SIEMENS

Data sheet 3LD2504-1TD51



SENTRON, Switch disconnector 3LD, main switch, 4-pole, lu: 63 A, Operating power / at AC-23 A at 400 V: 22 kW, front-mounted, 1 NC, 1 NO, rotary operating mechanism, black, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	3LD Switch disconnector
design of the product	Main 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	black
design of handle	rotary operating mechanism, black
type of the driving mechanism / motor drive	No
General technical data	
number of poles	4
number of poles / note	PE
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	
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
Current	
operational current / rated value	63 A
operational current	
 at 40 °C / rated value 	63 A

a at 45 °C / rated value	63 A
 at 45 °C / rated value at 50 °C / rated value 	63 A 63 A
at 50 °C / rated value at 55 °C / rated value	63 A
at AC / rated value at AC / rated value	63 A
Main circuit	00 A
operational current	
at AC-21 / at 690 V / rated value	63 A
at AC-21 / at 655 V / lated value 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	
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	1
number of NO contacts / for auxiliary contacts	1
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 	No
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
 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

e at 440 V / for combination quite 1, 20 fine /	21 kA2 a
 at 440 V / for combination switch + gG fuse / maximum 	21 kA2.s
• at 690 V / for combination switch + gG fuse /	21 kA2.s
maximum	
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 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)
finely stranded / with core end processing	1x (2.516 mm²)
• stranded	1x (2,535mm²)
type of connectable conductor cross-sections / for	
auxiliary contacts ● solid	lateral auxiliary switch 2x (0,75 2,5mm²), 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 front mounting with central attachment	res No
rail mounting	No
net weight	405 g
Environmental conditions	
ambient temperature / during operation	
minimum	-25 °C
maximum	55 °C
ambient temperature / during storage	
minimum	-25 °C
• maximum	55 °C

Confirmation











Test Certificates

other

Special Test Certificate

Miscellaneous

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=3LD2504-1TD51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-1TD51

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

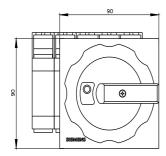
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2504-1TD51

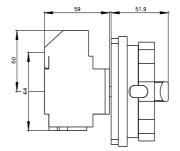
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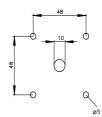
http://www.siemens.com/cax

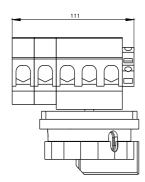
Tender specifications

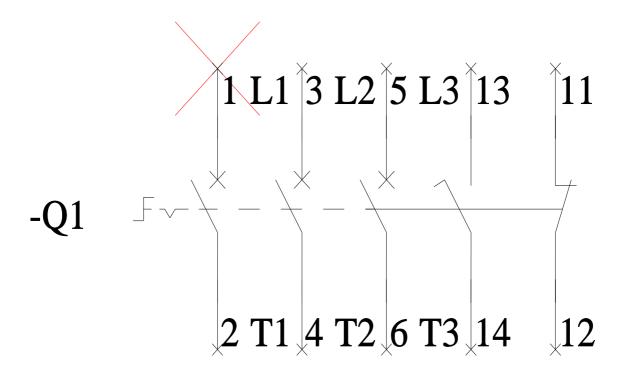
http://www.siemens.com/specifications











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