SIEMENS

Data sheet 3LD2144-0TK51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, Iu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, floor mounting with door coupling, rotary operating mechanism, black, central mounting 22.5 mm 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
Design of the operating mechanism	Short rotary knob
Design of handle	rotary operating mechanism, black
Type of the driving mechanism / motor drive	No

General technical data	
Number of poles	3
Type of device	fixed mounting
Type of switch	Floor mounting with door coupling
Size of switch disconnector	2
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	4 kA2.s

Let-through I2t value / with closed switch / at 440 V /	4 kA2.s
for combination switch + gG fuse / maximum Mechanical service life (switching cycles) / typical	100 000
Operating frequency / maximum	50 1/h
	50 WI
Voltage	
Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	6 kV
Current / at AC / rated value	25 A
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
Protection class	
Protection class IP	IP65
Protection class IP / on the front	IP65
Dissipation	
Power loss [W]	
• for rated value of the current / at AC / in hot	1.1 W
operating state / per pole	
• per conductor / typical	1.1 W
Current	
Operating current	
• at AC-23 A / at 690 V / rated value	11 A
• at AC-23 A / at 400 V / rated value	20 A
• at AC-22 A / at 690 V / rated value	25 A
• at AC-21 / at 690 V / rated value	25 A
• at AC-21 A / at 240 V / rated value	25 A
• at AC-21 A / at 440 V / rated value	25 A
• at AC-22 A / at 240 V / rated value	25 A
at AC-22 A / at 440 V / rated value	25 A
• at AC-23 A / at 240 V / rated value	20 A
• at AC-23 A / at 440 V / rated value	20 A
Continuous current	
• rated value	25 A
at 40 °C / rated value	25 A
at 45 °C / rated value	25 A
• at 50 °C / rated value	25 A
at 55 °C / rated value	25 A
Operating current / of upstream fuse / rated value	25 A
Let-through current / with closed switch	207.
at 440 V / for combination switch + gG fuse /	3.5 kA
maximum	

 at 690 V / for combination switch + gG fuse / maximum permissible 	3.5 kA
Short-time withstand current (Icw)	
limited to 1 s / rated value	640 A
• at 690 V / limited to 1 s / rated value	640 A
Main circuit	
Operating frequency	
• initial value	50 Hz
Full-scale value	60 Hz
Operating power	
• at AC-23 A / at 240 V / rated value	5 kW
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	9.5 kW
• at AC-23 A / at 400 V / rated value	9.5 kW
• at AC-23 A / at 440 V / rated value	9.5 kW
• at AC-23 A / at 690 V / rated value	9.5 kW
• at AC-3 / at 240 V / rated value	4 kW
• at AC-3 / at 400 V / rated value	7.5 kW
• at AC-3 / at 690 V / rated value	7.5 kW
Operating current / rated value	25 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
• switch disconnector	Yes
 EMERGENCY OFF switch 	No
• safety switch	Yes
• maintenance/repair switch	Yes
Appearance	
Color / of the actuating element	black
Product details	
Product function / can be locked into OFF position	Yes
Number of bracket locks / maximum	3

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Hasp thickness / of the bracket locks / minimum	4 mm
Hasp thickness / of the bracket locks / maximum	8 mm
Short circuit	
Conditional short-circuit current / with line-side fuse	
protection	
at 690 V / by gG fuse / rated value	50 kA
Number of connectable NC contacts / for auxiliary contacts / attachable / maximum	3
Number of connectable NO contacts / for auxiliary contacts / attachable / maximum	5
Number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
AWG number / as coded connectable conductor cross section / solid	
• maximum	8
• minimum	14
Type of electrical connection	
• for main current circuit	box terminal
 for auxiliary contacts 	connection terminals
Requirements	
Requirements Design of the fuse link	
	fuse gL/gG: 25 A
Design of the fuse link • for short-circuit protection of the main circuit /	fuse gL/gG: 25 A fuse gL/gG: 10 A
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch	
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required	
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design	fuse gL/gG: 10 A
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height	fuse gL/gG: 10 A 83 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type	fuse gL/gG: 10 A 83 mm 67 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth	fuse gL/gG: 10 A 83 mm 67 mm 451.5 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type	fuse gL/gG: 10 A 83 mm 67 mm 451.5 mm
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type Mounting type	fuse gL/gG: 10 A 83 mm 67 mm 451.5 mm Built-in unit fixed-mounted version No Yes
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting	fuse gL/gG: 10 A 83 mm 67 mm 451.5 mm Built-in unit fixed-mounted version No Yes Yes
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment	fuse gL/gG: 10 A 83 mm 67 mm 451.5 mm Built-in unit fixed-mounted version No Yes
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Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Net weight Environmental conditions	fuse gL/gG: 10 A 83 mm 67 mm 451.5 mm Built-in unit fixed-mounted version No Yes Yes
Design of the fuse link • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required Mechanical Design Height Width Depth Mounting type • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Net weight Environmental conditions Ambient temperature / during operation	fuse gL/gG: 10 A 83 mm 67 mm 451.5 mm Built-in unit fixed-mounted version No Yes Yes 431 g

Certificates

Reference code

• acc. to DIN EN 61346-2

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• acc. to DIN EN 81346-2

SF

General Product Approval

Test Certificates

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Miscellaneous

Special Test Certificate

Shipping Approval

other





Environmental Confirmations

Further informatior

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=3LD2144-0TK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2144-0TK51

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2144-0TK51

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











