## 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				
design of the actuating element	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				
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	21 kA2.s				
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	21 kA2.s				
operating frequency / maximum	50 1/h				
Voltage					
insulation voltage / rated value	690 V				
surge voltage resistance / rated value	6 kV				
operational current / at AC / rated value	63 A				
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>	4.5 W				
<ul> <li>per conductor / typical</li> </ul>	4.5 W				
Current					
operational current					
• at AC-23 A / at 400 V / rated value	43 A				

	22.4
• 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 440 V / rated value	63 A
operational current / of upstream fuse / rated value	63 A
let-through current / with closed switch	
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	6 kA
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	6 kA
Main circuit	
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	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	15.5 kW
operational 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 / 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
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>switch disconnector</li> <li>EMERGENCY OFE switch</li> </ul>	Yes
EMERGENCY OFF switch	Yes
<ul><li>EMERGENCY OFF switch</li><li>safety switch</li></ul>	Yes Yes
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul>	Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch Appearance	Yes Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch     Appearance     color / of the actuating element	Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch Appearance	Yes Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch     Appearance     color / of the actuating element	Yes Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch Appearance color / of the actuating element Product details	Yes Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch     Appearance     color / of the actuating element     Product details     e product function / can be locked into OFF position	Yes Yes Yes red Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch     Appearance     color / of the actuating element     Product details     eproduct function / can be locked into OFF position     number of bracket locks / maximum	Yes Yes Yes Yes 3
EMERGENCY OFF switch     safety switch     maintenance/repair switch     Appearance     color / of the actuating element     Product details         product function / can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum	Yes Yes Yes Yes Yes 3 4 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch      Appearance     color / of the actuating element      Product details         product function / can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / maximum     hasp thickness / of the bracket locks / maximum	Yes Yes Yes Yes Yes 3 4 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch     Appearance     color / of the actuating element     Product details         e product function / can be locked into OFF position         number of bracket locks / maximum         hasp thickness / of the bracket locks / minimum         hasp thickness / of the bracket locks / maximum         product extension / optional	Yes Yes Yes Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch     Appearance     color / of the actuating element     Product details         e product function / can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional     e motor drive	Yes Yes Yes Yes 3 4 mm 8 mm
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse</li> </ul></li></ul>	Yes Yes Yes Yes 3 4 mm 8 mm
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> </ul></li></ul>	Yes Yes Yes Yes 3 4 mm 8 mm No No
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul></li></ul>	Yes Yes Yes Yes 3 4 mm 8 mm
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul></li></ul>	Yes Yes Yes Ted Yes 3 4 mm 8 mm No No No
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul> according UL <ul> <li>operational current / at AC / according to UL 508/UL 60947-4-1 / rated value</li> </ul></li></ul>	Yes Yes Yes 7es 7es 7es 3 4 mm 8 mm 8 mm 50 kA 50 kA
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul> according UL <ul> <li>operational current / at AC / according to UL 508/UL</li> </ul></li></ul>	Yes Yes Yes Ted Yes 3 4 mm 8 mm No No No
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul> according UL <ul> <li>operational current / at AC / according to UL 508/UL 60947-4-1 / rated value</li> <li>operating voltage / at AC / at 50/60 Hz / according to UL</li> </ul></li></ul>	Yes Yes Yes 7es 7es 7es 3 4 mm 8 mm 8 mm 50 kA 50 kA
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul> according UL <ul> <li>operational current / at AC / according to UL 508/UL 60947-4-1 / rated value</li> <li>active power [hp] / at AC / at 480 V / according to UL</li> </ul></li></ul>	Yes Yes Yes red Yes 3 4 mm 8 mm No No No 50 kA 63 A 600 V
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance <ul> <li>color / of the actuating element Product details <ul> <li>product function / can be locked into OFF position</li> <li>number of bracket locks / maximum</li> <li>hasp thickness / of the bracket locks / minimum</li> <li>hasp thickness / of the bracket locks / maximum</li> <li>product extension / optional</li> <li>motor drive</li> <li>voltage trigger</li> </ul> Short circuit <ul> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 690 V / by gG fuse / rated value</li> </ul> according UL <ul> <li>operational current / at AC / according to UL 508/UL 60947-4-1 / rated value</li> <li>active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value</li> </ul></li></ul>	Yes Yes Yes red Yes 3 4 mm 8 mm No No No S0 kA 63 A 600 V 40

rated value					
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	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	6 14				
type of connectable conductor cross-sections / for copper conductor	14				
• solid	1x (2,535mm²)				
<ul> <li>finely stranded / with core end processing</li> </ul>	$1x (2.516 \text{ mm}^2)$				
stranded     stranded	1x (2,535mm <sup>2</sup> )				
type of connectable conductor cross-sections / for					
auxiliary contacts	latoral auxiliant awitch 24 (0	75 2 5mm <sup>2</sup> ) 1x 4mm	2: front ouvilion		
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				
Requirements					
design of the fuse link					
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 63 A				
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A				
Mechanical Design					
height	106 mm				
width	90 mm				
depth	110.5 mm				
fastening method	Built-in unit fixed-mounted version				
fastening method					
• 4-hole front mounting	Yes				
<ul> <li>front mounting with central attachment</li> </ul>	No				
rail mounting	No				
net weight	490 g				
Environmental conditions					
ambient temperature / during operation					
• minimum	-25 °C				
• maximum	55 °C				
ambient temperature / during storage / minimum	-25 °C				
Certificates					
reference code					
• acc. to DIN EN 61346-2	S				
• acc. to IEC 81346-2	SF				
General Product Approval		Declaration of Conformity	Test Certificates		











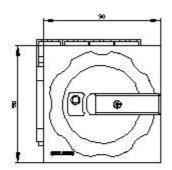
Special Test Certificate

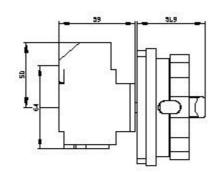
other

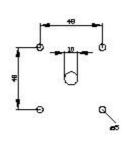
Environmental Confirmations

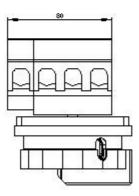
Further information

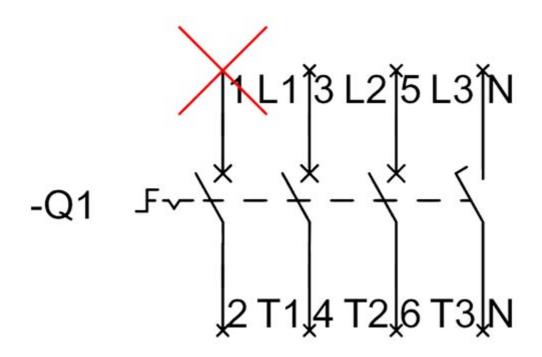
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2504-1TL53 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-1TL53 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2504-1TL53 Tender specifications http://www.siemens.com/specifications











## -CI

