SIEMENS

3LD2305-0TK13 Data sheet



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3- pole, lu: 160 A, operating power / at AC-23 A 400 V: 75 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 operation	1 ON - 0 OFF
Design of the operating mechanism	selector switch
Design of handle	knob-operated mechanism, red/yellow
Type of the driving mechanism / motor drive	No

General technical data	
Number of poles	3
Type of device	fixed mounting
Type of switch	front mounted
Size of switch disconnector	5
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	185 kA2.s

Let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	185 kA2.s
Mechanical service life (switching cycles) / typical	100 000
Operating frequency / maximum	50 1/h
Voltage	
Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	8 kV
Operating current / at AC / rated value	160 A
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
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	36 W
operating state / per pole	
per conductor / typical	36 W
Current	
Operating current	
• at AC-23 A / at 690 V / rated value	47 A
• at AC-23 A / at 400 V / rated value	132 A
• at AC-22 A / at 690 V / rated value	140 A
• at AC-21 / at 690 V / rated value	160 A
• at AC-21 A / at 240 V / rated value	160 A
• at AC-21 A / at 440 V / rated value	160 A
• at AC-22 A / at 240 V / rated value	140 A
• at AC-22 A / at 440 V / rated value	140 A
• at AC-23 A / at 240 V / rated value	140 A
• at AC-23 A / at 440 V / rated value	132 A
Operating current / of upstream fuse / rated value	160 A
Let-through current / with closed switch	
• at 440 V / for combination switch + gG fuse /	15 kA
maximum	
 at 690 V / for combination switch + gG fuse / maximum permissible 	15 kA
Short-time withstand current (lcw)	
• limited to 1 s / rated value	4 000 A
• at 690 V / limited to 1 s / rated value	4 000 A
Main circuit	

Operating frequency	
• initial value	50 Hz
• Full-scale value	60 Hz
Operating power	
• at AC-23 A / at 240 V / rated value	75 kW
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	75 kW
• at AC-23 A / at 400 V / rated value	75 kW
• at AC-23 A / at 440 V / rated value	75 kW
• at AC-23 A / at 690 V / rated value	45 kW
• at AC-3 / at 240 V / rated value	35 kW
• at AC-3 / at 400 V / rated value	50 kW
• at AC-3 / at 690 V / rated value	37 kW
Operating current / rated value	160 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 	Yes
• safety switch	Yes
maintenance/repair switch	Yes
Appearance	
Color / of the actuating element	red
Product details	
Product function / 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	6 mm
Product extension / optional	
• motor drive	No
Voltage trigger	No

Chart aircuit	
Short circuit Conditional short-circuit current / with line-side fuse	
protection	
• at 690 V / by gG fuse / rated value	50 kA
according UL	
Operating current / at AC / acc. to UL 508 / rated	180 A
value	
Operating voltage / at AC / at 50/60 Hz / acc. to UL 508 / rated value	600 V
Active power [hp] / at AC / at 480 V / acc. to UL 508 / rated value	75
Active power [hp] / at AC / at 600 V / acc. to UL 508 / rated value	50
Short-time withstand current (SCCR) / at 600 V / acc. to UL 508	10 kA
Continuous current / of upstream fuse / according to UL / rated value	200 A
Type of fuse / according to UL	RK5
Number of connectable NC contacts / for auxiliary	3
contacts / attachable / maximum	
Number of connectable NO contacts / for auxiliary	3
contacts / attachable / maximum	
Number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
Connections AWG number / as coded connectable conductor	1
Connections AWG number / as coded connectable conductor cross section / solid • minimum	1 4/0
Connections AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for	
Connections AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for copper conductor	4/0
Connections AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for copper conductor • solid	4/0 1x (16185mm²)
Connections AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing	1x (16185mm²) 1x (16150mm²)
Connections AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded Type of connectable conductor cross-sections / for	4/0 1x (16185mm²)
Connections AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded	1x (16185mm²) 1x (16150mm²)
Connections AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded Type of connectable conductor cross-sections / for auxiliary contacts	1x (16185mm²) 1x (16150mm²) 1x (16185mm²) 1x (16185mm²)
AWG number / as coded connectable conductor cross section / solid	1x (16185mm²) 1x (16150mm²) 1x (16185mm²) 1x (16185mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front
AWG number / as coded connectable conductor cross section / solid • minimum • maximum Type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded Type of connectable conductor cross-sections / for auxiliary contacts • solid • finely stranded / with core end processing	1x (16185mm²) 1x (16185mm²) 1x (16150mm²) 1x (16185mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm² lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front

• for auxiliary contacts

connection terminals

Requirements

Design of the fuse link

• for short-circuit protection of the main circuit /

• for short-circuit protection of the auxiliary switch

required

/ required

fuse gL/gG: 160 A

fuse gL/gG: 10 A

Mechanical Design	
Height	169 mm
Width	112 mm
Depth	94 mm
Mounting type	Built-in unit fixed-mounted version
Mounting type	
 front mounting with 4-hole attachment 	Yes
 front mounting with central attachment 	No
• rail mounting	No
Net weight	2 105 g

Environmental conditions	
Ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
Ambient temperature / during storage / minimum	-25 °C

Certificates

Reference code

• acc. to DIN EN 61346-2

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• acc. to DIN EN 81346-2

SF

General Product Approval	Declaration of	Test Certificates
	Conformity	









Type Test Certificates/Test Report

Special Test Certificate

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=3LD2305-0TK13

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2305-0TK13

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2305-0TK13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











