

SENTRON, Switch disconnecter 3LD, main switch, 3-pole, Iu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for metric screw connection, 1 NC, 1 NO, rotary operating mechanism, black



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 operating mechanism	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
Number of poles / Note	PE + N
Type of device	fixed mounting
Type of switch	Molded-plastic enclosure for metric threaded joint
Size of switch disconnecter	2
Electrical endurance (switching cycles) / at AC-23 A / at 690 V	6 000
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.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
Mechanical service life (switching cycles) / typical	100 000
Operating frequency / maximum	50 1/h

### Voltage

Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	6 kV
Current / at AC / rated value	25 A
Operating voltage <ul style="list-style-type: none"> <li>at AC / at 50/60 Hz / rated value</li> </ul>	690 V

### Protection class

Protection class IP	IP65
Protection class IP / on the front	IP65

### Dissipation

Power loss [W] <ul style="list-style-type: none"> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul>	1.1 W 1.1 W
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### Current

Operating current <ul style="list-style-type: none"> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> <li>at AC-22 A / at 440 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> <li>at AC-23 A / at 440 V / rated value</li> </ul>	11 A 20 A 25 A 25 A 25 A 25 A 25 A 25 A 20 A 20 A
Continuous current <ul style="list-style-type: none"> <li>rated value</li> <li>at 40 °C / rated value</li> <li>at 45 °C / rated value</li> <li>at 50 °C / rated value</li> <li>at 55 °C / rated value</li> </ul>	25 A 25 A 25 A 25 A 25 A
Operating 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>	3.5 kA
Short-time withstand current (I <sub>cw</sub> )	
<ul style="list-style-type: none"> <li>• limited to 1 s / rated value</li> </ul>	640 A
<ul style="list-style-type: none"> <li>• at 690 V / limited to 1 s / rated value</li> </ul>	640 A

### Main circuit

Operating frequency	
<ul style="list-style-type: none"> <li>• initial value</li> </ul>	50 Hz
<ul style="list-style-type: none"> <li>• Full-scale value</li> </ul>	60 Hz
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 / at 50/60 Hz / rated value</li> </ul>	9.5 kW
<ul style="list-style-type: none"> <li>• at AC-23 A / at 400 V / rated value</li> </ul>	9.5 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>	9.5 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>	7.5 kW
<ul style="list-style-type: none"> <li>• at AC-3 / at 690 V / rated value</li> </ul>	7.5 kW
Operating current / rated value	25 A

### Auxiliary circuit

Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	1
Number of NO contacts / for auxiliary contacts	1
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	
<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

### Appearance

Color / of the actuating element	black
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### Product details

Product function / can be locked into OFF position	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
<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
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 <ul style="list-style-type: none"> <li>• maximum</li> <li>• minimum</li> </ul>	8 14
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
<b>Requirements</b>	
Design of the fuse link <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit / required</li> <li>• for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 25 A fuse gL/gG: 10 A
<b>Mechanical Design</b>	
Height	164 mm
Width	100 mm
Depth	118 mm
Mounting type	Complete unit in enclosure
Mounting type <ul style="list-style-type: none"> <li>• front mounting with 4-hole attachment</li> <li>• front mounting with central attachment</li> <li>• rail mounting</li> </ul>	No Yes No
Net weight	502 g
<b>Environmental conditions</b>	
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 / minimum	-25 °C

## Certificates

### Reference code

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

S  
SF

### General Product Approval

### Declaration of Conformity

### Test Certific- ates



CSA



UL



VDE

[Miscellaneous](#)



EG-Konf.

[Miscellaneous](#)

### Shipping Ap- proval

### other



LRS

[Environmental Con-  
firmations](#)

## 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=3LD2164-2TD51-0AE2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-2TD51-0AE2>

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

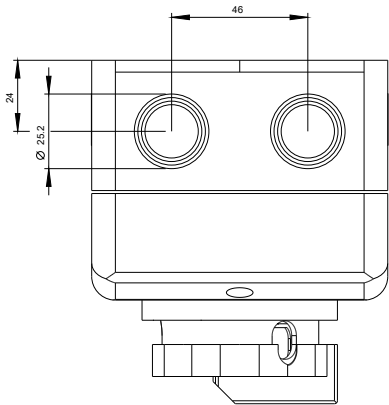
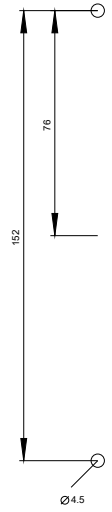
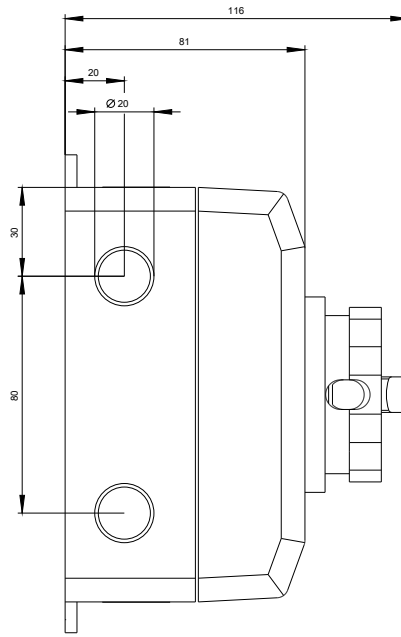
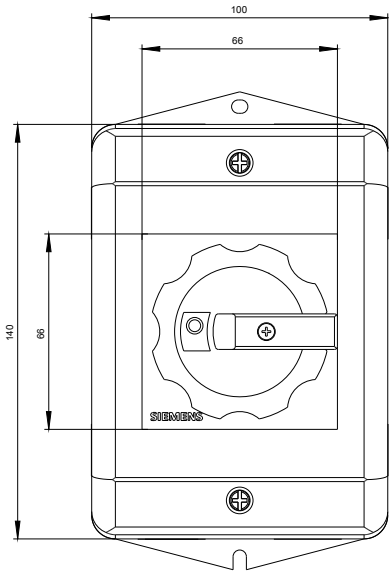
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### CAX-Online-Generator

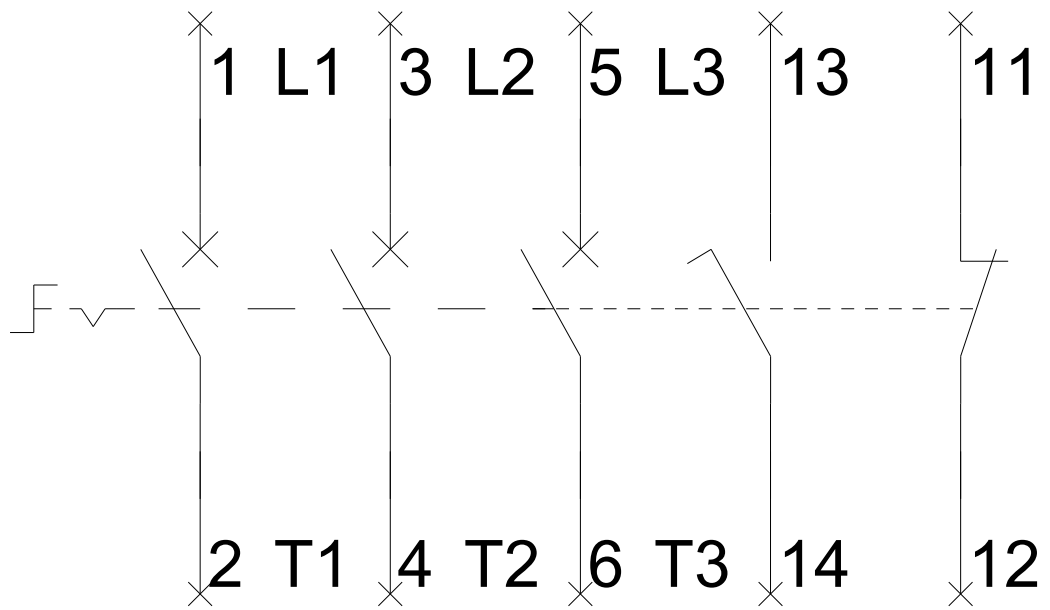
<http://www.siemens.com/cax>

### Tender specifications

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



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