



SENTRON 3LD5 switch disconnecter UL, EMERGENCY-OFF switch, 3-pole, approved according to UL 489, UL 60947-4-1 and IEC 60947-3, UL: 100 A, SCCR 65 kA at 480 V AC, operational power @ 480 V AC 3-phase: 60 hp, IEC: 100 A, operational power at AC-23 A at 400 V: 45 kW, floor mounting with door coupling, defeatable rotary operating mechanism, EMERGENCY OFF, 4-hole mounting of the handle, without tolerance compensation including terminal covers for the infeed side

Model	
product brand name	SENTRON
product designation	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 (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	6 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	100 A
• at AC-21 A at 240 V rated value	100 A
• at AC-21 A at 400 V rated value	100 A

<ul style="list-style-type: none"> <li>• at AC-21 A at 440 V rated value</li> </ul>	100 A
<ul style="list-style-type: none"> <li>• at AC-23 A at 400 V rated value</li> </ul>	100 A
<b>operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-23 A at 240 V rated value</li> </ul>	30 kW
<ul style="list-style-type: none"> <li>• at AC-23 A at 440 V rated value</li> </ul>	45 kW
<ul style="list-style-type: none"> <li>• at AC-23 A at 690 V rated value</li> </ul>	37 kW
<ul style="list-style-type: none"> <li>• at AC-3 at 240 V rated value</li> </ul>	30 kW
<ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> </ul>	45 kW
<ul style="list-style-type: none"> <li>• at AC-3 at 690 V rated value</li> </ul>	30 kW

#### 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
suitability for use switch disconnecter	Yes
suitability for use EMERGENCY OFF switch	Yes
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes

#### Product details

special product feature	defeatable door-coupling handle
product feature can be locked into OFF position	Yes

#### Accessories

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

#### Short circuit

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>	50 kA
<b>let-through current with closed switch</b>	
<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
<b>I<sup>2</sup>t value with closed switch</b>	
<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
<b>design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit required</li> </ul>	Fuse gG: 125 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	125 A

#### according UL

operational current at AC according to UL 489/UL 60947-4-1 rated value	100 A
operational current at AC according to UL 508/UL 60947-4-1 rated value	100 A
operating voltage at AC at 50/60 Hz according to UL 489	480 V

<b>rated value</b>	
<b>operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value</b>	480 V
<b>active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value</b>	60
<b>short-time withstand current (SCCR) at 480 V according to UL 508/UL 60947-4-1 and UL 489</b>	65 kA
<b>continuous current of upstream fuse according to UL rated value</b>	100 A
<b>type of fuse according to UL</b>	Class J
<b>Connections</b>	
<b>AWG number as coded connectable conductor cross section solid maximum</b>	
•	3
•	4/0
<b>AWG number as coded connectable conductor cross section solid according to UL 489</b>	
• minimum	3
• maximum	4/0
<b>AWG number as coded connectable conductor cross section solid according to CSA C22.2 No. 5-16</b>	
• minimum	3
• maximum	2/0
<b>type of connectable conductor cross-sections for copper conductor</b>	
• 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> )
<b>type of connectable conductor cross-sections for auxiliary contacts</b>	
• 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> )
<b>type of electrical connection</b>	
• for main current circuit	box terminal
• for auxiliary contacts	connection terminals
<b>Mechanical Design</b>	
<b>height</b>	178 mm
<b>width</b>	113 mm
<b>depth</b>	158 mm
<b>type of device</b>	fixed mounting
<b>fastening method</b>	Built-in unit fixed-mounted version
<b>fastening method</b>	
• 4-hole front mounting	Yes
• front mounting with central attachment	No
• rail mounting	No
<b>Net Weight</b>	2.189 kg
<b>Environmental conditions</b>	
<b>ambient temperature during operation</b>	
• minimum	-25 °C
• maximum	55 °C
<b>ambient temperature during storage</b>	
• minimum	-25 °C
• maximum	55 °C
<b>Approvals Certificates</b>	
<b>Environment</b>	<b>General Product Approval</b>

## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD5410-0TK13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD5410-0TK13>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD5410-0TK13](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5410-0TK13)

### CAX-Online-Generator

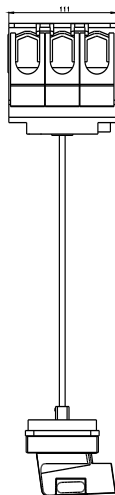
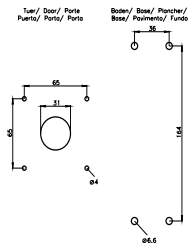
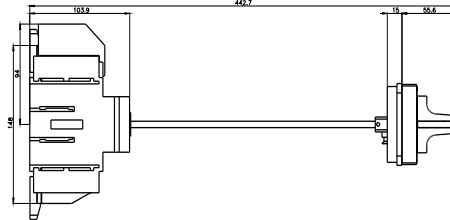
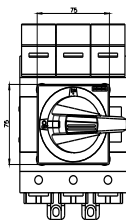
<https://www.siemens.com/cax>

### Tender specifications

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

### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)



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