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

Model		
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	
design of the actuating element	Short rotary knob	
design of handle	rotary operating mechanism, black	
type of the driving mechanism / motor drive	No	
General technical data		
number of poles	3	
type of device	fixed mounting	
type of switch	front mounted	
size of switch disconnector	2	
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	9 kA2.s	
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	9 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 	1.8 W	
 per conductor / typical 	1.8 W	
Current		
operational current		
 at 40 °C / rated value 	32 A	
• at 45 °C / rated value	32 A	

 at 50 °C / rated value 	32 A
 at 55 °C / rated value 	32 A
at AC / rated value	32 A
at AC-23 A / at 400 V / rated value	22 A
at AC-21 / at 690 V / rated value	32 A
at AC-21 A / at 240 V / rated value	32 A
at AC-21 A / at 440 V / rated value	32 A
operational current / of upstream fuse / rated value	40 A
let-through current / with closed switch	
 at 440 V / for combination switch + gG fuse / maximum 	4.5 kA
 at 690 V / for combination switch + gG fuse / maximum permissible 	4.5 kA
Main circuit	
operating power	
at AC-23 A / at 240 V / rated value	6 kW
at AC-23 A / at 400 V / rated value	11.5 kW
at AC-23 A / at 440 V / rated value	11.5 kW
at AC-23 A / at 690 V / rated value	11.5 kW
• at AC-3 / at 240 V / rated value	5.5 kW
• at AC-3 / at 400 V / rated value	9.5 kW
• at AC-3 / at 690 V / rated value	9.5 kW
operational current / rated value	32 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
	500.1/
insulation voltage / of the auxiliary switch / rated value	500 V
insulation voltage / of the auxiliary switch / rated value Suitability	500 V
	500 V
Suitability	Yes
Suitability suitability for use	
Suitability suitability for use • main switch	Yes
Suitability suitability for use • main switch • switch disconnector	Yes Yes
Suitability suitability for use • main switch • switch disconnector • EMERGENCY OFF switch	Yes Yes No
Suitability suitability for use • main switch • switch disconnector • EMERGENCY OFF switch • safety switch	Yes Yes No Yes
Suitability suitability for use • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch Appearance	Yes Yes No Yes
suitability suitability for use main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element	Yes Yes No Yes Yes
Suitability suitability for use • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch Appearance	Yes Yes No Yes Yes
Suitability suitability for use • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes No Yes Yes
Suitability suitability for use • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch Appearance color / of the actuating element Product details	Yes Yes No Yes Yes Yes Yes
suitability suitability for use main switch 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 No Yes Yes black Yes
suitability suitability for use • main switch • 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 No Yes Yes Yes Yes 3
suitability suitability for use • main switch • 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 No Yes Yes Yes black Yes 3 4 mm
suitability suitability for use	Yes Yes No Yes Yes Yes black Yes 3 4 mm
suitability suitability for use • main switch • 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	Yes Yes No Yes Yes Yes black Yes 3 4 mm 8 mm
suitability suitability for use • main switch • 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 No Yes Yes Yes black Yes 3 4 mm 8 mm
Suitability suitability for use	Yes Yes No Yes Yes Yes black Yes 3 4 mm 8 mm
suitability suitability for use	Yes Yes No Yes Yes Yes black Yes 3 4 mm 8 mm No No
Suitability suitability for use • main switch • 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 No Yes Yes Yes black Yes 3 4 mm 8 mm
Suitability suitability for use	Yes Yes No Yes Yes black Yes 3 4 mm 8 mm No No
Suitability suitability for use • main switch • 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 No Yes Yes Yes black Yes 3 4 mm 8 mm No No
Suitability suitability for use • main switch • 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 No Yes Yes Yes black Yes 3 4 mm 8 mm No No

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
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	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 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
Requirements	
design of the fuse link	
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 40 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
Mechanical Design	
height	83 mm
width	67 mm
depth	116.5 mm
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	223 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	









Miscellaneous



Declaration of Conformity

Test Certificates

Marine / Shipping

other



Special Test Certificate





Environmental Confirmations **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=3LD2254-0TK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2254-0TK51

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2254-0TK51

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











