SIEMENS

Data sheet 3LD3154-1TK51



Load disconnector 3LD3, lu 25 A Main switch 3-pole Rated operating capacity at AC-23 A at 400V 9.0kW Front plate mounting Basic switch with Central hole mounting 22.5mm Toggle drive black 66x66 mm with auxiliary switch 1OE + 1S

product brand name design of the product design of the product display version / for switch position indicator manual operation type of switch design of the actuating element design of the actuating element color / of the actuating element design of handle type of switch design of handle votary operating mechanism / motor drive design of handle type of the driving mechanism / motor drive No General technical data number of poles number of poles / note nechnical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / 14 690 V operating frequency / maximum degree of pollution Voltago Insulation voltage / rated value operating requency / rated value • minimum surge voltage resistance / rated value • minimum sminimum fol Hz protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss [W] / for rated value operating state / per pole Current e at 40 °C / rated value operational current / rated value operational current / rated value e at 40 °C / rated value operational current / rated value e at 40 °C / rated value e at 40 °	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 type of the driving mechanism / motor drive General technical data number of poles / note mechanical service life (switching cycles) / typical 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 vilage • at AC / rated value • minimum • maximum 60 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front pissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 4 ° C / rated value • operating state / per pole Current • at 40 ° C / rated value • at 40 ° C / rated value • operational current / rated value • operational current • at 40 ° C / rated value • operational current • at 40 ° C / rated value • at 40 ° C / rated value • operational current • at 40 ° C / rated value • 25 A	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 type of the driving mechanism / motor drive No General technical data number of poles / note mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating frequency / rated value • at AC / rated value • minimum • maximum fooltz Protection class IP operational current / each value operational current / per pole Current operational current / rated value • at 40 °C / rated value • operational current / rated value	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 / note number of poles / note electrical endurance (switching cycles) / typical 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 voltage • at AC / rated value • minimum • maximum 50 Hz • maximum 50 Hz • maximum 50 Hz Protection class IP degree of protection NEMA rating 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 operational current / rated value operating state / per pole Current operational current / rated value operational current / rated value Operational current • at 40 °C / rated value Operational current • at 40 °C / rated value Operational current • at 40 °C / rated value Operational current • at 40 °C / rated value Operational current • at 40 °C / rated value Operational current • at 40 °C / rated value Operational current • at 40 °C / rated value Operational current • at 40 °C / rated value	design of the product	Main switch	
design of the actuating element black color / of the driving mechanism / motor drive No General technical data number of poles		1 ON - 0 OFF	
color / of the actuating element design of handle type of the driving mechanism / motor drive Ceneral technical data number of poles number of poles / note number of poles / note electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / operating frequency / maximum for operating frequency / maximum for operating frequency / maximum for operating voltage / rated value for operating voltage / operating frequency / rated value for operating state / per pole Current for operating current / rated value for operating attar / rated value for operational current / rated value for operational current for attact value for operating state / per pole Current for attact value for operating state / per pole Current for attact value for operating state / per pole Current for attact value for operating state / per pole Current for attact value for operating state / per pole	type of switch	front mounted	
design of handle type of the driving mechanism / motor drive No General technical data number of poles number of poles / note mechanical service life (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 operating voltage esistance / rated value / 690 V operating frequency / rated value / 690 V operating frequency / rated value / 690 V operating frequency / rated value / 690 V operating voltage • at AC / rated value / 690 V operating frequency / rated value / 60 Hz Protection class IP / on the front / 1965 degree of protection NEMA rating / 1, 3R, 4X, 12 protection class IP / on the front / 1965 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 / 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 anumber of poles mechanical 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 operating voltage resistance / rated value operating frequency / rated value at AC / rated value operating frequency / rated value and the first of the companion of the current / at AC / in hot operating state / per pole Current operational current / rated value operating state / per pole Current operational current / rated value 25 A operational current at 40 °C / rated value 25 A	color / of the actuating element	black	
number of poles number of poles / note mechanical service life (switching cycles) / typical	design of handle	rotary operating mechanism, black	
number of poles 3 number of poles / note 3 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) • at AC-23 A / at 690 V 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 • at AC / rated value 690 V operating frequency / rated value 690 V operating requency / rated value 690 V operating voltage • at AC / rated value 690 V operating frequency / rated value • minimum 50 Hz • maximum 60 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 25 A operational current / rated value 25 A operational current • at 40 °C / rated value	type of the driving mechanism / motor drive	No	
number of poles / note mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V 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 • at AC / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value • minimum 50 Hz • maximum 60 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 25 A operational current • at 40 °C / rated value 25 A	General technical data		
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electrical endurance (switching cycles) • at AC-23 A / at 690 V 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 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 • at 40 °C / rated value 25 A	number of poles / note	3	
at AC-23 A / at 690 V operating frequency / maximum degree of pollution 7	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 • 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 50 Hz 690 V 690	electrical endurance (switching cycles)		
degree of pollution Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value ominimum ominimu	• 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 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	operating frequency / maximum	50 1/h	
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 25 A operational current • at 40 °C / rated value 25 A	degree of pollution	3	
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 6 kV 6 kV 6 kV 6 kV 690 V 690	Voltage		
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 690 V 690	insulation voltage / rated value	690 V	
■ at AC / rated value Operating frequency / rated value ● minimum ● maximum On 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 operational current ● at 40 °C / rated value 25 A	surge voltage resistance / rated value	6 kV	
operating frequency / rated value • minimum • maximum 60 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	operating voltage		
 minimum maximum 60 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 operational current at 40 °C / rated value 25 A 	at AC / rated value	690 V	
● maximum 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 60 Hz IP65 1, 3R, 4X, 12 IP65 1.1 W 1.1 W 25 A	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 • at 40 °C / rated value 1P65 1, 3R, 4X, 12 25 A 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 IP65 1.1 W 1.1 W 25 A	• maximum	60 Hz	
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 • at 40 °C / rated value 1, 3R, 4X, 12 1P65 1.1 W 1.1 W 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 • at 40 °C / rated value 1.1 W 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 • at 40 °C / rated value 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	

at 50 °C / rated value	25 A
 at 50 °C / rated value at 55 °C / rated value 	25 A 25 A
at AC / rated value	25 A 25 A
	2071
Main circuit	
operational current	25 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	41114
 at AC-23 A / at 240 V / rated value 	4 kW
 at AC-23 A / at 400 V / rated value 	10 kW
• at AC-23 A / at 440 V / rated value	9 kW
• at AC-23 A / at 690 V / rated value	9 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	1
number of NO contacts / for auxiliary contacts	1
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
safety switch	Yes
maintenance/repair switch	Yes
Product details	
special product feature	Can be locked in zero position
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
motor drive	
	No
voltage trigger	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts	No 2
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	No 2 4
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 2 4 0
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	No 2 4 0 3
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	No 2 4 0 3
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 Short circuit conditional short-circuit current / with line-side fuse	No 2 4 0 3
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 Short circuit conditional short-circuit current / with line-side fuse protection	No 2 4 0 3 4 8 mm
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 Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value	No 2 4 0 3 4 8 mm
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 Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value	No 2 4 0 3 4 8 mm
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 Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value let-through current / with closed switch • at 240 V / for combination switch + gG fuse /	No 2 4 0 3 4 8 mm 10 kA 6 kA
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 440 V / by gG fuse / rated value • 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 2 4 0 3 4 8 mm 10 kA 6 kA 3.5 kA
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 440 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 /	No 2 4 0 3 4 8 mm 10 kA 6 kA 3.5 kA
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 440 V / by gG fuse / rated value • 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 permissible	No 2 4 0 3 4 8 mm 10 kA 6 kA 3.5 kA

maximum	
• at 440 V / for combination switch + gG fuse /	4 kA2.s
maximum	. 10 = 10
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	6
• minimum	14
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (2.5 to 16 mm²)
 finely stranded / with core end processing 	1x (2.516 mm²)
stranded	1x (2.5 to 16 mm²)
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	Box terminals
Mechanical Design	CO 1999
height width	60 mm 47 mm
depth	114 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	200 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
maximum ambient temperature / during storage	55 °C
ambient temperature / during storage	25 °C
minimum maximum	-25 °C 55 °C
General Product Approval	Declaration of Conformity
outloid i roddot Approvai	Decidiation of Comornity











other

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=3LD3154-1TK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD3154-1TK51

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD3154-1TK51

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







