



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3-pole, I_{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 actuating element	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
mechanical service life (switching cycles) / typical	100 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
I _{2t} value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	185 kA2.s
let-through I _{2t} 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
operational current / at AC / rated value	160 A
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	
operational current	
• at AC-23 A / at 400 V / rated value	132 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
operational current / of upstream fuse / rated value	160 A
let-through current / with closed switch	
• at 440 V / for combination switch + gG fuse / maximum	15 kA
• at 690 V / for combination switch + gG fuse / maximum permissible	15 kA
Main circuit	
operating power	
• at AC-23 A / at 240 V / 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
operational 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
Short circuit	
conditional short-circuit current / with line-side fuse protection	
• at 690 V / by gG fuse / rated value	50 kA
according UL	
operational 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 /	200 A

rated value		
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 (16 ... 185mm ²)	
• finely stranded / with core end processing	1x (16...150mm ²)	
• stranded	1x (16...185mm ²)	
type of connectable conductor cross-sections / for auxiliary contacts		
• solid	lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²)	
• finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 ... 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ²	
• stranded	lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²)	
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	
fastening method	Built-in unit fixed-mounted version	
fastening method		
• 4-hole front mounting	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	S	
• acc. to IEC 81346-2	SF	
General Product Approval	Declaration of Conformity	Test Certificates



Type Test
Certificates/Test
Report

Test Certificates other

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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

Tender specifications

<http://www.siemens.com/specifications>





