SIEMENS

Data sheet

3LD2154-1TL51



SENTRON, Switch disconnector 3LD, main switch, 4-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

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	4	
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	4 kA2.s	
let-through l2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 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 	1.1 W	
 per conductor / typical 	1 W	
Current		
operational current		
• at 40 °C / rated value	25 A	
• at 45 °C / rated value	25 A	
• at 50 °C / rated value	25 A	
• at 55 °C / rated value	25 A	

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• at AC / rated value	25 A
 at AC-23 A / at 400 V / rated value 	20 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 440 V / rated value	25 A
operational current / of upstream fuse / rated value	25 A
let-through current / with closed switch	3.5 kA
 at 440 V / for combination switch + gG fuse / maximum 	3.5 KA
 at 690 V / for combination switch + gG fuse / 	4 kA
maximum permissible	
Main circuit	
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
operational current / rated value	25 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
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
Appearance	
color / of the actuating element	black
Product details	
product feature	
 can be locked into OFF position 	Yes
number of bracket locks / maximum	3
hasp thickness / of the bracket locks / minimum	4 mm
hasp thickness / of the bracket locks / maximum	8 mm
product extension / optional	
motor drive	No
voltage trigger	No
Short circuit	
conditional short-circuit current / with line-side fuse	
protection	
• at 690 V / by gG fuse / rated value	50 kA
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
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	1
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	1
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: 25 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
Mechanical Design	
height	84 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	256 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	
	n Miscellaneous

General Product
ApprovalDeclaration of ConformityTest CertificatesMarine / Shipping

EHC

CE

Special Test Certificate





Marine / Shipping



Miscellaneous

other

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=3LD2154-1TL51 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2154-1TL51 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2154-1TL51 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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