SIEMENS

Data sheet

3LD2144-0TK51

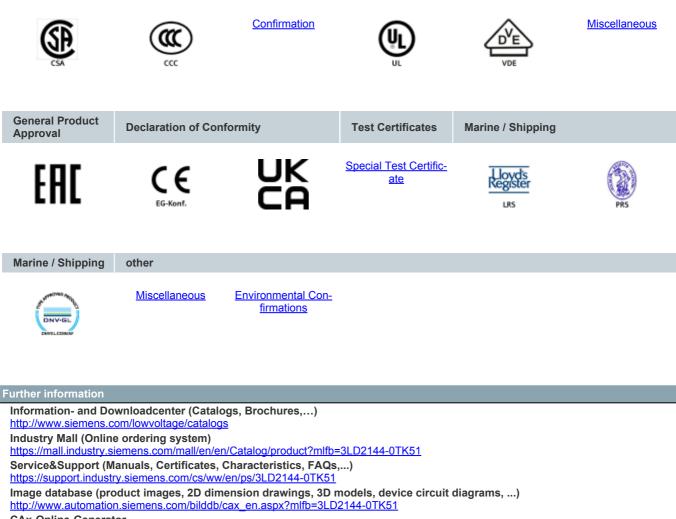


SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, floor mounting with door coupling, rotary operating mechanism, black, central mounting 22.5 mm of the handle

product brand name SENTRON product designation 3LD 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 the actuating mechanism / motor drive No Qeneral technical data rotary operating mechanism, black number of poles 3 size of switch disconnector 2 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 surge voltage resistance / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 690 V	Model		
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	product brand name	SENTRON	
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	product designation	3LD Switch disconnector	
operation Floor mounting with door coupling 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 number of poles 3 size of switch disconnector 2 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 insulation voltage / rated value operating voltage 6 kV operating voltage 690 V	design of the product	Main switch	
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 number of poles 3 size of switch disconnector 2 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 surge voltage resistance / rated value 690 V operating voltage 690 V operating frequency / rated value 690 V		1 ON - 0 OFF	
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 number of poles 3 size of switch disconnector 2 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V operating voltage 64 kV operating voltage 690 V	type of switch	Floor mounting with door coupling	
design of handle rotary operating mechanism, black type of the driving mechanism / motor drive No General technical data number of poles number of poles 3 size of switch disconnector 2 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 insulation voltage / rated value operating voltage 690 V surge voltage resistance / rated value 690 V operating voltage 690 V operating requency / rated value 690 V	design of the actuating element	Short rotary knob	
type of the driving mechanism / motor drive No General technical data	color / of the actuating element	black	
General technical data number of poles 3 size of switch disconnector 2 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 insulation voltage / rated value insulation voltage resistance / rated value 690 V operating voltage 690 V operating requency / rated value 690 V	design of handle	rotary operating mechanism, black	
number of poles 3 size of switch disconnector 2 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 insulation voltage / rated value operating voltage 6 80 V operating voltage 6 90 V operating requency / rated value 6 90 V	type of the driving mechanism / motor drive	No	
size of switch disconnector 2 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 • at AC-23 A / at 690 V 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V operating voltage resistance / rated value 6 kV operating voltage 690 V	General technical data		
mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 • at AC-23 A / at 690 V 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V operating voltage resistance / rated value 6 kV operating voltage 690 V • at AC / rated value 690 V	number of poles	3	
electrical endurance (switching cycles) 6 000 • at AC-23 A / at 690 V 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 6 kV operating voltage 690 V • at AC / rated value 690 V	size of switch disconnector	2	
• at AC-23 A / at 690 V 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 6 kV operating voltage 6 kV operating voltage 690 V • at AC / rated value 690 V	mechanical service life (switching cycles) / typical	100 000	
operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 6 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V	electrical endurance (switching cycles)		
degree of pollution 3 Voltage insulation voltage / rated value insulation voltage resistance / 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	• at AC-23 A / at 690 V	6 000	
Voltage 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	operating frequency / maximum	50 1/h	
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	degree of pollution	3	
surge voltage resistance / rated value 6 kV operating voltage 690 V operating frequency / rated value 690 V	Voltage		
operating voltage 690 V operating frequency / rated value 690 V	insulation voltage / rated value	690 V	
• at AC / rated value 690 V forerating frequency / rated value	surge voltage resistance / rated value	6 kV	
operating frequency / rated value	operating voltage		
	 at AC / rated value 	690 V	
	operating frequency / rated value		
• minimum 50 Hz	• minimum	50 Hz	
• maximum 60 Hz	• maximum	60 Hz	
Protection class	Protection class		
protection class IP IP65	protection class IP	IP65	
degree of protection NEMA rating 1, 3R, 4X, 12	degree of protection NEMA rating	1, 3R, 4X, 12	
protection class IP / on the front IP65	protection class IP / on the front	IP65	
Dissipation	Dissipation		
power loss [W] / for rated value of the current / at AC / in 1.1 W hot operating state / per pole		1.1 W	
Current	Current		
operational current / rated value 25 A	operational current / rated value	25 A	
operational current	operational current		
• at 40 °C / rated value 25 A	• at 40 °C / rated value	25 A	
• at 45 °C / rated value 25 A	• at 45 °C / rated value	25 A	

	05 A
• at 50 °C / rated value	25 A
• at 55 °C / rated value	25 A
at AC / rated value	25 A
Main circuit	
operational current	
• at AC-21 / at 690 V / rated value	25 A
 at AC-21 A / at 240 V / rated value 	25 A
 at AC-21 A / at 400 V / rated value 	25 A
 at AC-21 A / at 440 V / rated value 	25 A
at AC-23 A / at 400 V / rated value	20 A
operating power	
 at AC-23 A / at 240 V / rated value 	5 kW
 at AC-23 A / at 400 V / rated value 	10 kW
 at AC-23 A / at 440 V / rated value 	9.5 kW
 at AC-23 A / at 690 V / rated value 	10 kW
 at AC-3 / at 240 V / rated value 	4 kW
 at AC-3 / at 400 V / rated value 	8 kW
 at AC-3 / at 690 V / rated value 	7.5 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 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	No
	Yes
 safety switch maintenance/renair switch 	Yes
maintenance/repair switch	Yes Yes
maintenance/repair switch Product details	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position	
maintenance/repair switch Product details product feature / can be locked into OFF position accessories	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes Yes
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive	Yes Yes No
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional emotor drive evoltage trigger	Yes Yes No No
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional emotor drive evoltage trigger number of connectable NC contacts / for auxiliary contacts	Yes Yes No
maintenance/repair switch Product details 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	Yes Yes No No
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional emotor drive evoltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum	Yes Yes No No 3 5
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional emotor drive evoltage 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	Yes Yes No No 3 5 0
 maintenance/repair switch Product details 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 connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum 	Yes Yes No No 3 5 0 3
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional emotor drive evoltage 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 hasp thickness / of the bracket locks	Yes Yes No No 3 5 0
 maintenance/repair switch Product details 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 connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks 	Yes Yes No No 3 5 0 3
 maintenance/repair switch Product details 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 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details 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 	Yes Yes No No 3 5 0 3
 maintenance/repair switch Product details 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 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details 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 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details 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 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 / 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details 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 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 / 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details 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 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 / for combination switch + gG fuse / maximum 	Yes Yes No No 3 5 0 3 4 8 mm 50 kA 3.5 kA 3.5 kA
 maintenance/repair switch Product details 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 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 / 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 	Yes Yes No No 3 5 0 3 4 8 mm 50 kA 3.5 kA 3.5 kA 4 kA

I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s
design of the fuse link	
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 25 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	25 A
according UL	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	25 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	10
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	15
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	8
• minimum	14
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1,516mm²)
 finely stranded / with core end processing 	1x (1,510mm²)
stranded	1x (1,516mm²)
type of connectable conductor cross-sections / for	
auxiliary contactssolid	lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary
 finely stranded / with core end processing 	switch 1x (0,75 2,5mm ²) lateral auxiliary switch 2x (0,75 1,5mm ²), 1x 2,5mm ² ; front auxiliary
• stranded	switch 1x 2,5mm ² lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)
type of electrical connection	Switch 1x (0,75 2,511117)
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
	00 mm
heightwidth	83 mm 67 mm
	451.5 mm
depth 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	Yes
net weight	431 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	

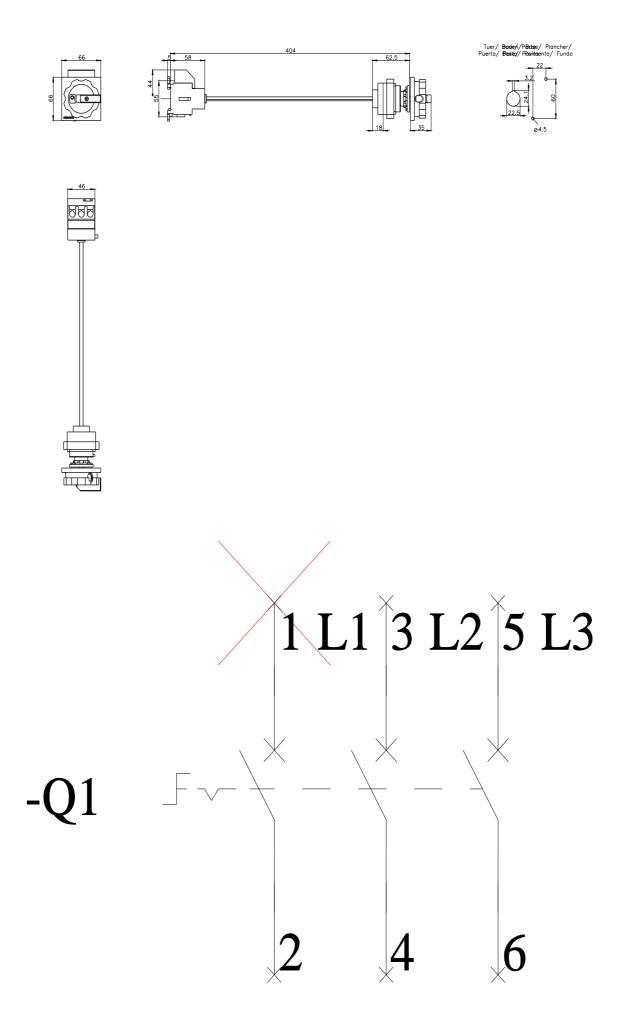


CAx-Online-Generator

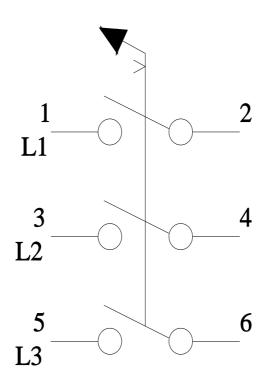
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Tender specifications

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