



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 4-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 150A, SCCR 50kA at 480VAC, Operating power at 480VAC 3-phase: 100hp, IEC: 160A, Operating power at AC-23A at 400V: 75kW, front-mounted, rotary operating mechanism, red/yellow, 4-hole mounting of the handle, incl. terminal covers for the infeed side

Model	
product brand name	SENTRON
product designation	3LD UL switch disconnecter
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	4
size of switch disconnecter	3
mechanical service life (switching cycles) / typical	100 000
electrical endurance (switching 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	6 kV
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	160 A
operational current	
• at 40 °C / rated value	160 A
• at 45 °C / rated value	160 A
• at 50 °C / rated value	160 A
• at 55 °C / rated value	160 A
• at AC / rated value	160 A
Main circuit	
operational current	

<ul style="list-style-type: none"> <li>• at AC-21 / at 690 V / rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-21 A / at 240 V / rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-21 A / at 400 V / rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-21 A / at 440 V / rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-23 A / at 400 V / rated value</li> </ul>	160 A
operating power	
<ul style="list-style-type: none"> <li>• at AC-23 A / at 240 V / rated value</li> </ul>	45 kW
<ul style="list-style-type: none"> <li>• at AC-23 A / at 440 V / rated value</li> </ul>	75 kW
<ul style="list-style-type: none"> <li>• at AC-23 A / at 690 V / rated value</li> </ul>	55 kW
<ul style="list-style-type: none"> <li>• at AC-3 / at 240 V / rated value</li> </ul>	45 kW
<ul style="list-style-type: none"> <li>• at AC-3 / at 400 V / rated value</li> </ul>	75 kW
<ul style="list-style-type: none"> <li>• at AC-3 / at 690 V / rated value</li> </ul>	45 kW
<b>Auxiliary circuit</b>	
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
<b>Suitability</b>	
suitability for use	
<ul style="list-style-type: none"> <li>• main switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• switch disconnector</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• EMERGENCY OFF switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• safety switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• maintenance/repair switch</li> </ul>	Yes
<b>Product details</b>	
product feature / can be locked into OFF position	Yes
<b>accessories</b>	
product extension / optional	
<ul style="list-style-type: none"> <li>• motor drive</li> </ul>	No
<ul style="list-style-type: none"> <li>• voltage trigger</li> </ul>	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	2
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
number of bracket locks / maximum	3
hasp thickness / of the bracket locks	5 ... 7.5 mm
<b>Short circuit</b>	
conditional short-circuit current / with line-side fuse protection	
<ul style="list-style-type: none"> <li>• at 440 V / by gG fuse / rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• at 690 V / by gG fuse / rated value</li> </ul>	30 kA
let-through current / with closed switch	
<ul style="list-style-type: none"> <li>• at 240 V / for combination switch + gG fuse / maximum</li> </ul>	16 kA
<ul style="list-style-type: none"> <li>• at 440 V / for combination switch + gG fuse / maximum</li> </ul>	16 kA
<ul style="list-style-type: none"> <li>• at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	15 kA
I <sup>2</sup> t value / with closed switch	
<ul style="list-style-type: none"> <li>• at 240 V / for combination switch + gG fuse / maximum</li> </ul>	223 kA <sup>2</sup> .s
<ul style="list-style-type: none"> <li>• at 440 V / for combination switch + gG fuse / maximum</li> </ul>	223 kA <sup>2</sup> .s
<ul style="list-style-type: none"> <li>• at 690 V / for combination switch + gG fuse / maximum</li> </ul>	223 kA <sup>2</sup> .s
design of the fuse link	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit / required</li> </ul>	Fuse gG: 160 A

<ul style="list-style-type: none"> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	160 A
<b>according UL</b>	
operational current / at AC / according to UL 489/UL 60947-4-1 / rated value	150 A
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	150 A
operating voltage / at AC / at 50/60 Hz / according to UL 489 / rated value	480 V
operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value	480 V
active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value	100
short-time withstand current (SCCR) / at 480 V / according to UL 508/UL 60947-4-1 and UL 489	50 kA
continuous current / of upstream fuse / according to UL / rated value	150 A
type of fuse / according to UL	Class J
<b>Connections</b>	
AWG number / as coded connectable conductor cross section / solid <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	1 4/0
AWG number / as coded connectable conductor cross section / solid / according to UL 489 <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	1 4/0
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16 <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	3 2/0
type of connectable conductor cross-sections / for copper conductor <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul>	1x (16 ...185mm <sup>2</sup> ) 1x (16...150mm <sup>2</sup> ) 1x (16...185mm <sup>2</sup> )
type of connectable conductor cross-sections / for auxiliary contacts <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul>	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> ) 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> 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 style="list-style-type: none"> <li>for main current circuit</li> <li>for auxiliary contacts</li> </ul>	box terminal connection terminals
<b>Mechanical Design</b>	
height	178 mm
width	151 mm
depth	93 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method <ul style="list-style-type: none"> <li>4-hole front mounting</li> <li>front mounting with central attachment</li> <li>rail mounting</li> </ul>	Yes No No
net weight	2 150 g
<b>Environmental conditions</b>	
ambient temperature / during operation <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	-25 °C 55 °C

ambient temperature / during storage

- minimum
- maximum

-25 °C  
55 °C

#### General Product Approval

#### Declaration of Conformity



[Confirmation](#)



EG-Konf.

#### other

[Miscellaneous](#)

#### 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?mfb=3LD5820-0TL13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD5820-0TL13>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3LD5820-0TL13](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3LD5820-0TL13)

**CAX-Online-Generator**

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

**Tender specifications**

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



