



3LD3 switch disconnecter, Iu 16 A main switch 3-pole + N rated operational power at AC-23 A at 400 V 7.5 kW basic switch without knob-operated mechanism with auxiliary switches 1 NO + 1 NC

Model	
product brand name	SENTRON
product designation	Switch disconnecter
design of the product	Switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	DIN-rail mounting
design of the actuating element	Without handle
design of handle	without
type of the driving mechanism motor drive	No
General technical data	
number of poles	4
number of poles note	4
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	IP20
protection class IP on the front	IP20
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	0.5 W
Main circuit	
operational current	
• at AC-21 at 690 V rated value	16 A
• at AC-21 A at 240 V rated value	16 A
• at AC-21 A at 400 V rated value	16 A
• at AC-21 A at 440 V rated value	16 A
• at AC-23 A at 400 V rated value	16 A

<b>operating power</b>	
<ul style="list-style-type: none"> <li>at AC-23 A at 240 V rated value</li> <li>at AC-23 A at 400 V rated value</li> <li>at AC-23 A at 440 V rated value</li> <li>at AC-23 A at 690 V rated value</li> <li>at AC-3 at 240 V rated value</li> <li>at AC-3 at 400 V rated value</li> <li>at AC-3 at 690 V rated value</li> </ul>	3 kW 8 kW 7.5 kW 8 kW 3 kW 6 kW 5.5 kW
<b>Auxiliary circuit</b>	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
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 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
<b>Product details</b>	
special product feature	Basic Switch
product feature can be locked into OFF position	No
<b>Accessories</b>	
product extension optional	
<ul style="list-style-type: none"> <li>motor drive</li> <li>voltage trigger</li> </ul>	No No
number of connectable NC contacts for auxiliary contacts attachable maximum	2
number of connectable NO contacts for auxiliary contacts attachable maximum	4
number of connectable CO contacts for auxiliary contacts attachable maximum	0
<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> <li>at 690 V by gG fuse rated value</li> </ul>	10 kA 6 kA
let-through current with closed switch	
<ul style="list-style-type: none"> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	3 kA 3 kA 3 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> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	2.5 kA <sup>2</sup> ·s 2.5 kA <sup>2</sup> ·s 3 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> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 20 A fuse gL/gG: 10 A
operational current of upstream fuse rated value	16 A
<b>according UL</b>	
operational current at AC according to UL 508/UL 60947-4-1 rated value	16 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	7.5
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	10

short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	5 kA
continuous current of upstream fuse according to UL rated value	50 A
type of fuse according to UL	RK5

### Connections

AWG number as coded connectable conductor cross section solid maximum	
•	6
•	14
type of connectable conductor cross-sections for copper conductor	
• solid	1x (2.5 to 16 mm <sup>2</sup> )
• finely stranded with core end processing	1x (2.5...16 mm <sup>2</sup> )
• stranded	1x (2.5 to 16 mm <sup>2</sup> )
type of connectable conductor cross-sections for auxiliary contacts	
• solid	2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>
• finely stranded with core end processing	2x (0.75 ... 1.5 mm <sup>2</sup> ), 1x 2.5 mm <sup>2</sup>
• stranded	2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>
type of electrical connection	
• for main current circuit	box terminal
• for auxiliary contacts	Box terminals

### Mechanical Design

height	60 mm
width	60 mm
depth	64 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
• 4-hole front mounting	No
• front mounting with central attachment	No
• rail mounting	Yes
Net Weight	202 g

### Environmental conditions

ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-25 °C
• maximum	55 °C

### Approvals Certificates

Environment	General Product Approval
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firmations](#)

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### 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=3LD3010-1TL05>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD3010-1TL05>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD3010-1TL05](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD3010-1TL05)

CAX-Online-Generator

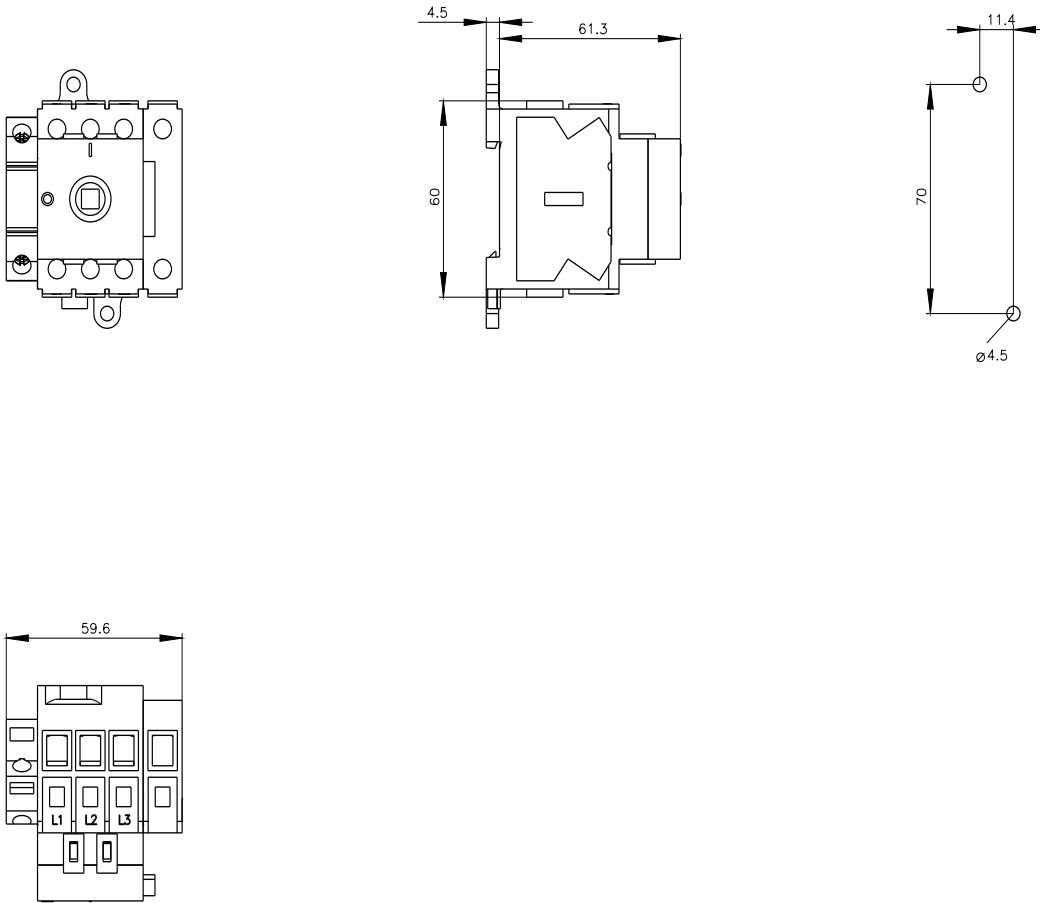
<https://www.siemens.com/cax>

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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