



SENTRON, Switch disconnecter 3LD, main switch, 4-pole, Iu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, floor mounting with door coupling, rotary operating mechanism, black, central mounting 22.5 mm 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	4
type of device	fixed mounting
type of switch	Floor mounting with door coupling
size of switch disconnecter	2
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	4 kA <sup>2</sup> .s
let-through I <sub>2t</sub> value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 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	1.1 W
• per conductor / typical	1 W
Current	
operational current	
• at 40 °C / rated value	25 A
• at 45 °C / rated value	25 A
• at 50 °C / rated value	25 A
• at 55 °C / rated value	25 A

<ul style="list-style-type: none"> <li>• at AC / 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
<ul style="list-style-type: none"> <li>• at AC-21 / at 690 V / rated value</li> </ul>	25 A
<ul style="list-style-type: none"> <li>• at AC-21 A / at 240 V / rated value</li> </ul>	25 A
<ul style="list-style-type: none"> <li>• at AC-21 A / at 440 V / rated value</li> </ul>	25 A
operational current / of upstream fuse / rated value	25 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>	3.5 kA
<ul style="list-style-type: none"> <li>• at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	4 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>	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
operational current / rated value	25 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	25 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	10
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	15
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	2
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	8
• minimum	14
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1,5...16mm <sup>2</sup> )
• finely stranded / with core end processing	1x (1,5...10mm <sup>2</sup> )
• stranded	1x (1,5...16mm <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: 25 A
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
<b>Mechanical Design</b>	
height	83 mm
width	67 mm
depth	451.5 mm
fastening method	Built-in unit fixed-mounted version
fastening method	
• 4-hole front mounting	No
• front mounting with central attachment	Yes
• rail mounting	Yes
net weight	445 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>
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[Special Test Certificate](#)



Marine / Shipping

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?mfb=3LD2144-1TL51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2144-1TL51>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3LD2144-1TL51](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3LD2144-1TL51)

**CAX-Online-Generator**

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

**Tender specifications**

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



