SIEMENS

Data sheet

3LD2254-0TK51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 32 A, Operating power / at AC-23 A at 400 V: 11.5 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
	front mounted
type of switch	
design of the actuating element	Short rotary knob black
color of the actuating element design of handle	
type of the driving mechanism motor drive	rotary operating mechanism, black No
General technical data	
	2
number of poles	3
size of switch disconnector	2
mechanical service life (operating cycles) typical	100 000
 electrical endurance (operating cycles) at AC-23 A at 690 V 	6 000
	50 1/h
operating frequency maximum degree of pollution	3
	5
Voltage	200.1/
insulation voltage rated value	690 V
surge voltage resistance rated value	6 kV
operating voltage	200.1/
at AC rated value	690 V
operating frequency rated value	50.15
• 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	1.8 W
Current	
operational current rated value	32 A
operational current	
 at 40 °C rated value 	32 A
 at 45 °C rated value 	32 A
 at 50 °C rated value 	32 A
• at 55 °C rated value	32 A

at AC rated value	32 A
Main circuit	
operational current	
at AC-21 at 690 V rated value	32 A
at AC-21 A at 240 V rated value	32 A
• at AC-21 A at 400 V rated value	32 A
• at AC-21 A at 440 V rated value	32 A
 at AC-23 A at 400 V rated value 	22 A
operating power	
• at AC-23 A at 240 V rated value	6 kW
 at AC-23 A at 400 V rated value 	12 kW
 at AC-23 A at 440 V rated value 	11.5 kW
 at AC-23 A at 690 V rated value 	12 kW
 at AC-3 at 240 V rated value 	5.5 kW
 at AC-3 at 400 V rated value 	10 kW
 at AC-3 at 690 V rated value 	9.5 kW
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
Product details	
product feature can be locked into OFF position	Yes
product feature can be locked into OFF position	Yes
accessories	Yes
accessories product extension optional	
accessories product extension optional • motor drive	No
accessories product extension optional • motor drive • voltage trigger	No No
accessories product extension optional • motor drive	No
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts	No
accessories 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	No No 2
accessories 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	No No 2 2 0
accessories 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	No No 2 2
accessories 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	No No 2 2 0 3
accessories 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 hasp thickness of the bracket locks Short circuit	No No 2 2 0 3
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accessories 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 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	No No 2 2 0 3 4 8 mm
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accessories 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 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 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	No 2 2 0 3 4 8 mm
accessories 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 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 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 by combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 4.5 kA
accessories 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 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 by combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 4.5 kA 4.5 kA
accessories 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 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 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 by combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 4.5 kA 4.5 kA 5 kA
accessories 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 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 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 by combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum	No No 2 2 0 3 4 8 mm 50 kA 4.5 kA 4.5 kA 4.5 kA 9 kA2.s
accessories 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 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 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum permissible	No No 2 2 0 3 4 8 mm 50 kA 4.5 kA 4.5 kA 4.5 kA 5 kA 9 kA2.s
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accessories 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 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 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 by combination switch + gG fuse maximum • at 690 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 • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum <td< td=""><td>No No 2 2 2 0 3 4 8 mm 50 kA 4.5 kA 4.5 kA 4.5 kA 5 kA 9 kA2.s 9 kA2.s 9 kA2.s</td></td<>	No No 2 2 2 0 3 4 8 mm 50 kA 4.5 kA 4.5 kA 4.5 kA 5 kA 9 kA2.s 9 kA2.s 9 kA2.s
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according UL	
operational current at AC according to UL 508/UL 60947-	32 A
4-1 rated value operating voltage at AC at 50/60 Hz according to UL	600 V
508/UL 60947-4-1 rated value active power [hp] at AC at 480 V according to UL 508/UL	20
60947-4-1 rated value active power [hp] at AC at 600 V according to UL 508/UL	20
60947-4-1 rated value short-time withstand current (SCCR) at 600 V according to	5 kA
UL 508/UL 60947-4-1 continuous current of upstream fuse according to UL rated	80 A
value type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross	
section solid	0
 maximum minimum 	8 14
	14
type of connectable conductor cross-sections for copper conductor	$1 \times (1 = 16 \text{mm}^2)$
 solid finally stranded with ears and processing 	1x (1,516mm²) 1x (1,510mm²)
 finely stranded with core end processing stranded 	, ,
• stranded type of connectable conductor cross-sections for auxiliary	1x (1,516mm²)
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	
Mechanical Design height	83 mm
	83 mm 67 mm
height width depth	
height width depth type of device	67 mm 116.5 mm fixed mounting
height width depth type of device fastening method	67 mm 116.5 mm
height width depth type of device fastening method fastening method	67 mm 116.5 mm fixed mounting
height width depth type of device fastening method fastening method • 4-hole front mounting	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C 55 °C
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C 55 °C -25 °C
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C 55 °C
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C 55 °C -25 °C
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C 55 °C -25 °C 55 °C
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum General Product Approval	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C 55 °C -25 °C 55 °C
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum General Product Approval	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 223 g -25 °C 55 °C -25 °C 55 °C

EHC





Special Test Certificate





other

Environmental Confirmations Miscellaneous

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875 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=3LD2254-0TK51 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2254-0TK51 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2254-0TK51 CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications









