SIEMENS

Data sheet

3LD2054-1TL53

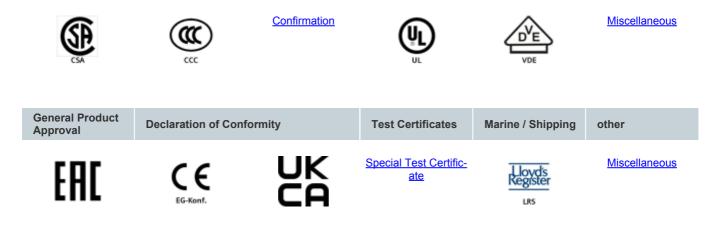


SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4-pole, Iu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, front-mounted, rotary operating mechanism, Red / yellow, central mounting 22.5 mm of the handle

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 type of switch front mounted design of the actuating element red color / of the actuating element red design of handle rotary operating mechanism, red/yellow type of the driving mechanism / motor drive No Size of switch disconnector 1 number of poles 4 size of switch disconnector 1 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 50 1/h degree of pollution 3 Voltage 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V surge voltage resistance / rated value 690 V operating frequency / rated value 690 V operating fr	Model		
design of the product EMERGENCY-STOP switch display version / for switch position indicator manual operation 1 ON - 0 OFF type of switch front mounted design of the actuating element Short rotary knob color / of the actuating element red design of handle rotary operating mechanism, red/yellow type of the driving mechanism / motor drive No General technical data	product brand name	SENTRON	
display version / for switch position indicator manual operation 1 ON - 0 OFF type of switch front mounted design of the actuating element red color / of the actuating element red design of handle rotary operating mechanism, red/yellow type of the driving mechanism / motor drive No General technical data	product designation	3LD Switch disconnector	
operation front mounted fype of switch front mounted design of the actuating element red color / of the actuating element red design of handle rotary operating mechanism, red/yellow type of the driving mechanism / motor drive No General technical data	design of the product	EMERGENCY-STOP switch	
Asign of the actuating element Short rotary knob color / of the actuating element red design of handle rotary operating mechanism, red/yellow type of the driving mechanism / motor drive No General technical data		1 ON - 0 OFF	
color / of the actuating element red design of handle rotary operating mechanism, red/yellow type of the driving mechanism / motor drive No General technical data	type of switch	front mounted	
design of handle rotary operating mechanism, red/yellow type of the driving mechanism / motor drive No General technical data	design of the actuating element	Short rotary knob	
type of the driving mechanism / motor drive No General technical data	color / of the actuating element	red	
General technical data number of poles 4 size of switch disconnector 1 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 V operating trequency / rated value 690 V operating frequency / rated value 11 • minimum 50 Hz • maximum 60 Hz Protection class IP IP65 gree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation <t< td=""><td>design of handle</td><td>rotary operating mechanism, red/yellow</td></t<>	design of handle	rotary operating mechanism, red/yellow	
number of poles 4 size of switch disconnector 1 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 6 000 insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 6 kV operating frequency / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 6 kV operating frequency / rated value 690 V operating requency / rated value 6 kV operating requency / rated value 6 kV operating frequency / rated value 60 Hz Protection class Protection class protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W	type of the driving mechanism / motor drive	No	
size of switch disconnector 1 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 64V operating frequency / rated value 690 V operating voltage 690 V operating voltage 690 V operating voltage 690 V operating trequency / rated value 690 V operating frequency / rated value 60 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 <td>General technical data</td> <td></td>	General technical data		
mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / maximum 600 V surge voltage resistance / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 600 Hz Protection class 700 Hz protection class IP IP65 protection class IP / on the front IP65 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W	number of poles	4	
electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 64 KV operating voltage • at AC / rated value 690 V operating voltage • at AC / rated value 690 V operating frequency / rated value 600 Hz operating frequency / rated value 100 Hz 00 Hz 00 Hz 00 Hz Protection class IP protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	size of switch disconnector	1	
• at AC-23 A / at 690 V 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 6 kV operating frequency / rated value 690 V operating frequency / rated value 600 Hz Protection class Protection class IP grotection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W	mechanical service life (switching cycles) / typical	100 000	
operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V insulation voltage / rated value 690 V operating voltage resistance / rated value 6 kV operating voltage 6 kV operating requency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 60 Hz Protection class Frotection class IP protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W	electrical endurance (switching cycles)		
degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 6 kV • at AC / rated value 690 V operating frequency / rated value 600 Hz Protection class Protection class IP protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in 0.5 W	• at AC-23 A / at 690 V	6 000	
Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 6 kV • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class 100 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W	operating frequency / maximum	50 1/h	
insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class 1, 3R, 4X, 12 protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W	degree of pollution	3	
surge voltage resistance / rated value 6 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class 10 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W	Voltage		
operating voltage 690 V operating frequency / rated value 690 V operating frequency / rated value 50 Hz • minimum 60 Hz Protection class 60 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 0.5 W	insulation voltage / rated value	690 V	
• at AC / rated value 690 V operating frequency / rated value 600 V • 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	surge voltage resistance / rated value	6 kV	
operating frequency / rated value 50 Hz • minimum 50 Hz • maximum 60 Hz Protection class Protection class IP 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	operating voltage		
• 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 0.5 W	 at AC / rated value 	690 V	
• maximum 60 Hz Protection class IP65 protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation IP65 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W	operating frequency / rated value		
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	• minimum	50 Hz	
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	• maximum	60 Hz	
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	Protection class		
protection class IP / on the front IP65 Dissipation	protection class IP	IP65	
Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W	degree of protection NEMA rating	1, 3R, 4X, 12	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W	protection class IP / on the front	IP65	
hot operating state / per pole	Dissipation		
Current		0.5 W	
	Current		
operational current / rated value 16 A	operational current / rated value	16 A	
operational current	operational current		
• at 40 °C / rated value 16 A	• at 40 °C / rated value	16 A	
• at 45 °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
at AC / rated value	16 A
Main circuit	
operational current	
 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 400 V / rated value 	16 A
 at AC-21 A / at 440 V / rated value 	16 A
 at AC-23 A / at 400 V / rated value 	16 A
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
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 contacts / at AC / maximum	10 A
insulation voltage / of the auxiliary switch / rated value	500 V
	500 V
Suitability	
suitability for use	
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	Yes
safety switch	Yes
maintenance/repair switch	Yes
Product details	
product feature / can be locked into OFF position	Yes
	Yes
product feature / can be locked into OFF position	Yes
product feature / can be locked into OFF position accessories	Yes
product feature / can be locked into OFF position accessories product extension / optional	
product feature / can be locked into OFF position accessories product extension / optional • motor drive	No
product feature / can be locked into OFF position accessories product extension / optional • motor drive • voltage trigger	No No
product feature / can be locked into OFF position accessories product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts	No No
product feature / can be locked into OFF position accessories product extension / optional	No No 1
product feature / can be locked into OFF position accessories product extension / optional	No No 1 1
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum	No No 1 1 0
product feature / can be locked into OFF position accessories product extension / optional	No No 1 1 0 3
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum number of bracket locks / maximum conditional short-circuit current / with line-side fuse 	No No 1 1 0 3
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection	No No 1 1 0 3
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection attachable / by gG fuse / rated value	No No 1 1 0 3 4 8 mm
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch at 240 V / for combination switch + gG fuse /	No No 1 1 0 3 4 8 mm
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch at 240 V / for combination switch + gG fuse / maximum at 440 V / for combination switch + gG fuse /	No No 1 1 0 3 4 8 mm
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch at 240 V / for combination switch + gG fuse / maximum at 440 V / for combination switch + gG fuse / maximum at 690 V / by combination switch + gG fuse / maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA
<pre>product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch at 240 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum </pre>	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA
product feature / can be locked into OFF position accessories product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value let-through current / with closed switch • at 240 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum permissible	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA

I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	3 kA2.s
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
operational current / of upstream fuse / rated value	20 A
according UL	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	16 A
operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value	600 V
active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value	7.5
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	10
short-time withstand current (SCCR) / at 600 V / according to UL 508/UL 60947-4-1	5 kA
continuous current / of upstream fuse / according to UL / rated value	50 A
type of fuse / according to UL	RK5
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	2x (0.75 2.5 mm²), 1x 4 mm²
 finely stranded / with core end processing 	2x (0.75 1.5 mm²), 1x 2.5 mm²
• stranded	2x (0.75 2.5 mm²), 1x 4 mm²
type of electrical connection	
 for main current circuit 	box terminal
 for auxiliary contacts 	connection terminals
Mechanical Design	
height	84 mm
width	67 mm
depth	116.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
 4-hole front mounting 	No
 front mounting with central attachment 	Yes
● rail mounting	No
net weight	207 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
maximum	55 °C
ambient temperature / during storage	
● minimum	-25 °C
● maximum	55 °C
General Product Approval	



other

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=3LD2054-1TL53

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

 https://support.industry.siemens.com/cs/ww/en/ps/3LD2054-1TL53

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

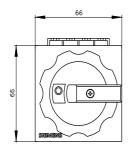
 http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2054-1TL53

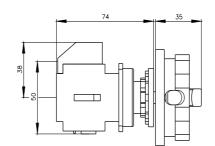
 CAx-Online-Generator

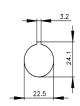
 http://www.siemens.com/cax

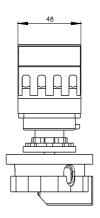
 Tender specifications

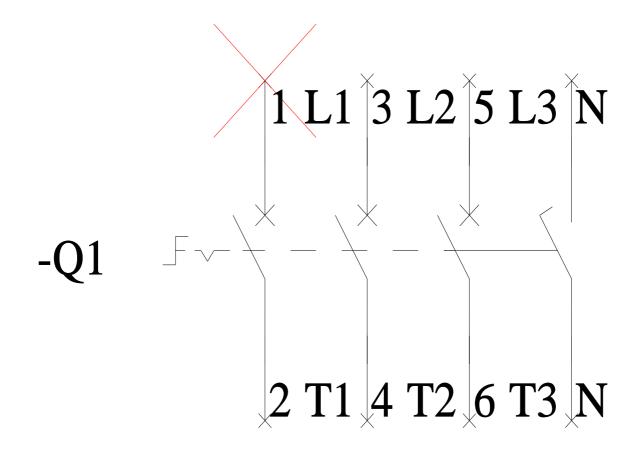
 http://www.siemens.com/specifications

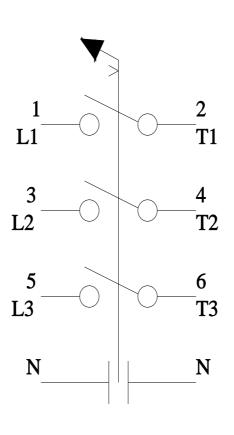












-CI

Ø