## SIEMENS

## Data sheet

## 3LD2254-0TK51

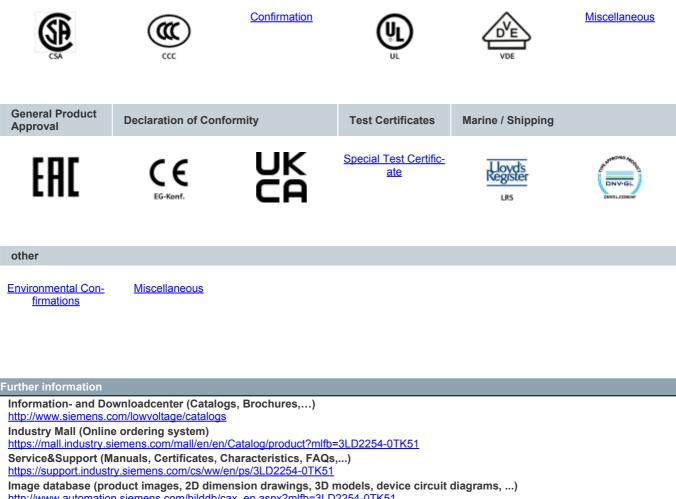


SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 32 A, Operating power / at AC-23 A at 400 V: 11.5 kW, front-mounted, rotary operating mechanism, black, central mounting 22.5 mm of the handle

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         front mounted           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	Model		
design of the product       Main 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       black         design of the actuating mechanism / motor drive       No         General 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         operating voltage       64 V         operating voltage       690 V	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       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         front mounted           type of switch         front mounted           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	design of the product	Main switch	
Join 1       Action of the actuating element       Short rotary knob         color / of the actuating element       black       rotary operating mechanism, black         type of the driving mechanism / motor drive       No         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       690 V         surge voltage resistance / rated value       690 V         operating voltage       6400 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       3         size of switch disconnector       2         mechanical service life (switching cycles) / typical       100 000         electrical endurance (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         operating voltage       680 V         operating voltage       690 V	type of switch	front mounted	
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         insulation voltage / rated value       690 V         operating voltage       690 V         operating voltage       690 V         operating frequency / 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         • 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       64 kV         operating voltage       690 V         • at AC / 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         • 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       6 kV         operating voltage       6 90 V         operating voltage       6 kV         operating frequency / rated value       690 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         • at AC / rated value       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       6 90 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       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 / 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       690 V         • 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 40 V       • 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     operating frequency / rated value	surge voltage resistance / rated value	6 kV	
operating frequency / rated value	operating voltage		
	<ul> <li>at AC / rated value</li> </ul>	690 V	
• minimum 50 Hz	operating frequency / rated value		
	• 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 1.8 W hot operating state / per pole	power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.8 W	
Current	Current		
operational current / rated value 32 A	operational current / rated value	32 A	
operational current	operational current		
• at 40 °C / rated value 32 A	• at 40 °C / rated value	32 A	
• at 45 °C / rated value 32 A	• at 45 °C / rated value	32 A	

e at 50 °C / rated value	22.4
• at 50 °C / rated value	32 A
• at 55 °C / rated value	32 A
at AC / rated value	32 A
Main circuit	
operational current	
<ul> <li>at AC-21 / at 690 V / rated value</li> </ul>	32 A
<ul> <li>at AC-21 A / at 240 V / rated value</li> </ul>	32 A
<ul> <li>at AC-21 A / at 400 V / rated value</li> </ul>	32 A
<ul> <li>at AC-21 A / at 440 V / rated value</li> </ul>	32 A
• at AC-23 A / at 400 V / rated value	22 A
operating power	
<ul> <li>at AC-23 A / at 240 V / rated value</li> </ul>	6 kW
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	12 kW
• at AC-23 A / at 440 V / rated value	11.5 kW
<ul> <li>at AC-23 A / at 690 V / rated value</li> </ul>	12 kW
<ul> <li>at AC-3 / at 240 V / rated value</li> </ul>	5.5 kW
<ul> <li>at AC-3 / at 400 V / rated value</li> </ul>	10 kW
• at AC-3 / at 690 V / rated value	9.5 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
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	No
<ul> <li>safety switch</li> </ul>	Yes
<ul> <li>maintenance/repair switch</li> </ul>	Yes
Product details	
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
motor drive	No
<ul> <li>voltage trigger</li> </ul>	No
number of connectable NC contacts / for auxiliary contacts	2
/ attachable / maximum	
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	2
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
number of bracket locks / maximum	3
hasp thickness / of the bracket locks	4 8 mm
Short circuit	
conditional short-circuit current / with line-side fuse protection	
● at 690 V / by gG fuse / rated value	50 kA
let-through current / with closed switch	
● at 240 V / for combination switch + gG fuse / maximum	4.5 kA
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	4.5 kA
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	5 kA
I2t value / with closed switch	
at 240 V / for combination switch + gG fuse / maximum	9 kA2.s
<ul> <li>at 440 V / for combination switch + gG fuse /</li> </ul>	9 kA2.s

movimum	
maximum	0.442.0
<ul> <li>at 690 V / for combination switch + gG fuse / maximum</li> </ul>	9 kA2.s
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 40 A
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	40 A
according UL	40 A
	20.4
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	32 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	20
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	20
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	80 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)
<ul> <li>finely stranded / with core end processing</li> </ul>	1x (1,510mm <sup>2</sup> )
• stranded	1x (1,516mm <sup>2</sup> )
type of connectable conductor cross-sections / for auxiliary contacts	
• solid	2x (0.75 2.5 mm²), 1x 4 mm²
<ul> <li>finely stranded / with core end processing</li> </ul>	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
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals
Mechanical Design	
height	83 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
<ul> <li>front mounting with central attachment</li> </ul>	Yes
• rail mounting	No
net weight	223 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	



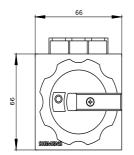
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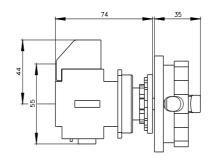
**CAx-Online-Generator** 

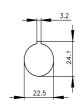
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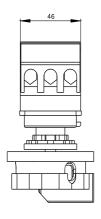
**Tender specifications** 

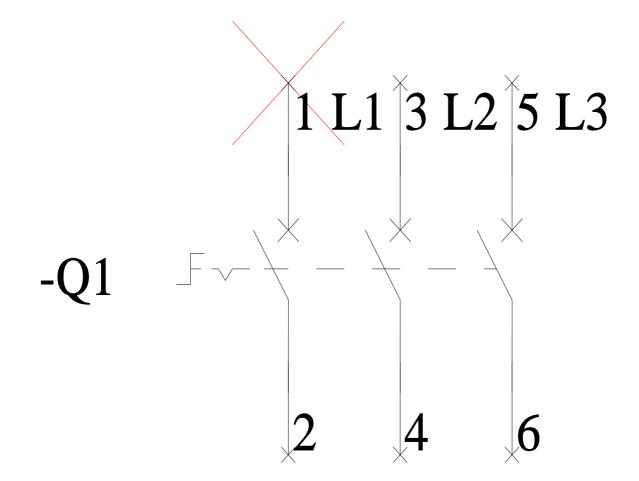
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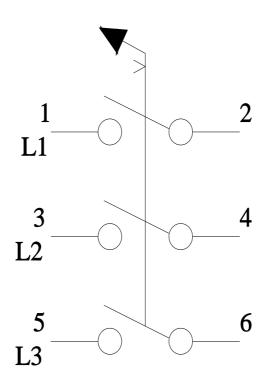








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