SIEMENS

Data sheet 3LD2305-0TK11

SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 160 A, Operating power / at AC-23 A at 400 V: 75 kW, front-mounted, knob-operated mechanism, black, 4-hole mounting 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
design of the operating mechanism	selector switch
design of handle	knob-operated mechanism, black
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
mechanical service life (switching cycles)	
• typical	100 000
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
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 operating state / per pole 	36 W
• per conductor / typical	36 W
Current	
Current operating current	
	47 A
operating current	47 A 132 A
operating current • at AC-23 A / at 690 V / rated value	
 operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value 	132 A
 operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value 	132 A 140 A
 operating current at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value 	132 A 140 A 160 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value 	132 A 140 A 160 A 160 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value 	132 A 140 A 160 A 160 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value 	132 A 140 A 160 A 160 A 140 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value 	132 A 140 A 160 A 160 A 160 A 140 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 440 V / rated value 	132 A 140 A 160 A 160 A 140 A 140 A 140 A 132 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value 	132 A 140 A 160 A 160 A 160 A 140 A 140 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value 	132 A 140 A 160 A 160 A 140 A 140 A 140 A 132 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 690 V / rated value let-through current / with closed switch at 440 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / 	132 A 140 A 160 A 160 A 160 A 140 A 140 A 140 A 140 A 140 A 140 A
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value at 440 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum permissible 	132 A 140 A 160 A 160 A 160 A 140 A 140 A 140 A 140 A 140 A 140 A 15 kA
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 440 V / rated value operating current / of upstream fuse / rated value let-through current / with closed switch at 440 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum permissible short-time withstand current (lcw) 	132 A 140 A 160 A 160 A 160 A 140 A 140 A 140 A 140 A 140 A 140 A 15 kA
 at AC-23 A / at 690 V / rated value at AC-23 A / at 400 V / rated value at AC-22 A / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 440 V / rated value at AC-22 A / at 240 V / rated value at AC-22 A / at 240 V / rated value at AC-23 A / at 240 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value at AC-23 A / at 440 V / rated value at 440 V / for combination switch + gG fuse / maximum at 690 V / for combination switch + gG fuse / maximum permissible 	132 A 140 A 160 A 160 A 160 A 140 A 140 A 140 A 140 A 140 A 15 kA

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 /	500 V
maximum	
continuous current / of the auxiliary contact / rated value	10 A
insulation voltage / of the auxiliary switch / rated	500 V
value	
Suitability	
suitability for use	
• main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
• safety switch	Yes
maintenance/repair switch	Yes
Appearance	
color / of the actuating element	black
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
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 / according to UL 508/UL 60947-4-1 / rated value	180 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	75
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	50
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
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	3
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	3
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
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)
• finely stranded / with core end processing	1x (16150mm²)
• stranded	1x (16185mm²)
type of connectable conductor cross-sections / for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
• finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²
• stranded	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)

type of electrical connection

• for main current circuit

box terminal

• for auxiliary contacts

connection terminals

Requirements

design of the fuse link

• for short-circuit protection of the main circuit / required

fuse gL/gG: 160 A

• for short-circuit protection of the auxiliary switch

/ required

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
 mounting type / front mounting with central attachment 	No
 mounting type / rail mounting 	No
net weight	2 089 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	S	
• acc. to DIN EN 81346-2	SF	

General Product Approval

Declaration of Conformity

Test Certificates









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=3LD2305-0TK11

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2305-0TK11

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2305-0TK11

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











