type of the driving mechanism motor drive	No
General technical data	
number of poles	4
size of switch disconnector	3
mechanical service life (operating cycles) typical	100 000
electrical endurance (operating cycles)	
• at AC-23 A at 690 V	6 000
operating frequency maximum	50 1/h
degree of pollution	3
Voltage	
insulation voltage rated value	690 V
surge voltage resistance rated value	6 kV
operating voltage	
<ul> <li>at AC rated value</li> </ul>	690 V
operating frequency rated value	
• minimum	50 Hz
• maximum	60 Hz
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
Current	
operational current rated value	63 A
operational current	
<ul> <li>at 40 °C rated value</li> </ul>	63 A
• at 45 °C rated value	63 A
• at 50 °C rated value	63 A
• at 55 °C rated value	63 A

at AC rated value	63 A
Main circuit	
operational current	
at AC-21 at 690 V rated value	63 A
• at AC-21 A at 240 V rated value	63 A
• at AC-21 A at 400 V rated value	63 A
• at AC-21 A at 440 V rated value	63 A
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	43 A
operating power	
at AC-23 A at 240 V rated value	11 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	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
<ul> <li>at AC-3 at 690 V rated value</li> </ul>	15 kW
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	Yes
safety switch	Yes
maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	Yes
product feature can be locked into OFF position	Yes
accessories	Yes
accessories product extension optional	
accessories product extension optional • motor drive	No
accessories product extension optional • motor drive • voltage trigger	No No
accessories product extension optional • motor drive	No
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts	No No
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts	No No 2
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum	No No 2 2
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum	No No 2 2 0
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum	No No 2 2 0 3
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit	No No 2 2 0 3
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accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable NO contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse	No No 2 2 0 3
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection	No No 2 2 0 3 4 8 mm
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum	No 2 2 0 3 4 8 mm
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 690 V by combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 6 kA
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 690 V by combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 690 V by combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 690 V by cor combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA 6 kA 6 kA
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA 6 kA 6 kA 6 kA
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum permissible         l2t value with closed switch         • at 240 V for combination switch + gG fuse maximum permissible         l2t value with closed switch         • at 240 V for combination switch + gG fuse maximum permissible         l2t value with closed switch         • at 240 V for combination switch + gG fuse maximum permissible         l2t value with closed switch         • at 240 V for combination switch + gG fuse maximum permissible	No No 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA 6 kA 6 kA
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 690 V by combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum <td< td=""><td>No No 2 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA 6 kA 6 kA 21 kA2.s 21 kA2.s 21 kA2.s 21 kA2.s</td></td<>	No No 2 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA 6 kA 6 kA 21 kA2.s 21 kA2.s 21 kA2.s 21 kA2.s
accessories         product extension optional         • motor drive         • voltage trigger         number of connectable NC contacts for auxiliary contacts attachable maximum         number of connectable NO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of connectable CO contacts for auxiliary contacts attachable maximum         number of bracket locks maximum         hasp thickness of the bracket locks         Short circuit         conditional short-circuit current with line-side fuse protection         • at 690 V by gG fuse rated value         let-through current with closed switch         • at 240 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 240 V for combination switch + gG fuse maximum         • at 440 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum <t< td=""><td>No No 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA 6 kA 6 kA 6 kA</td></t<>	No No 2 2 0 3 4 8 mm 50 kA 6 kA 6 kA 6 kA 6 kA 6 kA 6 kA
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according UL	
operational current at AC according to UL 508/UL 60947- 4-1 rated value	63 A
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 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	175 A
type of fuse according to UL	RK5
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 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	lateral auxiliary switch 2x (0,75 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup>
stranded	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	box terminal
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals
Mechanical Design	
height	106 mm
width	90 mm
depth	110.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	Vec
<ul> <li>4-hole front mounting</li> <li>front mounting with central attachment</li> </ul>	Yes No
rail mounting	No
-	490 g
net weight	490 g
Environmental conditions	
ambient temperature during operation	05 °C
• minimum	-25 °C
maximum	55 °C
<ul> <li>ambient temperature during storage</li> <li>minimum</li> </ul>	-25 °C
• maximum	-25 °C
General Product Approval	Declaration of Conformity
Confirmation	
Declaration of	



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Special Test Certific- Environmental Confirmations

**Miscellaneous** 

**Confirmation** 

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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, ...)

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-1TL53

**CAx-Online-Generator** http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications











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