## **SIEMENS**

Data sheet 3LD3054-1TL51



Load disconnector 3LD3, lu 16 A Main switch 3-pole + N Rated operating capacity at AC-23 A at 400V 7.5kW Front plate mounting Basic switch with Central hole mounting 22.5mm Rotating drive black 66 x 66 mm with auxiliary switch 1OE + 1S

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 short rotary knob clesign of handle type of switch design of handle volume of poles type of switch design of handle volume of poles type of the driving mechanism / motor drive design of handle type of the driving mechanism / motor drive No  Ceneral technical data number of poles number of poles / a number of poles / note describe (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 requency / rated value menaminum  * ob Hz  * operation olass IP  protection class IP protection class IP / or the front  power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  * operational current / rated value operational current / rated value  * operational current / rated value operational current / rated value  * operational current * of AC / rated value  * of AC / rated value of the current / at AC / in hot operating state / per pole  * operational current  * of AC / rated value  * of A	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 rotary operating mechanism / motor drive design of handle rotary operating mechanism, black type of the driving mechanism / motor drive No  Ceneral technical data number of poles / note number of poles / note described in described in the describe	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  type of the driving mechanism / motor drive  Short rotary knob  black  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)  • at AC-23 A / at 690 V  operating frequency / maximum  degree of pollution  Voltage  insulation voltage / rated value  operating voltage resistance / rated value  • minimum  • maximum  for HP65  degree of protection class IP  degree of protection ness IP / or the front  Dissipation  power loss [V) / 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 / rated value  operational current  operational current / rated value  operational current / rated value  operational current / rated value of the current / at AC / in hot operating state / per pole  Current  operational current / rated value  operational current / rated value  operational current / rated value  operational current / rated value of the current / at AC / in hot operating state / per pole	product designation	3LD Switch disconnector		
operation type of switch design of the actuating element color / of the actuating element black rotary operating mechanism, black type of the driving mechanism / motor drive No  General technical data number of poles number of poles 4 number of poles 4 number of poles 4 number of poles 5 electrical endurance (switching cycles) / typical 100 000 electrical endurance (switching cycles) / e 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 operating voltage resistance / rated value 690 V operating voltage resistance / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 600 Lt  Protection class IP / on the front IP65 Dissipation power loss [VI] / for rated value of the current / at AC / in hot operating state / per pole  Current operational current / rated value 16 A operational current / rated value 16 A	design of the product	Main 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 number of poles 4 number of poles   4 number of poles   4 number of poles   4 number of poles   4 number of poles   4 number of poles   6 number of poles   6 number of poles   7		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 number of poles / note nechanical 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 frequency / rated value • at AC / rated value • minimum • maximum  Protection class protection class IP degree of protection NEMA rating protection class IP / or the front power loss [W] / for rated value of the current / at AC / in hot operating state / per pole  Current  center of the actuating mechanism, black rotary operating mechanism, black rotary operating mechanism, black  rotary operating mechanism, black  4  4  4  4  4  4  4  4  4  4  4  4  4	type of switch	front mounted		
design of handle type of the driving mechanism / motor drive  Ro  General technical data number of poles / note	design of the actuating element	Short rotary knob		
type of the driving mechanism / motor drive  General technical data  number of poles	color / of the actuating element	black		
A number of poles A number of poles / note Mechanical service life (switching cycles) / typical / 100 000  electrical endurance (switching cycles) / 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 frequency / maximum / 50 Hz  operating requency / rated value / 690 V  surge voltage resistance / rated value / 690 V  operating voltage / o at AC / rated value / 690 V  operating frequency / rated value / 690 V  Dissipation   I, 3R, 4X, 12  protection class IP / on the front   IP65  Dissipation   IP65  Dissipation   IP65  Ourrent   O,5 W   O,5 W    operational current / rated value / 16 A    operational current / rated value / operational current / rated value / 16 A    operational current / rated value / 16 A    operational current / rated value / 16 A	design of handle	rotary operating mechanism, black		
number of poles 4 number of poles / note 4 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 6 kV operating voltage • at AC / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V  operating frequency / rated value 690 V  operating frequency / rated value 690 V  operating frequency / rated value 690 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 16 A operational current / rated value 16 A	type of the driving mechanism / motor drive	No		
number of poles / note  mechanical service life (switching cycles) / typical 100 000  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 6 kV operating voltage  • at AC / rated value 690 V operating frequency / rated value 690 V  operating requency / rated value 690 V  operating requency / rated value 690 V  operating frequency / rated value 690 V  operating frequency / rated value 600 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 16 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 • at AC / rated value • at AC / 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  16 A operational current / rated value  16 A	number of poles	4		
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 resistance / rated value  • at AC / rated value  • 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  operational current / rated value  16 A0  16 A  operational current	number of poles / note	4		
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 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 16 A operational current / rated value 16 A	mechanical service life (switching cycles) / typical	100 000		
operating frequency / maximum degree of pollution 3  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 690 V  operating frequency / rated value • minimum • maximum 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 16 A operational current / rated value 16 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  • 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 16 A operational current / rated value 5	• at AC-23 A / at 690 V	6 000		
insulation voltage / rated value  surge voltage resistance / rated value  operating voltage  • at AC / rated value  operating frequency / rated value  • minimum  • maximum  for 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  insulation voltage / rated value of the current / at AC / in hot operating state / per pole  16 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 of A	degree of pollution	3		
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  operational current / rated value  16 kV  68 kV  690 V  69	Voltage			
operating voltage	insulation voltage / rated value	690 V		
at AC / rated value operating frequency / rated value ominimum omaximum omaximum of 0 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  16 A  operational current	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  16 A  operational current	operating voltage			
minimum     maximum     m	at AC / rated value	690 V		
● 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 for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational current / rated value for the current / at AC / in hot operational cu	operating frequency / rated value			
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 for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current / rated value for a current / at AC / in hot operational current	• 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  16 A	• maximum	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  1, 3R, 4X, 12  IP65  0.5 W  16 A	Protection class			
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 16 A  operational current	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	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  16 A	protection class IP / on the front	IP65		
hot operating state / per pole  Current  operational current / rated value operational current	Dissipation			
operational current / rated value 16 A operational current		0.5 W		
operational current	Current			
	operational current / rated value	16 A		
• at 40 °C / rated value 16 A	operational current			
	<ul> <li>at 40 °C / rated value</li> </ul>	16 A		
• at 45 °C / rated value 16 A	● at 45 °C / rated value	16 A		

	4C A		
• at 50 °C / rated value	16 A		
• at 55 °C / rated value	16 A		
at AC / rated value	16 A		
Main circuit			
operational current			
• at AC-21 / at 690 V / rated value	16 A		
<ul><li>at AC-21 A / at 240 V / rated value</li></ul>	16 A		
<ul><li>at AC-21 A / at 400 V / rated value</li></ul>	16 A		
<ul><li>at AC-21 A / at 440 V / rated value</li></ul>	16 A		
at AC-23 A / at 400 V / rated value	16 A		
operating power			
<ul><li>at AC-23 A / at 240 V / rated value</li></ul>	3 kW		
<ul><li>at AC-23 A / at 400 V / rated value</li></ul>	8 kW		
<ul><li>at AC-23 A / at 440 V / rated value</li></ul>	7.5 kW		
<ul><li>at AC-23 A / at 690 V / rated value</li></ul>	8 kW		
<ul><li>at AC-3 / at 240 V / rated value</li></ul>	3 kW		
<ul><li>at AC-3 / at 400 V / rated value</li></ul>	6 kW		
at AC-3 / at 690 V / rated value	5.5 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		
<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		
product feature / can be locked into OFF position accessories	Yes		
	Yes		
accessories	Yes 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 No		
accessories  product extension / optional	No No 2		
accessories  product extension / optional	No No 2 4		
product extension / optional	No No 2 4 0		
product extension / optional	No No 2 4		
product extension / optional	No No 2 4 0		
product extension / optional	No No 2 4 0 3 4 8 mm		
product extension / optional	No No 2 4 0 3 4 8 mm		
product extension / optional	No No 2 4 0 3 4 8 mm		
product extension / optional	No 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	No 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 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  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 No 2 4 0 3 4 8 mm  10 kA 6 kA 3 kA		
product extension / optional	No No 2 4 0 3 4 8 mm  10 kA 6 kA 3 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 No 2 4 0 3 4 8 mm  10 kA 6 kA 3 kA		

maximum	2 5 1/42 6		
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	2.5 kA2.s		
• at 690 V / for combination switch + gG fuse /	3 kA2.s		
maximum			
design of the fuse link			
for short-circuit protection of the main circuit /     an action of the main circuit /	fuse gL/gG: 20 A		
required			
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A		
operational current / of upstream fuse / rated value	16 A		
according UL			
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	16 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	7.5		
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	10		
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)		
<ul> <li>finely stranded / with core end processing</li> </ul>	1x (2.516 mm²)		
• stranded	1x (2.5 to 16 mm²)		
type of connectable conductor cross-sections / for			
auxiliary contacts	0 (0 == 0 = 0) 4 4		
• 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 m	nm²	
type of electrical connection	h 4		
<ul><li>for main current circuit</li><li>for auxiliary contacts</li></ul>	box terminal  Box terminals		
	DOX (emilias		
Mechanical Design	60 mm		
height width	60 mm 60 mm		
depth	114 mm		
type of device	fixed mounting		
fastening method	Built-in unit fixed-mounted version		
fastening method		J. 5.5.1	
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)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD3054-1TL51}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD3054-1TL51

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD3054-1TL51

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







