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Data sheet 3LD2504-1TL53



SENTRON, switch disconnector 3LD, EMERGENCY-OFF switch, 4- pole, Iu: 63 A, operational power / at AC-23 A at 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-OFF 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	1.66 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

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● 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	
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 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 $kA^2 \cdot s$
● at 440 V for combination switch + gG fuse maximum	21 $kA^2 \cdot s$
● at 690 V for combination switch + gG fuse maximum	21 $kA^2 \cdot s$
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
operational current of upstream fuse rated value	63 A
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	40

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60947-4-1 rated value	
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
●	14
type of connectable conductor cross-sections for copper conductor	
● solid	1x (2,5...35mm²)
● finely stranded with core end processing	1x (2,5...25 mm²)
● stranded	1x (2,5..35mm²)
type of connectable conductor cross-sections for auxiliary contacts	
● **solid**	lateral auxiliary switch 2x (0,75 ... 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 ... 2,5mm²)
● **finely stranded with core end processing**	lateral auxiliary switch 2x (0,75 ... 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²
● **stranded**	lateral auxiliary switch 2x (0,75 ... 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 ... 2,5mm²)
type of electrical connection	
● **for main current circuit**	box terminal
● **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	
● 4-hole front mounting	Yes
● front mounting with central attachment	No
● rail mounting	No
Net Weight	483 g
Environmental conditions	
ambient temperature during operation	
● minimum	-25 °C
● maximum	55 °C
ambient temperature during storage	
● minimum	-25 °C
● maximum	55 °C

Approvals Certificates

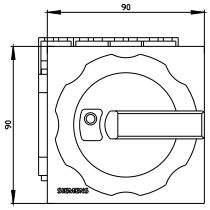
Environment		General Product Approval			
Environmental Con-firmations	Environmental Con-firmations				

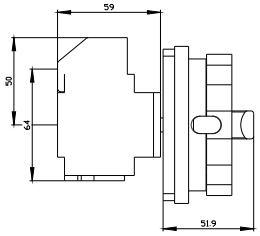
General Product Approval		Test Certificates	Maritime application	other	
Confirmation		Type Test Certific-ates/Test Report		Confirmation	

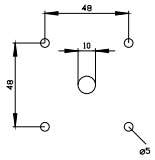
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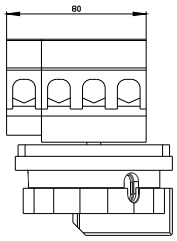
Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://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, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2504-1TL53
CAx-Online-Generator
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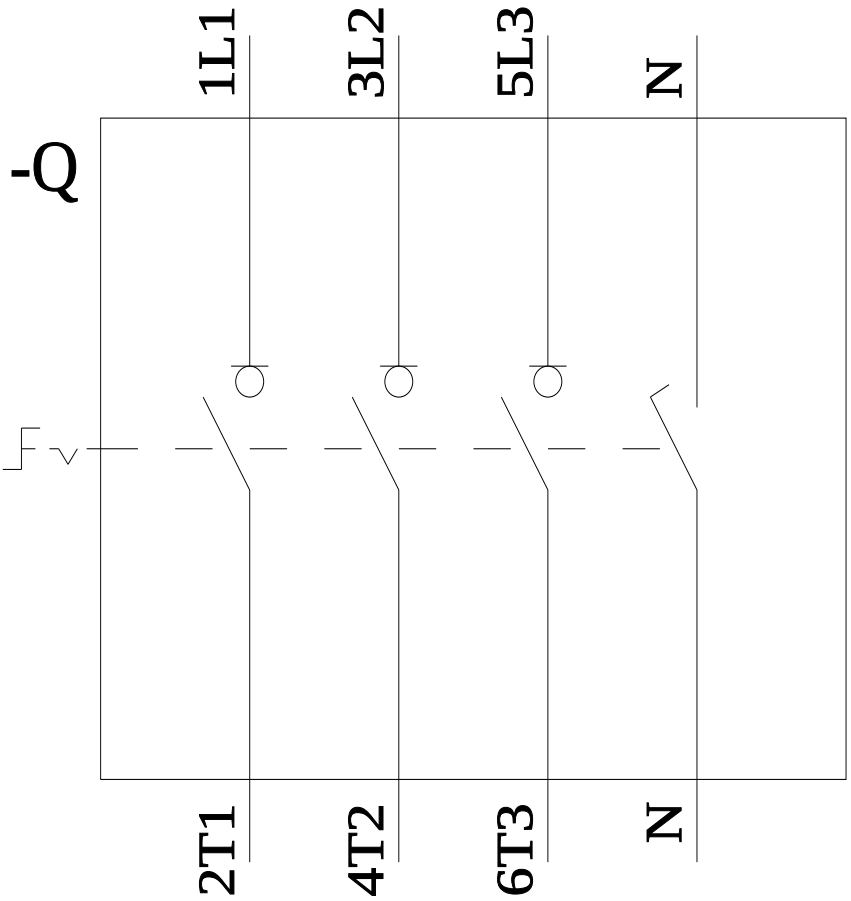


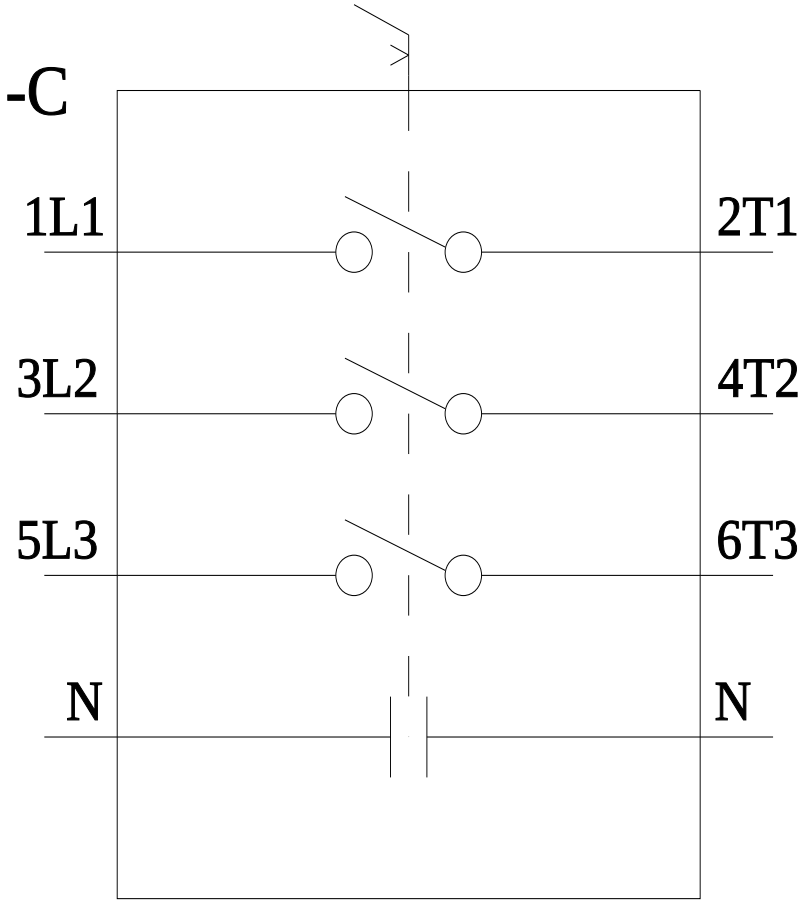






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