## SIEMENS

## Data sheet

## 3LD2504-0TK53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3-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	3
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
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
<ul> <li>at 45 °C rated value</li> </ul>	63 A
<ul> <li>at 50 °C rated value</li> </ul>	63 A
<ul> <li>at 55 °C rated value</li> </ul>	63 A

<ul> <li>at AC rated value</li> </ul>	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
• at AC-23 A at 400 V rated value	43 A
operating power	
at AC-23 A at 240 V rated value	11 kW
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	22 kW
• at AC-23 A at 440 V rated value	22 kW
<ul> <li>at AC-23 A at 690 V rated value</li> </ul>	19 kW
• at AC-3 at 240 V rated value	11 kW
• at AC-3 at 400 V rated value	19 kW
at AC-3 at 690 V rated value	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
accessories	
product extension optional	
motor drive	No
<ul> <li>voltage trigger number of connectable NC contacts for auxiliary contacts</li> </ul>	No
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
number of bracket locks maximum	3
hasp thickness of the bracket locks	4 8 mm
Short circuit	
conditional short-circuit current with line-side fuse protection	
at 690 V by gG fuse rated value	50 kA
let-through current with closed switch	
• at 240 V for combination switch + gG fuse maximum	6 kA
• at 440 V for combination switch + gG fuse maximum	6 kA
<ul> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	6 kA
permissible	
I2t value with closed switch	
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	21 kA2.s
• at 440 V for combination switch + gG fuse maximum	21 kA2.s
• at 690 V for combination switch + gG fuse maximum	21 kA2.s
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	fuse gL/gG: 63 A
required	
<ul> <li>required</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A

according UL	
operational current at AC according to UL 508/UL 60947-	63 A
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	40
60947-4-1 rated value active power [hp] at AC at 600 V according to UL 508/UL	50
60947-4-1 rated value short-time withstand current (SCCR) at 600 V according to	5 kA
UL 508/UL 60947-4-1 continuous current of upstream fuse according to UL rated	175 A
value 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> <li>stranded</li> </ul>	1x (2.516 mm²) 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> )
• finely stranded with core end processing	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
• for auxiliary contacts Mechanical Design	connection terminals
	connection terminals 106 mm
Mechanical Design height width	106 mm 90 mm
Mechanical Design height width depth	106 mm 90 mm 110.5 mm
Mechanical Design height width depth type of device	106 mm 90 mm 110.5 mm fixed mounting
Mechanical Design height width depth type of device fastening method	106 mm 90 mm 110.5 mm
Mechanical Design height width depth type of device fastening method fastening method	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version
Mechanical Design height width depth type of device fastening method fastening method • 4-hole front mounting	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes
Mechanical Design height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No
Mechanical Design height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No
Mechanical Design height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No
Mechanical Design height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No
Mechanical Design height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g
Mechanical Design         height         width         depth         type of device         fastening method         fastening method         • 4-hole front mounting         • front mounting with central attachment         • rail mounting         net weight         Environmental conditions         ambient temperature during operation	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No
Mechanical Design         height         width         depth         type of device         fastening method         fastening method         • 4-hole front mounting         • front mounting with central attachment         • rail mounting         net weight         Environmental conditions         ambient temperature during operation         • minimum	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g
Mechanical Design         height         width         depth         type of device         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	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g
Mechanical Design         height         width         depth         type of device         fastening method         fastening method         if astening method         • 4-hole front mounting         • front mounting with central attachment         • rail mounting         net weight         Environmental conditions         ambient temperature during operation         • maximum         ambient temperature during storage	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g -25 °C 55 °C
Mechanical Design         height         width         depth         type of device         fastening method         fastening method         • 4-hole front mounting         • front mounting with central attachment         • rail mounting         net weight         Environmental conditions         ambient temperature during operation         • maximum         ambient temperature during storage         • minimum	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g -25 °C 55 °C -25 °C
Mechanical Design         height         width         depth         type of device         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         ambient temperature during storage         • minimum         • maximum         Beneral Product Approval	106 mm         90 mm         110.5 mm         fixed mounting         Built-in unit fixed-mounted version         Yes         No         No         No         420 g         -25 °C         55 °C         -25 °C         55 °C         55 °C         55 °C         Declaration of Conformity
Mechanical Design height width depth type of device fastening method fastening method of fastening method of fastening method of fastening with central attachment of the front mounting of front mounting net weight Environmental conditions ambient temperature during operation of minimum of maximum ambient temperature during storage of minimum of maximum of maximum of maximum of maximum	106 mm         90 mm         110.5 mm         fixed mounting         Built-in unit fixed-mounted version         Yes         No         No         No         420 g         -25 °C         55 °C         -25 °C         55 °C         55 °C         55 °C         55 °C         Declaration of Conformity
Mechanical Design         height         width         depth         type of device         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         ambient temperature during storage         • minimum         • maximum         Beneral Product Approval	106 mm         90 mm         110.5 mm         fixed mounting         Built-in unit fixed-mounted version         Yes         No         No         No         420 g         -25 °C         55 °C         -25 °C         55 °C         55 °C         55 °C         55 °C         Declaration of Conformity
Mechanical Design         height         width         depth         type of device         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         ambient temperature during storage         • minimum         • maximum         Beneral Product Approval	106 mm         90 mm         110.5 mm         fixed mounting         Built-in unit fixed-mounted version         Yes         No         No         No         420 g         -25 °C         55 °C         -25 °C         55 °C         55 °C         55 °C         Declaration of Conformity
Mechanical Design         height         width         depth         type of device         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         ambient temperature during storage         • minimum         • maximum         Beneral Product Approval	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g -25 °C 55 °C -25 °C 55 °C -25 °C 55 °C Declaration of Conformity C €
Mechanical Design         height         width         depth         type of device         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         ambient temperature during storage         • minimum         • maximum         Beneral Product Approval	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g -25 °C 55 °C -25 °C 55 °C -25 °C 55 °C Declaration of Conformity C €
Mechanical Design         height         width         depth         type of device         fastening method         fastening method         fastening method         if ont mounting with central attachment         if ont mounting with central attachment         if ont mounting method         if ont mounting with central attachment         if and mounting         net weight         Environmental conditions         ambient temperature during operation         if minimum         maximum         ambient temperature during storage         if minimum         if maximum         General Product Approval         Image: Confirmation of	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g -25 °C 55 °C -25 °C 55 °C -25 °C 55 °C Declaration of Conformity Conformity Conformity Conformity
Mechanical Design         height         width         depth         type of device         fastening method         fastening method         afstening method         e front mounting with central attachment         e rail mounting         net weight         Environmental conditions         ambient temperature during operation         e minimum         maximum         ambient temperature during storage         e minimum         maximum         General Product Approval         Confirmation	106 mm 90 mm 110.5 mm fixed mounting Built-in unit fixed-mounted version Yes No No 420 g -25 °C 55 °C -25 °C 55 °C -25 °C 55 °C 20 Enc Ec.Konf.





Environmental Confirmations

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=3LD2504-0TK53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-0TK53

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-0TK53

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications









