



SENTRON, Switch disconnecter 3LD, main switch, 4-pole, Iu: 63 A, Operating power / at AC-23 A at 400 V: 22 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
type of switch	front mounted
design of the actuating element	Short rotary knob
color of the actuating element	black
design of handle	rotary operating mechanism, black
type of the driving mechanism motor drive	No

### General technical data

number of poles	4
size of switch disconnecter	3
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, 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	4.5 W
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### Current

operational current rated value	63 A
operational current	
• at 40 °C rated value	63 A
• at 45 °C rated value	63 A
• at 50 °C rated value	63 A
• at 55 °C rated value	63 A

• at AC rated value	63 A
<b>Main circuit</b>	
operational current	
• at AC-21 at 690 V rated value	63 A
• at AC-21 A at 240 V rated value	63 A
• at AC-21 A at 400 V rated value	63 A
• at AC-21 A at 440 V rated value	63 A
• at AC-23 A at 400 V rated value	43 A
operating power	
• at AC-23 A at 240 V rated value	11 kW
• at AC-23 A at 400 V rated value	22 kW
• at AC-23 A at 440 V rated value	22 kW
• at AC-23 A at 690 V rated value	19 kW
• at AC-3 at 240 V rated value	11 kW
• at AC-3 at 400 V rated value	19 kW
• at AC-3 at 690 V rated value	15 kW
<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	
• main switch	Yes
• switch disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes
<b>Product details</b>	
product feature can be locked into OFF position	Yes
<b>accessories</b>	
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	2
number of connectable CO contacts for auxiliary contacts attachable maximum	0
number of bracket locks maximum	3
hasp thickness of the bracket locks	4 ... 8 mm
<b>Short circuit</b>	
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	6 kA
• at 440 V for combination switch + gG fuse maximum	6 kA
• at 690 V for combination switch + gG fuse maximum permissible	6 kA
I <sup>2</sup> t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	21 kA <sup>2</sup> .s
• at 440 V for combination switch + gG fuse maximum	21 kA <sup>2</sup> .s
• at 690 V for combination switch + gG fuse maximum	21 kA <sup>2</sup> .s
design of the fuse link	
• for short-circuit protection of the main circuit required	fuse gL/gG: 63 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
operational current of upstream fuse rated value	63 A

according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	63 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	40
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	50
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	175 A
type of fuse according to UL	RK5

Connections	
AWG number as coded connectable conductor cross section solid	
<ul style="list-style-type: none"> <li>• maximum</li> <li>• minimum</li> </ul>	6 14
type of connectable conductor cross-sections for copper conductor	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul>	1x (2,5...35mm²) 1x (2.5...16 mm²) 1x (2,5...35mm²)
type of connectable conductor cross-sections for auxiliary contacts	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul>	lateral auxiliary switch 2x (0,75 ... 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 ... 2,5mm²) lateral auxiliary switch 2x (0,75 ... 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm² lateral auxiliary switch 2x (0,75 ... 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 ... 2,5mm²)
type of electrical connection	
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary contacts</li> </ul>	box terminal connection terminals

Mechanical Design	
height	106 mm
width	90 mm
depth	110.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
<ul style="list-style-type: none"> <li>• 4-hole front mounting</li> <li>• front mounting with central attachment</li> <li>• rail mounting</li> </ul>	Yes No No
net weight	489 g

Environmental conditions	
ambient temperature during operation	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-25 °C 55 °C
ambient temperature during storage	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-25 °C 55 °C

General Product Approval	Declaration of Conformity
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[Confirmation](#)



Declaration of Conformity	Test Certificates	other
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## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### 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=3LD2504-1TL51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2504-1TL51>

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

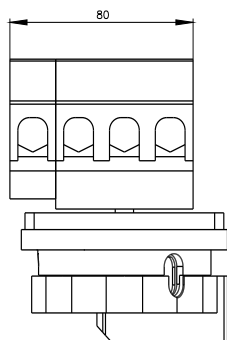
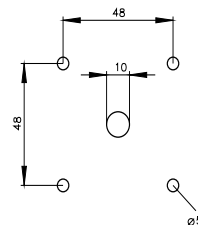
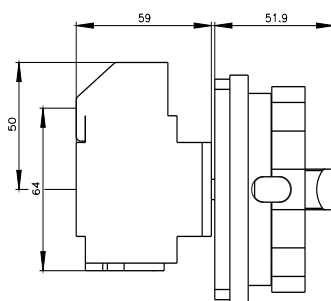
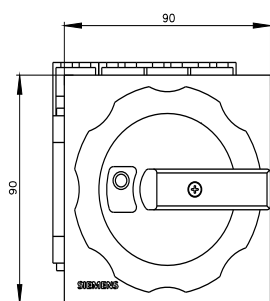
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2504-1TL51](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2504-1TL51)

### CAX-Online-Generator

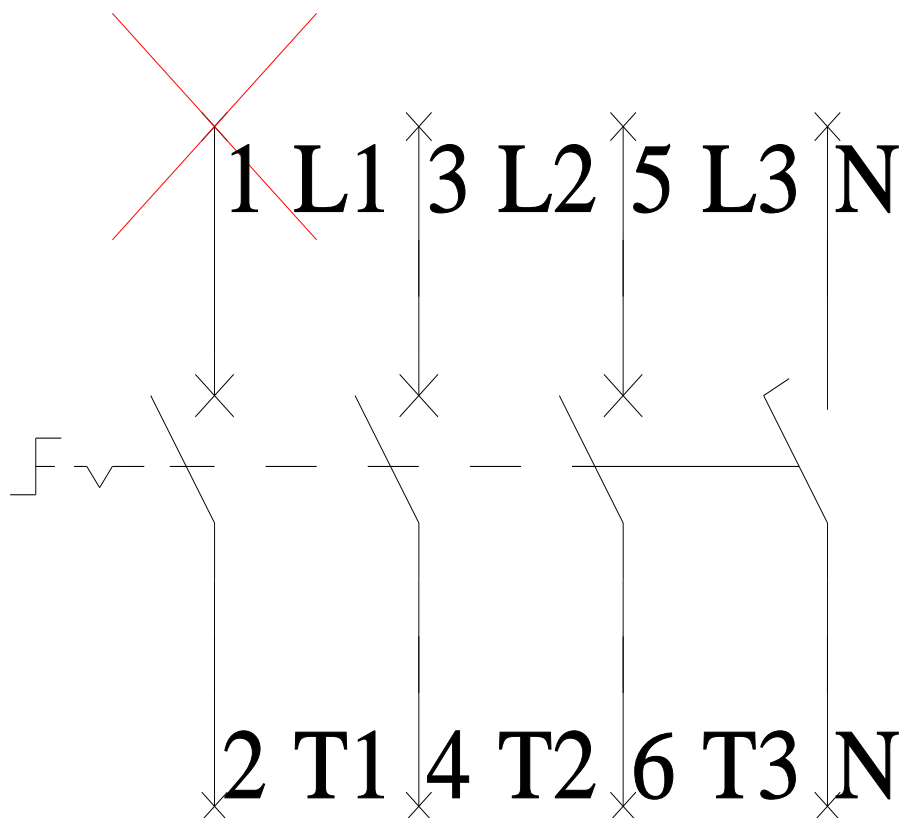
<http://www.siemens.com/cax>

### Tender specifications

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



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