



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 3-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, floor mounting with door coupling rotary operating mechanism, defeatable, emergency switching-off, 4-hole mounting of the handle, without tolerance compensation, 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	Floor mounting with door coupling
design of the actuating element	door-coupling rotary operating mechanism
color / of the actuating element	red
design of handle	rotary operating mechanism, red/yellow
type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
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>	
special product feature	defeatable door-coupling handle
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	3
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	5
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
let-through I <sub>2t</sub> value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	223 kA <sup>2</sup> .s
I <sub>2t</sub> value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	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	
• minimum	1
• maximum	4/0
AWG number / as coded connectable conductor cross section / solid / according to UL 489	
• minimum	1
• maximum	4/0
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16	
• minimum	3
• maximum	2/0
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	178 mm
width	113 mm
depth	158 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	1 900 g
<b>Environmental conditions</b>	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage	
• minimum	-25 °C

[Confirmation](#)



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=3LD5810-0TK13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD5810-0TK13>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3LD5810-0TK13](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3LD5810-0TK13)

CAx-Online-Generator

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

Tender specifications

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





