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	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	
 at AC rated value 	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
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

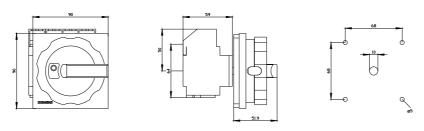
at AC-23 A at 400 V rated value	43 A
operating power	
at AC-23 A at 240 V rated value	11 kW
at AC-23 A at 400 V rated value	22 kW
• at AC-23 A at 440 V rated value	22 kW
at AC-23 A at 690 V rated value	19 kW
at AC-3 at 240 V rated value	11 kW
at AC-3 at 400 V rated value	19 kW
at AC-3 at 690 V rated value	15 kW
Auxiliary circuit	2
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
suitability for use switch disconnector	Yes
suitability for use EMERGENCY OFF switch	Yes
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	Yes
accessories	
product extension optional	
motor drive	No
voltage trigger	No
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
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
 at 690 V for combination switch + gG fuse maximum permissible 	6 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	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	
 for short-circuit protection of the main circuit required 	fuse gL/gG: 63 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
• for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value	
• for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL	fuse gL/gG: 10 A 63 A
for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1 rated value	fuse gL/gG: 10 A 63 A 63 A
for short-circuit protection of the auxiliary switch required operational current of upstream 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	fuse gL/gG: 10 A 63 A 63 A 600 V
for short-circuit protection of the auxiliary switch required operational current of upstream 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	fuse gL/gG: 10 A 63 A 63 A
for short-circuit protection of the auxiliary switch required operational current of upstream 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	fuse gL/gG: 10 A 63 A 63 A 600 V

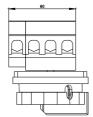
UL 508/UL 60947-41 175 A continuous current of upstream fuse according to UL rated value 175 A type of fuse according to UL RK5 Connections 6 • 14 Vype of connectable conductor cross sections for copper conductor 14 vs of connectable conductor cross-sections for copper conductor 14 vs of connectable conductor cross-sections for copper conductor 1x (2.535mm²) • solid 1x (2.535mm²) • stranded 1x (2.535mm²) • solid 1x (2.535mm²) • solid 1x (2.535mm²) • solid 1x (2.535mm²) • stranded 1x (2.535mm²) • solid 1x (2.535mm²) • solid 1x (2.535mm²) • solid 1x (2.535mm²) • stranded 1x (2.535mm²) • solid (0.75 2.5mm²) • solid 1x (2.535mm²) • finely stranded with core end processing 1ateral auxiliary switch 2x (0.75 2.5mm²), 1x 4mm², front auxiliary switch 2x (0.75	switch 1x
value RK5 Connections 6 • 14 type of connectable conductor cross section solid maximum 6 • 14 type of connectable conductor cross-sections for copper conductor 14 • solid 1x (2.535mm ²) • solid attribute conductor cross-sections for auxiliary 1x (2.535mm ²) • stranded 1x (2.535mm ²) (Type of connectable conductor cross-sections for auxiliary 1x (2.535mm ²) • solid 1x (2.535mm ²) • stranded 1x (2.535mm ²) • solid (ateral auxiliary switch 2x (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch 2x (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch 2x (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch 2x (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5mm ²), 1x 4mm ² , front auxiliary switch (0.75 2.5	switch 1x
Connections AWG number as coded connectable conductor cross section solid maximum • 6 • 14 type of connectable conductor cross-sections for copper conductor 14 • solid 1x (2,535mm²) • solid intells stranded with core end processing 1x (2,535mm²) • stranded 1x (2,535mm²) type of connectable conductor cross-sections for auxiliary estranded 1ateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 2x (0,75 2,5mm²) type of electrical connection box terminal • for auxiliary contacts connection terminals Mechanical Design 106 mm height 106 mm width 90 mm depth 10,5 mm type	switch 1x
AWG number as coded connectable conductor cross section solid maximum 6 • 14 type of connectable conductor cross-sections for copper conductor 1x (2,535mm²) • solid 1x (2,535mm²) • stranded 1x (2,535mm²) • stranded 1x (2,535mm²) • stranded 1x (2,535mm²) • solid 1x (2,535mm²) • stranded 1x (2,535mm²) • solid (ateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 2,5mm²; front auxiliary sy (0,75 2,5mm²) • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sy (0,75 2,5mm²) • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sy (0,75 2,5mm²) type of electrical connection box terminal • for auxiliary contacts connection terminals Mechanical Design 106 mm width 90 mm depth 110.5 mm type of device fixed mounting fastening method Built-In unit fixed-mounted version fastening method ethole front mounting	switch 1x
section solid maximum • 6 • 14 type of connectable conductor cross-sections for copper conductor • solid 1x (2,535mm ²) • finely stranded with core end processing 1x (2,535mm ²) • stranded 1x (2,535mm ²) type of connectable conductor cross-sections for auxiliary contacts • solid 1x (2,535mm ²) • finely stranded with core end processing 2,5mm ² • stranded 1x (2,535mm ²) • finely stranded with core end processing 2,5mm ² • stranded 1x (2,535mm ²), 1x 4mm ² ; front auxiliary sw (0,75 2,5mm ²) • finely stranded with core end processing 2,5mm ² • stranded 1ateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary sw (0,75 2,5mm ²) • for main current circuit • for main current circuit • for main current circuit • for auxiliary contacts Mechanical Design Mechanical Design Mechanical Design • fastening method fastening method fastening method • 4-hole front mounting • fort mounting with central attachment • rail mounting • fort mounting with central attachment • rail mounting • fort mounting with central attachment • rail mounting No • met weight 490 g	switch 1x
• 6 • 14 type of connectable conductor cross-sections for copper conductor 5 • solid 1x (2,535mm²) • finely stranded with core end processing 1x (2,535mm²) • stranded 1x (2,535mm²) type of connectable conductor cross-sections for auxiliary contacts 1ateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 2x (0,75 2,5mm²) type of electrical	switch 1x
type of connectable conductor cross-sections for copper conductor 1x (2,535mm²) • solid 1x (2,535mm²) • finely stranded with core end processing 1x (2,535mm²) • stranded 1x (2,535mm²) • solid (2,52,5mm²) • finely stranded with core end processing lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 2x (0,75 2,5mm²) type of electrical connection (0,75 2,5mm²) • for main current circuit box terminal • for auxiliary contacts connection terminals Mechanical Design 106 mm width 90 mm<	switch 1x
conductor• solid1x (2,535mm²)• finely stranded with core end processing1x (2,535mm²)• stranded1x (2,535mm²)type of connectable conductor cross-sections for auxiliary contacts1x (2,535mm²)• solidlateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²)• finely stranded with core end processinglateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary sw (0,75 2,5mm²)• finely stranded with core end processinglateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary sw (0,75 2,5mm²)• strandedlateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²)• strandedlateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²)• for main current circuitbox terminal connection terminals• for auxiliary contactsconnection terminalsMechanical Design106 mmwidth90 mmdepth110.5 mmtype of devicefixed mountingfastening methodguit-in unit fixed-mounted versionfastening methodYes• front mounting with central attachmentNo• rail mountingYes• front mounting with central attachmentNo	switch 1x
 solid 1x (2,535mm²) finely stranded with core end processing 1x (2,535mm²) type of connectable conductor cross-sections for auxiliary contacts solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) finely stranded with core end processing stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) type of electrical connection for main current circuit box terminal for auxiliary contacts connection terminals 	switch 1x
• finely stranded with core end processing 1x (2.516 mm²) • stranded 1x (2.535mm²) type of connectable conductor cross-sections for auxiliary contacts Iateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • solid Iateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • finely stranded with core end processing Iateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary sw (0,75 2,5mm²) • stranded Iateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • stranded Iateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • stranded Iateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) type of electrical connection Iateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) type of electrical connection Iateral auxiliary switch 2x (0,75 2,5mm²) width 90 mm elepth 106 mm width 90 mm depth 110.5 mm type of device fixed mounting fastening method 60 mm e front mounting Yes e front mounting with central attachment <td< td=""><td>switch 1x</td></td<>	switch 1x
• stranded 1x (2,5.35mm²) type of connectable conductor cross-sections for auxiliary contacts lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • solid lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • finely stranded with core end processing lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary sw (0,75 2,5mm²) • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) type of electrical connection box terminal • for main current circuit box terminal • for auxiliary contacts connection terminals Mechanical Design	switch 1x
type of connectable conductor cross-sections for auxiliary contacts lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 2x (0,75 2,5mm²), 1x 2,5mm²; front auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 2x (0,75 2,	switch 1x
contacts• solidlateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²)• finely stranded with core end processinglateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary sw (0,75 2,5mm²)• strandedlateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²)type of electrical connection• for main current circuit• for auxiliary contactsconnection terminalsMechanical DesignMethanical Designwidth90 mmdepth110.5 mmtype of devicefastening method• 4-hole front mountingYes• front mounting with central attachmentNo• rail mountingNonet weight490 g	switch 1x
• finely stranded with core end processing (0,75 2,5mm²) • stranded lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 2x (0,75 2,5	switch 1x
• stranded 2,5mm² • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary sw (0,75 2,5mm²) type of electrical connection • for main current circuit • for main current circuit box terminal • for auxiliary contacts connection terminals Mechanical Design 106 mm width 90 mm depth 110.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
(0,75 2,5mm²) type of electrical connection • for main current circuit • for auxiliary contacts 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 Yes • front mounting with central attachment No • rail mounting No net weight 490 g	witch 1x
• for main current circuitbox terminal• for auxiliary contactsconnection terminalsMechanical Designheight106 mmwidth90 mmdepth110.5 mmtype of devicefixed mountingfastening methodBuilt-in unit fixed-mounted versionfastening methodYes• front mounting with central attachmentNo• rail mountingNonet weight490 g	
• for auxiliary contacts 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 Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
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 Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
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 • 4-hole front mounting • front mounting with central attachment No • rail mounting No net weight 490 g	
width 90 mm depth 110.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
depth 110.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method - • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
fastening method Built-in unit fixed-mounted version fastening method Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
fastening method Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
• 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 490 g	
front mounting with central attachment rail mounting No No Average A attachment No Average A attachment Average A	
• rail mounting No net weight 490 g	
net weight 490 g	
Environmental conditions	
empirimum empirimum	
• maximum 55 °C	
ambient temperature during storage	
minimum -25 °C	
• maximum 55 °C	
Approvals Certificates	
General Product Approval	
	15
CCC CCC UK Confirmation UK Confirmation	11
CCC EG-Konf. UL	
Marine / Shipping other Environment	
<u>Miscellaneous</u> <u>Confirmation</u> <u>Environmental Con-</u> firmations firmations	
Kegister	
URS	
Further information	
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	

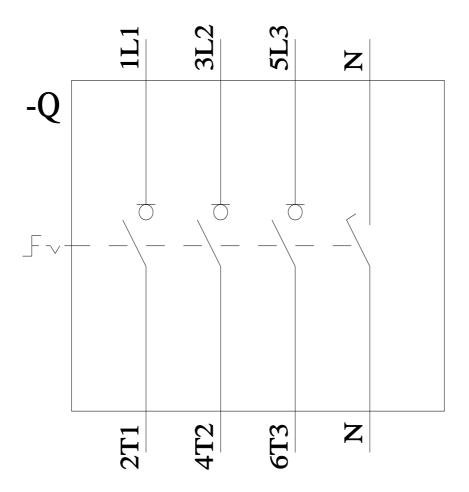
Industry Mall (Online ordering system)

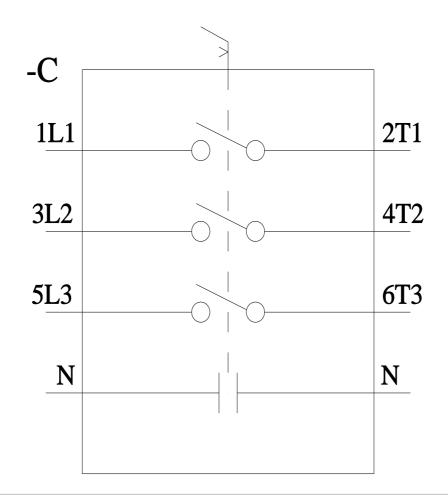
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2504-1TL53 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-1TL53 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) 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









last modified:

6/20/2023 🖸

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3LD25041TL53