



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	3LD 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 (switching cycles) / typical electrical endurance (switching cycles)	100 000
• 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
Current	
operational current / rated value	25 A
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
• at AC / rated value	25 A

#### 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
• at AC-21 A / at 440 V / rated value	25 A
• at AC-23 A / at 400 V / rated value	20 A
operating power	
• at AC-23 A / at 240 V / rated value	5 kW
• at AC-23 A / at 400 V / rated value	10 kW
• at AC-23 A / at 440 V / rated value	9.5 kW
• at AC-23 A / at 690 V / rated value	10 kW
• at AC-3 / at 240 V / rated value	4 kW
• at AC-3 / at 400 V / rated value	8 kW
• at AC-3 / at 690 V / rated value	7.5 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
• switch disconnector	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes

#### Product details

product feature / can be locked into OFF position	No
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#### accessories

product extension / optional	
• motor drive	No
• voltage trigger	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

#### Short circuit

conditional short-circuit current / with line-side fuse protection	
• at 690 V / by gG fuse / rated value	50 kA
let-through current / with closed switch	
• at 240 V / for combination switch + gG fuse / maximum	3.5 kA
• at 440 V / for combination switch + gG fuse / maximum	3.5 kA
• at 690 V / for combination switch + gG fuse / maximum permissible	4 kA
I <sub>2t</sub> value / with closed switch / at 240 V / for combination switch + gG fuse / maximum	4 kA <sup>2</sup> .s
I <sub>2t</sub> value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 kA <sup>2</sup> .s
I <sub>2t</sub> value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 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> </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
operational current / of upstream fuse / rated value	25 A
<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>Connections</b>	
AWG number / as coded connectable conductor cross section / solid	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	8
<ul style="list-style-type: none"> <li>minimum</li> </ul>	14
type of connectable conductor cross-sections / for copper conductor	
<ul style="list-style-type: none"> <li>solid</li> </ul>	1x (1,5...16mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>finely stranded / with core end processing</li> </ul>	1x (1,5...10mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>stranded</li> </ul>	1x (1,5...16mm <sup>2</sup> )
type of connectable conductor cross-sections / for auxiliary contacts	
<ul style="list-style-type: none"> <li>solid</li> </ul>	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> )
<ul style="list-style-type: none"> <li>finely stranded / with core end processing</li> </ul>	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>
<ul style="list-style-type: none"> <li>stranded</li> </ul>	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	
<ul style="list-style-type: none"> <li>for main current circuit</li> </ul>	box terminal
<ul style="list-style-type: none"> <li>for auxiliary contacts</li> </ul>	connection terminals
<b>Mechanical Design</b>	
height	188 mm
width	146 mm
depth	149 mm
type of device	fixed mounting
fastening method	Complete unit in enclosure
fastening method	
<ul style="list-style-type: none"> <li>4-hole front mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>front mounting with central attachment</li> </ul>	Yes
<ul style="list-style-type: none"> <li>rail mounting</li> </ul>	No
net weight	894 g
<b>Environmental conditions</b>	
ambient temperature / during operation	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	55 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	55 °C
<b>General Product Approval</b>	



[Confirmation](#)



[Miscellaneous](#)

General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping	other
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EG-Konf.

[Miscellaneous](#)



URS

[Miscellaneous](#)

other

[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=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, ...)

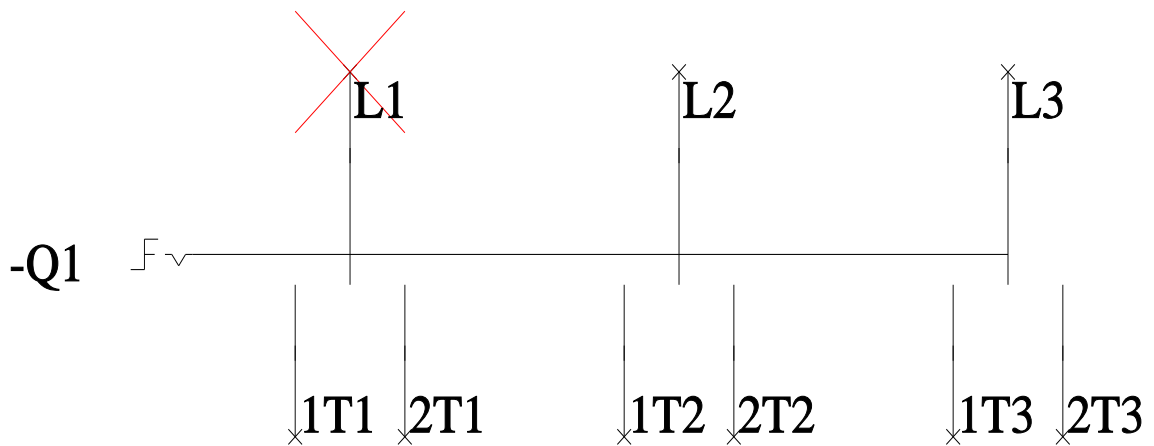
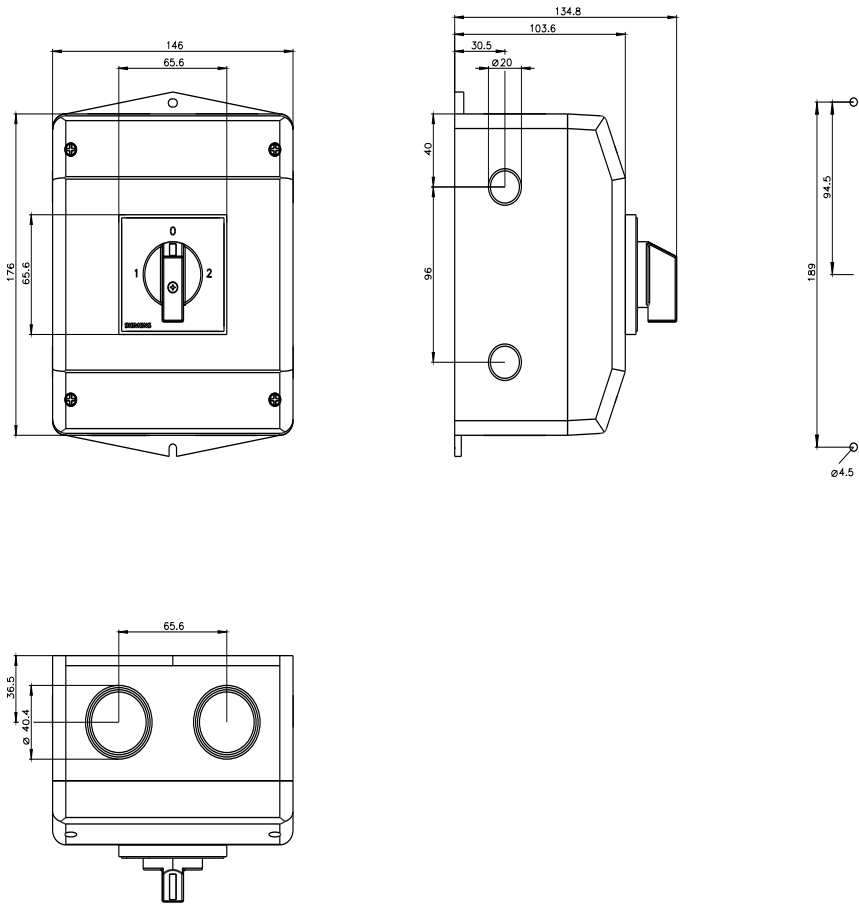
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2165-7UB01](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2165-7UB01)

CAX-Online-Generator

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

Tender specifications

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



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