SIEMENS

Data sheet 3LD2154-0TK51



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

product brand name product designation design of the product display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element design of he actuating element design of he actuating element black color / of the actuating element design of handle type of switch design of handle type of the driving mechanism / motor drive design of handle type of switch design of handle type of switch disconnector number of poles 3 size of switch disconnector 2 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / 6000 operating frequency / maximum degree of pollution 3 Voltage surge voltage resistance / rated value operating voltage • at AC - 7 rated value • minimum operating frequency / rated value • minimum • aximum 50 Hz Protection class IP degree of 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 Current • at 40 °C / rated value • at 45 °C / rated value	Model	
design of the product display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element design of handle volve of the driving mechanism / motor drive General technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating requency / rated value operating frequency / rated value operating requency / rated value operating often of the front operation class IP / on the front power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value at 40 °C / rated value 5 A operational current at 40 °C / rated value 25 A operational current at 40 °C / rated value 25 A operational current at 40 °C / rated value	product brand name	SENTRON
display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element black design of handle type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector electrical endurance (switching cycles) / typical floo 000 electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical floo 000 electrical endurance (switching cycles) /	product designation	3LD Switch disconnector
operation type of switch design of the actuating element color / of the actuating element design of handle type of the driving mechanism / motor drive No General technical data number of poles 3 size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum 60 Hz Protection class protection class IP / on the front Dissipation power loss [IV] / for rated value of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value	design of the product	Main switch
design of the actuating element black color / of the actuating element black design of handle 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 electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / e at AC-23 A / at 690 V 6000 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 frequency / rated value 600 Hz Protection class IP / on the front 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 Current operational current / rated value 25 A		1 ON - 0 OFF
color / of the actuating element design of handle type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating frequency / rated value • at AC / rated value • minimum • maximum 50 Hz protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation operating state / per pole Current • at 40 °C / rated value 25 A operational current / rated value 25 A operational current • at 40 °C / rated value 25 A operational current • at 40 °C / rated value 25 A	type of switch	front mounted
design of handle type of the driving mechanism / motor drive No General technical data number of poles size of switch disconnector 2 mechanical service life (switching cycles) / typical 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 surge voltage resistance / rated value • at AC / rated value • at AC / rated value • minimum 50 Hz • maximum 60 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value • 25 A	design of the actuating element	Short rotary knob
type of the driving mechanism / motor drive General technical data number of poles 3 size of switch disconnector 2 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / 6 000 operating frequency / maximum 50 1/h degree of pollution Voltage insulation voltage / rated value operating vitage resistance / rated value operating frequency / rated value • at AC / rated value • operating frequency / rated value • minimum • maximum Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 25 A operational current oat 40 °C / rated value 25 A	color / of the actuating element	black
In umber of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum foo 1/h degree of pollution Voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum foo Hz Protection class IP degree of 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 Current • at 40 °C / rated value • operational current • at 40 °C / rated value 25 A	design of handle	rotary operating mechanism, black
number of poles size of switch disconnector geochanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz Protection class IP degree of 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 Current • at 40 °C / rated value 25 A operational current / rated value • at 40 °C / rated value 25 A	type of the driving mechanism / motor drive	No
size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum foo 1/h degree of pollution voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value • minimum operating frequency / rated value • maximum foo Hz Protection class IP degree of 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 Current operational current / rated value 25 A operational current o at 40 °C / rated value 25 A operational current o at 40 °C / rated value 25 A	General technical data	
mechanical service life (switching cycles) / typical 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 surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum Frotection class protection class IP degree of 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 Current operational current / rated value • at 40 °C / rated value 25 A operational current • at 40 °C / rated value 25 A	number of poles	3
electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum foo 1/h degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum foo Hz Protection class protection class IP degree of 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 Current operational current / rated value • at 40 °C / rated value 25 A operational current • at 40 °C / rated value 25 A	size of switch disconnector	2
at AC-23 A / at 690 V operating frequency / maximum degree of pollution 70tage insulation voltage / rated value surge voltage resistance / rated value operating voltage at AC / rated value operating frequency / rated value operating frequency / rated value operating frequency / rated value ominimum ominimu	mechanical service life (switching cycles) / typical	100 000
operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz • maximum 50 Hz Protection class protection class IP degree of 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 Current operational current / rated value • at 40 °C / rated value • at 40 °C / rated value 25 A	electrical endurance (switching cycles)	
degree of pollution Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage • at AC / rated value 690 V operating frequency / rated value • minimum 50 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 Current operational current / rated value 25 A operational current • at 40 °C / rated value 25 A	• at AC-23 A / at 690 V	6 000
insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage • at AC / rated value 690 V operating frequency / rated value • 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 Current operational current / rated value • at 40 °C / rated value 25 A	operating frequency / maximum	50 1/h
insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz • maximum 50 Hz Protection class protection class IP degree of 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 Current operational current / rated value • at 40 °C / rated value 690 V 6 kV 6 kV 690 V 6 kV 690 V 10 Hz 690 V 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz 11 Hz 11 Hz 12 Hz 12 Hz 13 Hz 14 Hz 15 Hz 16 Hz 16 Hz 17 Hz 18 Hz	degree of pollution	3
surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz • maximum Frotection class protection class IP degree of 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 Current operational current / rated value of the value of the current operational current / rated value of the value of the value 25 A operational current of the value of the value 25 A	Voltage	
operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz 60 Hz Protection class protection class IP degree of 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 Current operational current / rated value operational current • at 40 °C / rated value 25 A	insulation voltage / rated value	690 V
 at AC / rated value operating frequency / rated value minimum maximum fo Hz Protection class protection class IP degree of protection NEMA rating 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 Current operational current / rated value at 40 °C / rated value 25 A 25 A 25 A 26 A 26 A	surge voltage resistance / rated value	6 kV
operating frequency / rated value	operating voltage	
	at AC / rated value	690 V
	operating frequency / rated value	
protection class IP degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current other in the state of the current / at AC / in hot operational current / at AC / in hot operational current / rated value 25 A operational current other in the state of the current / at AC / in hot operational current / rated value 25 A	• minimum	50 Hz
protection class IP 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 Current operational current / rated value operational current • at 40 °C / rated value 1, 3R, 4X, 12 2, 5A	maximum	60 Hz
degree of protection NEMA rating 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 Current operational current / rated value operational current • at 40 °C / rated value 25 A	Protection class	
protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current • at 40 °C / rated value 1.1 W 25 A 25 A	protection class IP	IP65
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current • at 40 °C / rated value 25 A	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 Current operational current / rated value operational current • at 40 °C / rated value 25 A	protection class IP / on the front	IP65
hot operating state / per pole Current operational current / rated value operational current operational current operational current 25 A 25 A	Dissipation	
operational current / rated value 25 A operational current • at 40 °C / rated value 25 A		1.1 W
operational current • at 40 °C / rated value 25 A	Current	
• at 40 °C / rated value 25 A	operational current / rated value	25 A
	operational current	
• at 45 °C / rated value 25 A	 at 40 °C / rated value 	25 A
	• at 45 °C / rated value	25 A

a at 50 °C / rated value	25 A
• at 50 °C / rated value	25 A
at 55 °C / rated value at 60 / rated value	25 A
at AC / rated value Main circuit	25 A
Main circuit	
operational current	0.F. A
• 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	E MAI
• at AC-23 A / at 240 V / rated value	5 kW 10 kW
• at AC-23 A / at 400 V / rated value	
• 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 Auxiliary circuit	7.5 kW
Auxiliary circuit	0
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 10 A
continuous current / of the auxiliary contact / rated value	
insulation voltage / of the auxiliary switch / rated value	500 V
Suitability	
suitability for use	Voo
• main switch	Yes
switch disconnector	Yes
 EMERGENCY OFF switch 	No
F 1 11 1	V
• safety 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 motor drive voltage trigger	Yes Yes No 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	Yes Yes No No 2
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	Yes Yes No No
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes Yes No No 2
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 2 2
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 2 2 0
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 2 2 0 3
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 2 2 0 3
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 2 2 0 3
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 2 2 0 3 4 8 mm
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 2 2 0 3 4 8 mm
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 2 2 0 3 4 8 mm
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 2 2 0 3 4 8 mm 50 kA 3.5 kA
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 2 2 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	Yes No No No 2 2 0 3 4 8 mm 50 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 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	197 g
Environmental conditions	
ambient temperature / during operation	05.00
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage	25 °C
• minimum	-25 °C 55 °C
maximum Concret Product Approved.	55 C
General Product Approval	





Confirmation





Miscellaneous

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping







Special Test Certificate





Marine / Shipping

other



Miscellaneous

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=3LD2154-0TK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2154-0TK51

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2154-0TK51

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











