



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3- pole, I<sub>u</sub>: 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	Switch disconnector
design of the product	EMERGENCY-STOP switch
display version for switch position indicator manual operation	1 ON - 0 OFF
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	
• at AC rated value	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
Main circuit	
operational current	
• 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 400 V rated value	160 A
• at AC-21 A at 440 V rated value	160 A

• at AC-23 A at 400 V rated value	132 A
<b>operating power</b>	
• 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
<b>Auxiliary circuit</b>	
number of CO contacts for auxiliary contacts	0
<b>number of NC contacts for auxiliary contacts</b>	0
<b>number of NO contacts for auxiliary contacts</b>	0
<b>operating voltage of auxiliary contacts at AC maximum</b>	500 V
<b>continuous current of the auxiliary contact rated value</b>	10 A
insulation voltage of the auxiliary switch rated value	500 V
<b>Suitability</b>	
<b>suitability for use main switch</b>	Yes
<b>suitability for use switch disconnector</b>	Yes
<b>suitability for use EMERGENCY OFF switch</b>	Yes
<b>suitability for use safety switch</b>	Yes
<b>suitability for use maintenance/repair switch</b>	Yes
<b>Product details</b>	
product feature can be locked into OFF position	Yes
<b>accessories</b>	
<b>product extension optional</b>	
• motor drive	No
• voltage trigger	No
<b>number of connectable NC contacts for auxiliary contacts attachable maximum</b>	3
<b>number of connectable NO contacts for auxiliary contacts attachable maximum</b>	3
<b>number of connectable CO contacts for auxiliary contacts attachable maximum</b>	0
<b>number of bracket locks maximum</b>	3
<b>hasp thickness of the bracket locks</b>	4 ... 6 mm
<b>Short circuit</b>	
<b>conditional short-circuit current with line-side fuse protection</b>	
• at 690 V by gG fuse rated value	50 kA
<b>let-through current with closed switch</b>	
• at 240 V for combination switch + gG fuse maximum	15 kA
• at 440 V for combination switch + gG fuse maximum	15 kA
• at 690 V for combination switch + gG fuse maximum permissible	15 kA
<b>I<sub>2t</sub> value with closed switch</b>	
• at 240 V for combination switch + gG fuse maximum	185 kA2.s
• at 440 V for combination switch + gG fuse maximum	185 kA2.s
• at 690 V for combination switch + gG fuse maximum	185 kA2.s
<b>design of the fuse link</b>	
• 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
<b>operational current of upstream fuse rated value</b>	160 A
<b>according UL</b>	
<b>operational current at AC according to UL 508/UL 60947-4-1 rated value</b>	180 A
<b>operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value</b>	600 V
<b>active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value</b>	75
<b>active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value</b>	50
<b>short-time withstand current (SCCR) at 600 V according to</b>	10 kA

UL 508/UL 60947-4-1	200 A
continuous current of upstream fuse according to UL rated value	
type of fuse according to UL	RK5
<b>Connections</b>	
AWG number as coded connectable conductor cross section solid maximum	
•	1
•	4/0
type of connectable conductor cross-sections for copper conductor	
• solid	1x (16 ... 185mm <sup>2</sup> )
• finely stranded with core end processing	1x (16...150mm <sup>2</sup> )
• stranded	1x (16...185mm <sup>2</sup> )
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> )
• finely stranded with core end processing	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	
• for main current circuit	box terminal
• for auxiliary contacts	connection terminals
<b>Mechanical Design</b>	
height	169 mm
width	112 mm
depth	94 mm
type of device	fixed mounting
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
<b>Environmental conditions</b>	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-25 °C
• maximum	55 °C
<b>Approvals Certificates</b>	
General Product Approval	



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#### 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=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](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>





