SIEMENS

Data sheet 3LD2013-1TL53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4- pole, lu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, floor mounting with door coupling, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle

Model	
Product brand name	SENTRON
Product designation	3LD Switch disconnector
Design of the product	EMERGENCY-STOP 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, red/yellow
Type of the driving mechanism / motor drive	No

General technical data		
Number of poles	4	
Type of device	fixed mounting	
Type of switch	Floor mounting with door coupling	
Size of switch disconnector	1	
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	2.5 kA2.s	

Let-through I2t value / with closed switch / at 440 V /	2.5 kA2.s
for combination switch + gG fuse / maximum	
Mechanical service life (switching cycles) / typical	100 000
Operating frequency / maximum	50 1/h
Type of fuse / according to UL	RK5
Voltage	
Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	6 kV
Current / at AC / rated value	16 A
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
 at AC / at 50/60 Hz / acc. to UL 508 / rated value 	600 V
Active power [hp] / at AC	
• at 480 V / acc. to UL 508 / rated value	7.5
• at 600 V / acc. to UL 508 / rated value	10
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	0.5 W
• for rated value of the current / at AC / in hot	0.5 W 0.5 W
 for rated value of the current / at AC / in hot operating state / per pole 	
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical 	
for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current	
for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current	0.5 W
for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value	0.5 W
for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value	9 A 16 A
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 690 V / rated value at AC-22 A / at 690 V / rated value 	9 A 16 A 16 A
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value	9 A 16 A 16 A 16 A
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value	9 A 16 A 16 A 16 A
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value 	9 A 16 A 16 A 16 A 16 A
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value 	9 A 16 A 16 A 16 A 16 A 16 A
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 440 V / rated value 	9 A 16 A
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 440 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value 	9 A 16
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value 	9 A 16
 for rated value of the current / at AC / in hot operating state / per pole per conductor / typical Current Operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value 	9 A 16

Let-through current / with closed switch	
 at 440 V / for combination switch + gG fuse / maximum 	3 kA
• at 690 V / for combination switch + gG fuse / maximum permissible	3 kA
Short-time withstand current (Icw)	
limited to 1 s / rated value	340 A
• at 690 V / limited to 1 s / rated value	340 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	4 kW
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	7.5 kW
• at AC-23 A / at 400 V / rated value	7.5 kW
• at AC-23 A / at 440 V / rated value	7.5 kW
• at AC-23 A / at 690 V / rated value	7.5 kW
• at AC-3 / at 240 V / rated value	3 kW
• at AC-3 / at 400 V / rated value	5.5 kW
• at AC-3 / at 690 V / rated value	5.5 kW
Operating current / rated value	16 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 	Yes
safety switch	Yes
• maintenance/repair switch	Yes
Appearance	
Color / of the actuating element	red

Product details	
Product function / can be locked into OFF	Yes
position	
Number of bracket locks / maximum	3
Hasp thickness / of the bracket locks / minimum	4 mm
Hasp thickness / of the bracket locks / maximum	8 mm
Short circuit	
Short-time withstand current (SCCR) / at 600 V / acc.	5 kA
to UL 508	
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	2
Number of connectable NO contacts / for auxiliary contacts / attachable / maximum	3
Number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
AWG number / as coded connectable conductor	
cross section / solid	
• maximum	10
• minimum	18
Type of electrical connection	
• for main current circuit	box terminal
• for auxiliary contacts	connection terminals
Requirements	
Design of the fuse link	
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 20 A
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
Mechanical Design	
Height	84 mm
Width	67 mm
Depth	429.5 mm
Mounting type	Built-in unit fixed-mounted version
Mounting type	
• front mounting with 4-hole attachment	Yes
 front mounting with central attachment 	No
• rail mounting	Yes
Net weight	423 g

Environmental conditions Ambient temperature / during operation • minimum • maximum 55 °C Ambient temperature / during storage / minimum -25 °C

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SF

Certificates

Reference code

acc. to DIN EN 61346-2acc. to DIN EN 81346-2

General Product Approval

Test Certificates









Miscellaneous

Special Test Certificate

Shipping Ap-	
proval	

other



Environmental Confirmations

LRS

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=3LD2013-1TL53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2013-1TL53

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2013-1TL53

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











