



SENTRON, Switch disconnecter 3LD, change-over switch, 3-pole, Iu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for metric cable screw connection, knob-operated mechanism, black

Model	
product brand name	SENTRON
product designation	Switch disconnecter
design of the product	Selector switch
display version for switch position indicator manual operation	1 ON - 0 OFF - 2 ON
type of switch	Molded-plastic enclosure for metric threaded joint
design of the actuating element	selector switch
color of the actuating element	black
design of handle	knob-operated mechanism, black
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
number of poles note	N + PE
size of switch disconnecter	2
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, 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	1.1 W
Main circuit	
operational current	
• at AC-21 at 690 V rated value	25 A
• at AC-21 A at 240 V rated value	25 A
• at AC-21 A at 400 V rated value	25 A

<ul style="list-style-type: none"> <li>• at AC-21 A at 440 V rated value</li> </ul>	25 A
<ul style="list-style-type: none"> <li>• at AC-23 A at 400 V rated value</li> </ul>	20 A
<b>operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-23 A at 240 V rated value</li> </ul>	5 kW
<ul style="list-style-type: none"> <li>• at AC-23 A at 400 V rated value</li> </ul>	10 kW
<ul style="list-style-type: none"> <li>• at AC-23 A at 440 V rated value</li> </ul>	9.5 kW
<ul style="list-style-type: none"> <li>• at AC-23 A at 690 V rated value</li> </ul>	10 kW
<ul style="list-style-type: none"> <li>• at AC-3 at 240 V rated value</li> </ul>	4 kW
<ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> </ul>	8 kW
<ul style="list-style-type: none"> <li>• at AC-3 at 690 V rated value</li> </ul>	7.5 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 disconnecter</b>	Yes
<b>suitability for use EMERGENCY OFF switch</b>	No
<b>suitability for use safety switch</b>	Yes
<b>suitability for use maintenance/repair switch</b>	Yes
<b>Product details</b>	
<b>product feature can be locked into OFF position</b>	No
<b>Accessories</b>	
<b>product extension optional</b>	
<ul style="list-style-type: none"> <li>• motor drive</li> </ul>	No
<ul style="list-style-type: none"> <li>• voltage trigger</li> </ul>	No
<b>number of connectable NC contacts for auxiliary contacts attachable maximum</b>	2
<b>number of connectable NO contacts for auxiliary contacts attachable maximum</b>	4
<b>number of connectable CO contacts for auxiliary contacts attachable maximum</b>	0
<b>Short circuit</b>	
<b>conditional short-circuit current with line-side fuse protection</b>	
<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>	3.5 kA
<ul style="list-style-type: none"> <li>• at 440 V for combination switch + gG fuse maximum</li> </ul>	3.5 kA
<ul style="list-style-type: none"> <li>• at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	4 kA
<b>I<sub>2t</sub> value with closed switch</b>	
<ul style="list-style-type: none"> <li>• at 240 V for combination switch + gG fuse maximum</li> </ul>	4 kA <sup>2</sup> .s
<ul style="list-style-type: none"> <li>• at 440 V for combination switch + gG fuse maximum</li> </ul>	4 kA <sup>2</sup> .s
<ul style="list-style-type: none"> <li>• at 690 V for combination switch + gG fuse maximum</li> </ul>	4 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 gL/gG: 25 A
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A
<b>operational current of upstream fuse rated value</b>	25 A
<b>according UL</b>	
<b>operational current at AC according to UL 508/UL 60947-4-1 rated value</b>	25 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>	10
<b>active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value</b>	15
<b>short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1</b>	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	8 14
type of connectable conductor cross-sections for copper conductor	1x (1,5...16mm <sup>2</sup> ) 1x (1,5...10mm <sup>2</sup> ) 1x (1,5...16mm <sup>2</sup> )
type of connectable conductor cross-sections for auxiliary contacts	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	box terminal connection terminals

### Mechanical Design

height	188 mm
width	146 mm
depth	149 mm
type of device	fixed mounting
fastening method	Complete unit in enclosure
fastening method	No Yes No
Net Weight	882 g

### Environmental conditions

ambient temperature during operation	-25 °C 55 °C
ambient temperature during storage	-25 °C 55 °C

### Approvals Certificates

#### General Product Approval



General Product Approval	Test Certificates	Maritime application	other
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[Miscellaneous](#)



[Miscellaneous](#)



[Confirmation](#)

### Environment

[Environmental Con-  
firmations](#)

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firmations](#)

## 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=3LD2165-7UB01>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2165-7UB01>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2165-7UB01](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2165-7UB01)

### CAX-Online-Generator

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

### Tender specifications

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





