## SIEMENS

## Data sheet

## 3LD2405-0TK13



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3-pole, lu=250 A, operating power / at AC-23 A 400 V: 132 kW, front-mounted, knob-operated mechanism, red/yellow, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	3LD Switch disconnector
design of the product	EMERGENCY-STOP switch
display version for switch position indicator manual	1 ON - 0 OFF
operation	
type of switch	front mounted
design of the actuating element	selector switch
color of the actuating element	red
design of handle	knob-operated mechanism, red/yellow
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
size of switch disconnector	5
mechanical service life (operating cycles) typical	100 000
electrical endurance (operating 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	8 kV
operating voltage	
<ul> <li>at AC rated value</li> </ul>	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	36 W
Current	
operational current rated value	250 A
operational current	
<ul> <li>at 40 °C rated value</li> </ul>	250 A
• at 45 °C rated value	250 A
<ul> <li>at 50 °C rated value</li> </ul>	250 A
<ul> <li>at 55 °C rated value</li> </ul>	250 A

• at AC rated value	250 A
Main circuit	
operational current	
at AC-21 at 690 V rated value	250 A
<ul> <li>at AC-21 A at 240 V rated value</li> </ul>	250 A
<ul> <li>at AC-21 A at 400 V rated value</li> </ul>	250 A
<ul> <li>at AC-21 A at 440 V rated value</li> </ul>	250 A
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	224 A
operating power	
at AC-23 A at 240 V rated value	75 kW
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	132 kW
<ul> <li>at AC-23 A at 440 V rated value</li> </ul>	132 kW
<ul> <li>at AC-23 A at 690 V rated value</li> </ul>	55 kW
<ul> <li>at AC-3 at 240 V rated value</li> </ul>	55 kW
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	110 kW
<ul> <li>at AC-3 at 690 V rated value</li> </ul>	45 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
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	Yes
<ul> <li>safety switch</li> </ul>	Yes
maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	Yes
	Yes
product feature can be locked into OFF position	Yes
product feature can be locked into OFF position accessories	Yes
product feature can be locked into OFF position accessories product extension optional	
product feature can be locked into OFF position accessories product extension optional • motor drive	No
product feature can be locked into OFF position accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts	No
product feature can be locked into OFF position 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 3 3 0
product feature can be locked into OFF position 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 3 3 0 3
product feature can be locked into OFF position 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	No No 3 3 0
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product feature can be locked into OFF position 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 conditional short-circuit current with line-side fuse protection	No No 3 0 3 4 6 mm
product feature can be locked into OFF position         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         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	No No 3 0 3 4 6 mm
product feature can be locked into OFF position  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  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	No No 3 3 0 3 4 6 mm 50 kA 15 kA 15 kA
product feature can be locked into OFF position         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	No No 3 3 0 3 4 6 mm 50 kA 15 kA
product feature can be locked into OFF position         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 690 V for combination switch + gG fuse maximum         • at 690 V for combination switch + gG fuse maximum         • at 440 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	No No 3 3 0 3 4 6 mm 50 kA 15 kA 15 kA
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according UL	
operational current at AC according to UL 508/UL 60947- 4-1 rated value	250 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	100
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	75
short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	10 kA
continuous current of upstream fuse according to UL rated value	200 A
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid	
• minimum	1
• maximum	4/0
type of connectable conductor cross-sections for copper conductor	
• solid	1x (16185mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (16150mm²)
<ul> <li>stranded</li> </ul>	1x (16185mm²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	lateral auxiliary switch 2x (0,75 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup>
stranded	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	box terminal
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals
Mechanical Design	
height	169 mm
height width	112 mm
height width depth	112 mm 94 mm
height width depth type of device	112 mm 94 mm fixed mounting
height width depth type of device fastening method	112 mm 94 mm
height width depth type of device fastening method fastening method	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version
height width depth type of device fastening method fastening method • 4-hole front mounting	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version
height width depth type of device fastening method fastening method • 4-hole front mounting	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No 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	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No 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	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No 2 093 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	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No 2 093 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	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No 2 093 g -25 °C -25 °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	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No 2 093 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	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No 2 093 g -25 °C -25 °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	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No 2 093 g -25 °C 55 °C -25 °C 55 °C 55 °C Declaration of
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 • maximum	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No 2 093 g -25 °C 55 °C -25 °C 55 °C -25 °C 55 °C Declaration of Conformity CE
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 • maximum	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No No 2 093 g -25 °C 55 °C -25 °C 55 °C 55 °C Declaration of
height width depth type of device fastening method fastening method a 4-hole front mounting front mounting with central attachment arail mounting net weight <b>Environmental conditions</b> ambient temperature during operation ambient temperature during storage ambient temperature during storage	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No 2 093 g -25 °C 55 °C -25 °C 55 °C -25 °C 55 °C Declaration of Conformity CE
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 • maximum	112 mm 94 mm fixed mounting Built-in unit fixed-mounted version Yes No 2 093 g -25 °C 55 °C -25 °C 55 °C -25 °C 55 °C Declaration of Conformity CE



Type Test Certificates/Test Report

Special Test Certificate **Confirmation** 

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=3LD2405-0TK13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2405-0TK13

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2405-0TK13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications









