



SENTRON, Switch disconnecter 3LD, main switch, 3-pole, Iu: 16 A, Operating power / at AC-23 A at 400 V: 7.5 kW, front-mounted, rotary operating mechanism, black, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	3LD Switch disconnecter
design of the product	Main switch
display version / for switch position indicator manual operation	1 ON - 0 OFF
design of the actuating element	Short rotary knob
design of handle	rotary operating mechanism, black
type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
type of device	fixed mounting
type of switch	front mounted
size of switch disconnecter	1
mechanical service life (switching cycles) / typical	100 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
I <sub>2t</sub> value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	3 kA <sup>2</sup> .s
let-through I <sub>2t</sub> value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	2.5 kA <sup>2</sup> .s
operating frequency / maximum	50 1/h
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	0.5 W
• per conductor / typical	1 W
Current	
operational current	
• at 40 °C / rated value	16 A
• at 45 °C / rated value	16 A
• at 50 °C / rated value	16 A
• at 55 °C / rated value	16 A

<ul style="list-style-type: none"> <li>• at AC / rated value</li> </ul>	16 A
<ul style="list-style-type: none"> <li>• at AC-23 A / at 400 V / rated value</li> </ul>	16 A
<ul style="list-style-type: none"> <li>• at AC-21 / at 690 V / rated value</li> </ul>	16 A
<ul style="list-style-type: none"> <li>• at AC-21 A / at 240 V / rated value</li> </ul>	16 A
<ul style="list-style-type: none"> <li>• at AC-21 A / at 440 V / rated value</li> </ul>	16 A
operational current / of upstream fuse / rated value	20 A
let-through current / with closed switch	
<ul style="list-style-type: none"> <li>• at 440 V / for combination switch + gG fuse / maximum</li> </ul>	3 kA
<ul style="list-style-type: none"> <li>• at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	3 kA
<b>Main circuit</b>	
operating power	
<ul style="list-style-type: none"> <li>• at AC-23 A / at 240 V / rated value</li> </ul>	4 kW
<ul style="list-style-type: none"> <li>• at AC-23 A / at 400 V / rated value</li> </ul>	8 kW
<ul style="list-style-type: none"> <li>• at AC-23 A / at 440 V / rated value</li> </ul>	7.5 kW
<ul style="list-style-type: none"> <li>• at AC-23 A / at 690 V / rated value</li> </ul>	8 kW
<ul style="list-style-type: none"> <li>• at AC-3 / at 240 V / rated value</li> </ul>	3 kW
<ul style="list-style-type: none"> <li>• at AC-3 / at 400 V / rated value</li> </ul>	6 kW
<ul style="list-style-type: none"> <li>• at AC-3 / at 690 V / rated value</li> </ul>	5.5 kW
operational current / rated value	16 A
<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 disconnecter</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• EMERGENCY OFF switch</li> </ul>	No
<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>Appearance</b>	
color / of the actuating element	black
<b>Product details</b>	
product feature	
<ul style="list-style-type: none"> <li>• can be locked into OFF position</li> </ul>	Yes
number of bracket locks / maximum	3
hasp thickness / of the bracket locks / minimum	4 mm
hasp thickness / of the bracket locks / maximum	8 mm
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
<b>Short circuit</b>	
conditional short-circuit current / with line-side fuse protection	
<ul style="list-style-type: none"> <li>• at 690 V / by gG fuse / rated value</li> </ul>	50 kA
<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
<b>Number</b>	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	3
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	3
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
<b>Connections</b>	
AWG number / as coded connectable conductor cross section / solid	
• maximum	10
• minimum	18
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1...6mm <sup>2</sup> )
• finely stranded / with core end processing	1x (1...4mm <sup>2</sup> )
• stranded	1x (1..6mm <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>Requirements</b>	
design of the fuse link	
• for short-circuit protection of the main circuit / required	fuse gL/gG: 20 A
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
<b>Mechanical Design</b>	
height	84 mm
width	67 mm
depth	92.5 mm
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	188 g
<b>Environmental conditions</b>	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
<b>General Product Approval</b>	



[Confirmation](#)



[Miscellaneous](#)

<b>General Product Approval</b>	<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
---------------------------------	----------------------------------	--------------------------	--------------------------



Special Test Certificate



other

[Miscellaneous](#)

[Environmental Confirmations](#)

### 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?mlfb=3LD2003-0TK51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-0TK51>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2003-0TK51](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-0TK51)

CAX-Online-Generator

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

Tender specifications

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



