## **SIEMENS**

Data sheet 3LD3154-0TL51



Load disconnector 3LD3, lu 25 A Main switch 3-pole + N 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

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 the actuating element design of handle design of handle type of fixe driving mechanism / motor drive design of handle type of he driving mechanism / motor drive No  General technical data number of poles / note number of poles / note number of poles service life (switching cycles) / typical electrical endurance (switching cycles) / operating frequency / maximum degree of pollution  Voltago insulation voltage / rated value operating voltage • at AC-23 A / at 64 value  operating frequency / rated value • inimimum • maximum  for optical insulation voltage / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • minimum • maximum  for operating frequency / rated value • for operating frequency / rated value • maximum  for operating frequency / rated value  operating frequency / rated value of the current / at AC / in hot operating state / per pole  Current  operational current / rated value • operational current / rated valu	Model		
design of the product display version / for switch position indicator manual operation type of switch front mounted design of the actuating element color / of the actuating element black design of handle rotary operating mechanism, black type of the driving mechanism / motor drive rotary operating mechanism, black type of the driving mechanism / motor drive Rofeneral technical data number of poles / note numbe	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 design of handle type of the driving mechanism / motor drive lose of the driving mechanism, black lose of	product designation	3LD Switch disconnector	
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  Foerard technical data number of poles number of poles   4 number of poles   7 number of	design of the product	Main switch	
design of the actuating element black color / of the actuating element black classing of handle type of the driving mechanism / motor drive No  General technical data  number of poles 4 number of poles 4 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 200 000 electrical endurance (switching cycles) / 6 000 operating frequency / maximum 50 1/h degree of pollution 3  Voltage insulation voltage / rated value 690 V operating voltage resistance / rated value 690 V operating voltage 690 V operating frequency / rated value 690 V operating resistance / rated value 690 V operating to operating voltage 690 V operating to operating voltage 690 V operating to operating frequency / rated value 690 V operating state / fact of the current / at AC / in 1, 3R, 4X, 12 protection class IP / on the front IP65  Dissipation  power loss [W] / for rated value of the current / at AC / in 1, 1, W operational current / rated value of the current / at AC / in 1, 1, W operational current / rated value 0	. ,	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 / 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 voltage • at AC / rated value operating frequency / rated value • minimum  50 Hz  690 V  operating frequency / rated value  • minimum  50 Hz  60 Hz  Protection class IP degree of protection NEMA rating protection class IP / or 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 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  Ceneral technical data number of poles number of poles / 4 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 for insulation voltage / rated value surge voltage resistance / rated value • at AC / rated value  • at AC / rated value  • at AC / rated value  for operating frequency / rated value  surge voltage resistance / rated value • at AC / rated value  • at AC / rated value  • minimum  50 Hz  • maximum  50 Hz  degree of 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	design of the actuating element	Short rotary knob	
type of the driving mechanism / motor drive    General technical data	color / of the actuating element	black	
Content   Cont	design of handle	rotary operating mechanism, black	
number of poles  number of poles / note  number of poles / note  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 surge voltage resistance / rated value operating voltage  • at AC / rated value operating frequency / rated value  • minimum  • maximum  50 Hz  emaximum  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  • at 40 °C / rated value  25 A operational current  • at 40 °C / rated value  25 A	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 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 omaximum  50 Hz • 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	General technical data		
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 6 kV operating frequency / rated value 690 V operating voltage • at AC / rated value 690 V operating frequency / rated value • minimum 50 Hz • maximum 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 / rated value 25 A operational current • at 40 °C / rated value 25 A	number of poles	4	
electrical endurance (switching cycles)  • at AC-23 A / at 690 V  operating frequency / maximum  degree of pollution  7	number of poles / note	4	
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 operating frequency / rated value ominimum operation class IP operational current / operational current / at AC / in operational current / rated value operational current / rated value operational current / rated value operational current operational curr	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 in minimum for Hz operation 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 / rated value operational current	electrical endurance (switching cycles)		
degree of pollution  Voltage  insulation voltage / rated value	• 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 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  50 Hz • 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 • at 40 °C / rated value  6 kV  6 kV  690 V  6 POV	Voltage		
operating voltage  • at AC / rated value  operating frequency / rated value  • minimum  • 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  690	insulation voltage / rated value	690 V	
at AC / rated value  operating frequency / rated value  iminimum  omaximum  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  690 V	surge voltage resistance / rated value	6 kV	
operating frequency / rated value	operating voltage		
minimum     maximum     m	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  • 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  operational current  • at 40 °C / rated value  IP65  1, 3R, 4X, 12  IP65  1.1 W  1.1 W  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  25 A	<ul><li>maximum</li></ul>	60 Hz	
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  operational current  operational current  operational current  operational current  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  operational current  operational current  operational current  25 A	protection class IP	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	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	<ul> <li>at 40 °C / rated value</li> </ul>	25 A	
	<ul> <li>at 45 °C / rated value</li> </ul>	25 A	

• at 50 °C / rated value	25 A
• at 55 °C / rated value	25 A
at AC / rated value	25 A
Main circuit	
operational current	
<ul><li>at AC-21 / at 690 V / rated value</li></ul>	25 A
<ul><li>at AC-21 A / at 240 V / rated value</li></ul>	25 A
<ul><li>at AC-21 A / at 400 V / rated value</li></ul>	25 A
<ul><li>at AC-21 A / at 440 V / rated value</li></ul>	25 A
at AC-23 A / at 400 V / rated value	20 A
operating power	
<ul><li>at AC-23 A / at 240 V / rated value</li></ul>	4 kW
<ul><li>at AC-23 A / at 400 V / rated value</li></ul>	10 kW
<ul><li>at AC-23 A / at 440 V / rated value</li></ul>	9 kW
<ul><li>at AC-23 A / at 690 V / rated value</li></ul>	9 kW
<ul><li>at AC-3 / at 240 V / rated value</li></ul>	4 kW
<ul><li>at AC-3 / at 400 V / rated value</li></ul>	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	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	
<ul><li>main switch</li></ul>	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	
special product feature	Can be locked in zero position
product feature / can be locked into OFF position	Yes
accessories	
accessories	No
accessories product extension / optional	No No
accessories  product extension / optional  • motor drive	
accessories  product extension / optional  motor drive  voltage trigger  number of connectable NC contacts / for auxiliary contacts	No
accessories  product extension / optional	No 2
product extension / optional	No 2 4
product extension / optional	No 2 4 0
product extension / optional	No 2 4 0 3
product extension / optional	No 2 4 0 3
product extension / optional	No 2 4 0 3
product extension / optional	No 2 4 0 3 4 8 mm
product extension / optional	No 2 4 0 3 4 8 mm
product extension / optional	No 2 4 0 3 4 8 mm
product extension / optional  motor drive voltage trigger  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 /	No 2 4 0 3 4 8 mm  10 kA 6 kA
product extension / optional  motor drive voltage trigger  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
product extension / optional	No 2 4 0 3 4 8 mm  10 kA 6 kA 3.5 kA
product extension / optional	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	
at 690 V / for combination switch + gG fuse / maximum	4 kA2.s
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	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	4 v /0 F to 40 mars2)
<ul><li>solid</li><li>finely stranded / with core end processing</li></ul>	1x (2.5 to 16 mm²) 1x (2.516 mm²)
stranded     stranded	1x (2.5 to 16 mm²)
type of connectable conductor cross-sections / for	M(2000 10 mm)
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  type of electrical connection	2x (0.75 2.5 mm²), 1x 4 mm²
for main current circuit	box terminal
for auxiliary contacts	Box terminals
Mechanical Design	
height	60 mm
width	49 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	55 °C
ambient temperature / during storage	
• minimum	-25 °C
• maximum	55 °C
General Product Approval	Declaration of Conformity



Confirmation









other

**Miscellaneous** 

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD3154-0TL51}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD3154-0TL51

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD3154-0TL51

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







