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 actuating element	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	
mechanical service life (switching cycles) / typical	100 000	
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	3 kA2.s	
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	2.5 kA2.s	
operating frequency / maximum	50 1/h	
Voltage		
insulation voltage / rated value	690 V	
surge voltage resistance / rated value	6 kV	
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 	0.5 W	
per conductor / typical	1 W	
Current		
operational current		
• at 40 °C / rated value	16 A	
• at 45 °C / rated value	16 A	
 at 50 °C / rated value 	16 A	
 at 55 °C / rated value 	16 A	

1.40/	40.4
at AC / rated value	16 A
 at AC-23 A / at 400 V / rated value 	16 A
• at AC-21 / at 690 V / rated value	16 A
• at AC-21 A / at 240 V / rated value	16 A
at AC-21 A / at 440 V / rated value	16 A
operational current / of upstream fuse / rated value	20 A
let-through current / with closed switch	Oliva
 at 440 V / for combination switch + gG fuse / maximum 	3 kA
• at 690 V / for combination switch + gG fuse /	3 kA
maximum permissible	
Main circuit	
operating power	
• at AC-23 A / at 240 V / rated value	4 kW
at AC-23 A / at 400 V / rated value	8 kW
• at AC-23 A / at 440 V / rated value	7.5 kW
at AC-23 A / at 690 V / rated value	8 kW
at AC-3 / at 240 V / rated value	3 kW
at AC-3 / at 400 V / rated value	6 kW
• at AC-3 / at 690 V / rated value	5.5 kW
operational 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	
•	Yes
main switch switch disconnector	
• switch disconnector	Yes
switch disconnectorEMERGENCY OFF switch	Yes Yes
switch disconnectorEMERGENCY OFF switchsafety switch	Yes Yes Yes
 switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch 	Yes Yes
 switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance	Yes Yes Yes Yes Yes
 switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element 	Yes Yes Yes
 switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details 	Yes Yes Yes Yes Yes
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes Yes Yes Yes Ted
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position	Yes Yes Yes Yes Yes Yes Yes
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum	Yes Yes Yes Yes Yes Yes 3
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum	Yes Yes Yes Yes Yes Yes red Yes 3 4 mm
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum hasp thickness / of the bracket locks / maximum	Yes Yes Yes Yes Yes Yes 3
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum hasp thickness / of the bracket locks / maximum product extension / optional	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm No No
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm No No
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm No No
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm No No
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL 60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL	Yes Yes Yes Yes Yes red Yes 3 4 mm 8 mm No No No
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL 60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value active power [hp] / at AC / at 480 V / according to UL	Yes Yes Yes Yes red Yes 3 4 mm 8 mm No No No 16 A 600 V
switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional motor drive voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL 60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value active power [hp] / at AC / at 600 V / according to UL	Yes Yes Yes Yes red Yes 3 4 mm 8 mm No No No 7.5

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continuous current / of upstream fuse / according to UL / rated value	50 A
type of fuse / according to UL	RK5
Number	
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 connectable conductor cross-sections / for copper conductor	
• solid	1x (16mm²)
 finely stranded / with core end processing 	1x (14mm²)
stranded	1x (16mm²)
type of connectable conductor cross-sections / for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 \dots 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 \dots 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
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
fastening method	Built-in unit fixed-mounted version
fastening method	
 4-hole front mounting 	Yes
 front mounting with central attachment 	No
rail mounting	Yes
net weight	423 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	





Confirmation





Miscellaneous





Special Test Certificate





other

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=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

