SIEMENS

Data sheet 3LD2022-1TL13



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4-pole, Iu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, front-mounted, knob-operated 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	selector switch	
design of handle	knob-operated 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	front mounted	
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	

140/ 1 1	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	
 at 440 V / for combination switch + gG fuse / maximum 	3 kA
• at 690 V / for combination switch + gG fuse /	3 kA
maximum permissible	O IVA
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 490 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	300 V
suitability for use	Yes
main switch	YES
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
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
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 red
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 2
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 2 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 2
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 2 4 mm 6 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 product extension / optional motor drive	Yes Yes Yes Yes red Yes 2 4 mm 6 mm 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 / maximum hasp thickness / of the bracket locks / maximum product extension / optional	Yes Yes Yes Yes Yes red Yes 2 4 mm 6 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 product extension / optional motor drive	Yes Yes Yes Yes red Yes 2 4 mm 6 mm 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	Yes Yes Yes Yes red Yes 2 4 mm 6 mm 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	Yes Yes Yes Yes red Yes 2 4 mm 6 mm 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	Yes Yes Yes Yes Yes red Yes 2 4 mm 6 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 2 4 mm 6 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 red Yes 2 4 mm 6 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 2 4 mm 6 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 2 4 mm 6 mm No No No To kA
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 2 4 mm 6 mm No No No 7.5

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	2
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 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
• finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm 2), 1x 2,5mm 2 ; front auxiliary switch 1x 2,5mm 2
• 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	66 mm
width	49 mm
depth	89.5 mm
fastening method	Built-in unit fixed-mounted version
fastening method	
4-hole front mounting	Yes
front mounting with central attachment	No
• rail mounting	No
net weight	175 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	
- Committee of the comm	



Confirmation







Miscellaneous



Special Test Certificate



Environmental Confirmations

other

Miscellaneous

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=3LD2022-1TL13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2022-1TL13

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

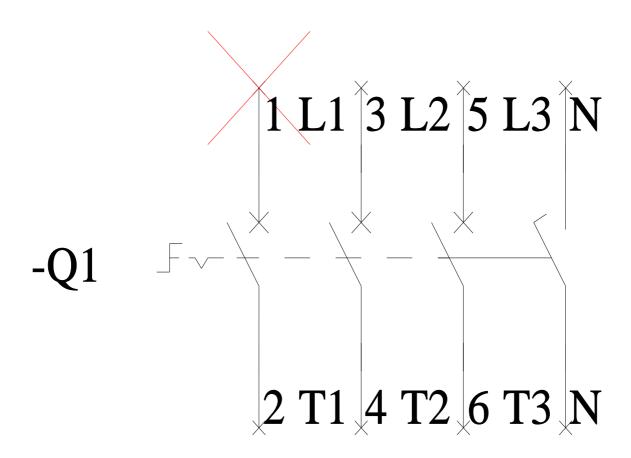
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2022-1TL13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications



7