# SIEMENS

### Data sheet

## 3LD2714-0TK51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 100 A, Operating power / at AC-23 A at 400 V: 37 kW, floor mounting with door coupling, rotary operating mechanism, black, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	Main switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	Floor mounting with door coupling
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	3
size of switch disconnector	4
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	
<ul> <li>at AC rated value</li> </ul>	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	7.5 W
Main circuit	
operational current	
• at AC-21 at 690 V rated value	100 A
• at AC-21 A at 240 V rated value	100 A
• at AC-21 A at 400 V rated value	100 A
• at AC-21 A at 440 V rated value	100 A

	70.4
at AC-23 A at 400 V rated value	70 A
operating power	
at AC-23 A at 240 V rated value	18.5 kW
• at AC-23 A at 400 V rated value	37 kW
• at AC-23 A at 440 V rated value	37 kW
• at AC-23 A at 690 V rated value	30 kW
at AC-3 at 240 V rated value	18.5 kW
at AC-3 at 400 V rated value	30 kW
at AC-3 at 690 V rated value	22 kW
Auxiliary circuit	<u>^</u>
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	N
suitability for use main switch	Yes
suitability for use switch disconnector	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	Ver
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	3
number of connectable NO contacts for auxiliary contacts attachable maximum	5
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	10 kA
• at 440 V for combination switch + gG fuse maximum	10 kA
<ul> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	
	10 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	64 kA2.s
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	64 kA2.s 64 kA2.s
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	64 kA2.s
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A fuse gL/gG: 10 A
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>operational current of upstream fuse rated value</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>operational current of upstream fuse rated value</li> <li>according UL</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A fuse gL/gG: 10 A 100 A
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link         <ul> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>operational current of upstream fuse rated value</li> </ul> </li> <li>according UL         <ul> <li>operational current at AC according to UL 508/UL 60947-4-1             rated value</li> </ul> </li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A fuse gL/gG: 10 A 100 A
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>operational current of upstream fuse rated value</li> <li>according UL</li> <li>operational current at AC according to UL 508/UL 60947-4-1</li> <li>rated value</li> <li>operating voltage at AC at 50/60 Hz according to UL 508/UL</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A fuse gL/gG: 10 A 100 A 100 A 600 V
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>operational current of upstream fuse rated value</li> <li>according UL</li> <li>operational current at AC according to UL 508/UL 60947-4-1</li> <li>rated value</li> <li>operating voltage at AC at 50/60 Hz according to UL 508/UL</li> <li>60947-4-1 rated value</li> <li>active power [hp] at AC at 480 V according to UL 508/UL</li> <li>60947-4-1 rated value</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A fuse gL/gG: 10 A 100 A 100 A 600 V 60
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>operational current of upstream fuse rated value</li> <li>according UL</li> <li>operational current at AC according to UL 508/UL 60947-4-1</li> <li>rated value</li> <li>operating voltage at AC at 50/60 Hz according to UL 508/UL</li> <li>60947-4-1 rated value</li> <li>active power [hp] at AC at 480 V according to UL 508/UL</li> </ul>	64 kA2.s 64 kA2.s 64 kA2.s fuse gL/gG: 100 A fuse gL/gG: 10 A 100 A 100 A 600 V

UL 508/UL 60947-4-1	
continuous current of upstream fuse according to UL rated	200 A
value	
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid maximum	
•	1
•	12
type of connectable conductor cross-sections for copper conductor	
• solid	1x (450mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (435mm²)
• stranded	1x (450mm²)
type of connectable conductor cross-sections for auxiliary contacts	lateral auviliant autich 2x (0.75 - 2.5mm²) 1x (mm²; front auviliant autich 1x
• 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> )
finely stranded with core end processing	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	
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	106 mm
height width	90 mm
depth	470.5 mm
type of device	fixed mounting
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	Yes
net weight	769 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage <ul> <li>minimum</li> </ul>	25.90
minimum     maximum	-25 °C 55 °C
Approvals Certificates	
General Product Approval	
CCC EG-Konf.	UL VDE
General Product Approval Marine / Ship	ping other
Miscellaneous	Lloyds <u>Miscellaneous</u> <u>Confirmation</u>
	register
DNV	LRS
Environment	
Environment	
Environmental Con- firmations firmations	

#### 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=3LD2714-0TK51

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2714-0TK51

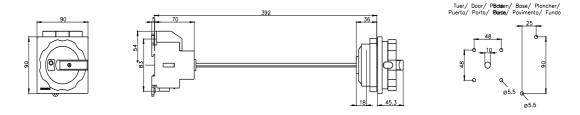
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2714-0TK51

CAx-Online-Generator

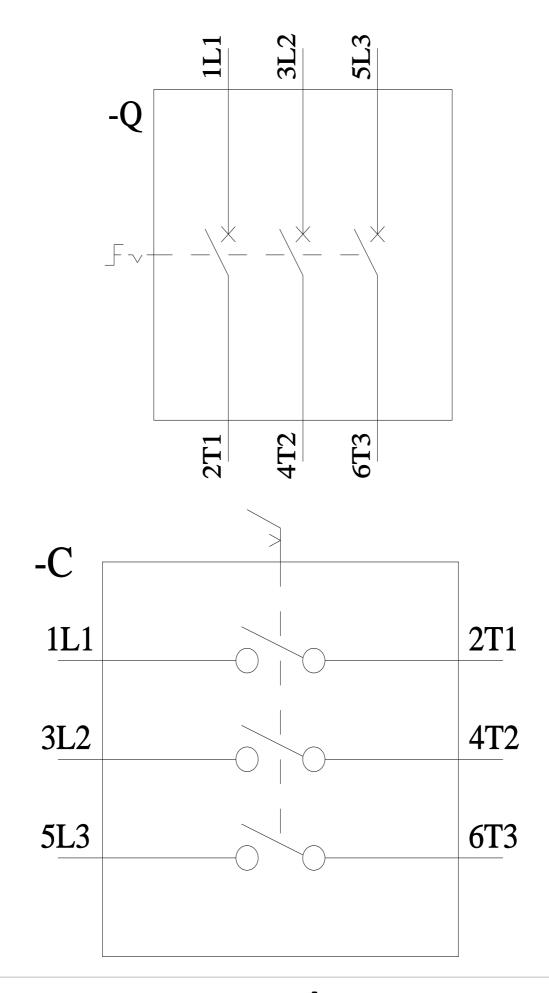
http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







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