



SENTRON, Switch disconnecter 3LD, main switch, 6-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	6
Number of poles / Note	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 _{2t} value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 kA ² .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
Operating current / at AC / rated value	25 A
Operating voltage at AC / at 50/60 Hz / rated value	690 V

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 - per conductor / typical	1.1 W 1.1 W
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Current

Operating current - at AC-23 A / at 690 V / rated value - at AC-23 A / at 400 V / rated value - at AC-22 A / at 690 V / rated value - at AC-21 / at 690 V / rated value - at AC-21 A / at 240 V / rated value - at AC-21 A / at 440 V / rated value - at AC-22 A / at 240 V / rated value - at AC-22 A / at 440 V / rated value - at AC-23 A / at 240 V / rated value - at AC-23 A / at 440 V / rated value	11 A 20 A 25 A 25 A 25 A 25 A 25 A 25 A 20 A 20 A
Operating current / of upstream fuse / rated value	25 A
Let-through current / with closed switch - at 440 V / for combination switch + gG fuse / maximum - at 690 V / for combination switch + gG fuse / maximum permissible	3.5 kA 3.5 kA
Short-time withstand current (I _{cw}) - limited to 1 s / rated value - at 690 V / limited to 1 s / rated value	640 A 640 A

Main circuit

Operating frequency	
• initial value	50 Hz
• Full-scale value	60 Hz
Operating power	
• at AC-23 A / at 240 V / rated value	5 kW
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	9.5 kW
• at AC-23 A / at 400 V / rated value	9.5 kW
• at AC-23 A / at 440 V / rated value	9.5 kW
• at AC-23 A / at 690 V / rated value	9.5 kW
• at AC-3 / at 240 V / rated value	4 kW
• at AC-3 / at 400 V / rated value	7.5 kW
• at AC-3 / at 690 V / rated value	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	
• Main switch	Yes
• switch disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes

Appearance	
Color / of the actuating element	black

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
Product extension / optional	
• motor drive	No
• Voltage trigger	No

Short circuit

Conditional short-circuit current / with line-side fuse protection

- at 690 V / by gG fuse / rated value

50 kA

according UL

Operating current / at AC / acc. to UL 508 / rated value

25 A

Operating voltage / at AC / at 50/60 Hz / acc. to UL 508 / rated value

600 V

Active power [hp] / at AC / at 480 V / acc. to UL 508 / rated value

10

Active power [hp] / at AC / at 600 V / acc. to UL 508 / rated value

15

Short-time withstand current (SCCR) / at 600 V / acc. to UL 508

5 kA

Continuous current / of upstream fuse / according to UL / rated value

50 A

Type of fuse / according to UL

RK5

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

Connections

AWG number / as coded connectable conductor cross section / solid

- maximum
- minimum

8

14

Type of connectable conductor cross-sections / for copper conductor

- solid
- finely stranded / with core end processing
- stranded

1x (1,5...16mm²)

1x (1,5...10mm²)

1x (1,5...16mm²)

Type of connectable conductor cross-sections / for auxiliary contacts

- solid
- finely stranded / with core end processing
- stranded

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

- for main current circuit

box terminal

- for auxiliary contacts

connection terminals

Requirements

Design of the fuse link

- for short-circuit protection of the main circuit / required
- for short-circuit protection of the auxiliary switch / required

fuse gL/gG: 25 A

fuse gL/gG: 10 A

Mechanical Design

Height

188 mm

Width

146 mm

Depth

149 mm

Mounting type

Complete unit in enclosure

Mounting type

- front mounting with 4-hole attachment
- front mounting with central attachment
- rail mounting

No

Yes

No

Net weight

877 g

Environmental conditions

Ambient temperature / during operation

- minimum
- maximum

-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



CCC



CSA



UL



VDE

[Miscellaneous](#)



EG-Konf.

Shipping Approval

other



LRS

[Environmental Conformations](#)

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=3LD2165-4VD51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2165-4VD51>

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

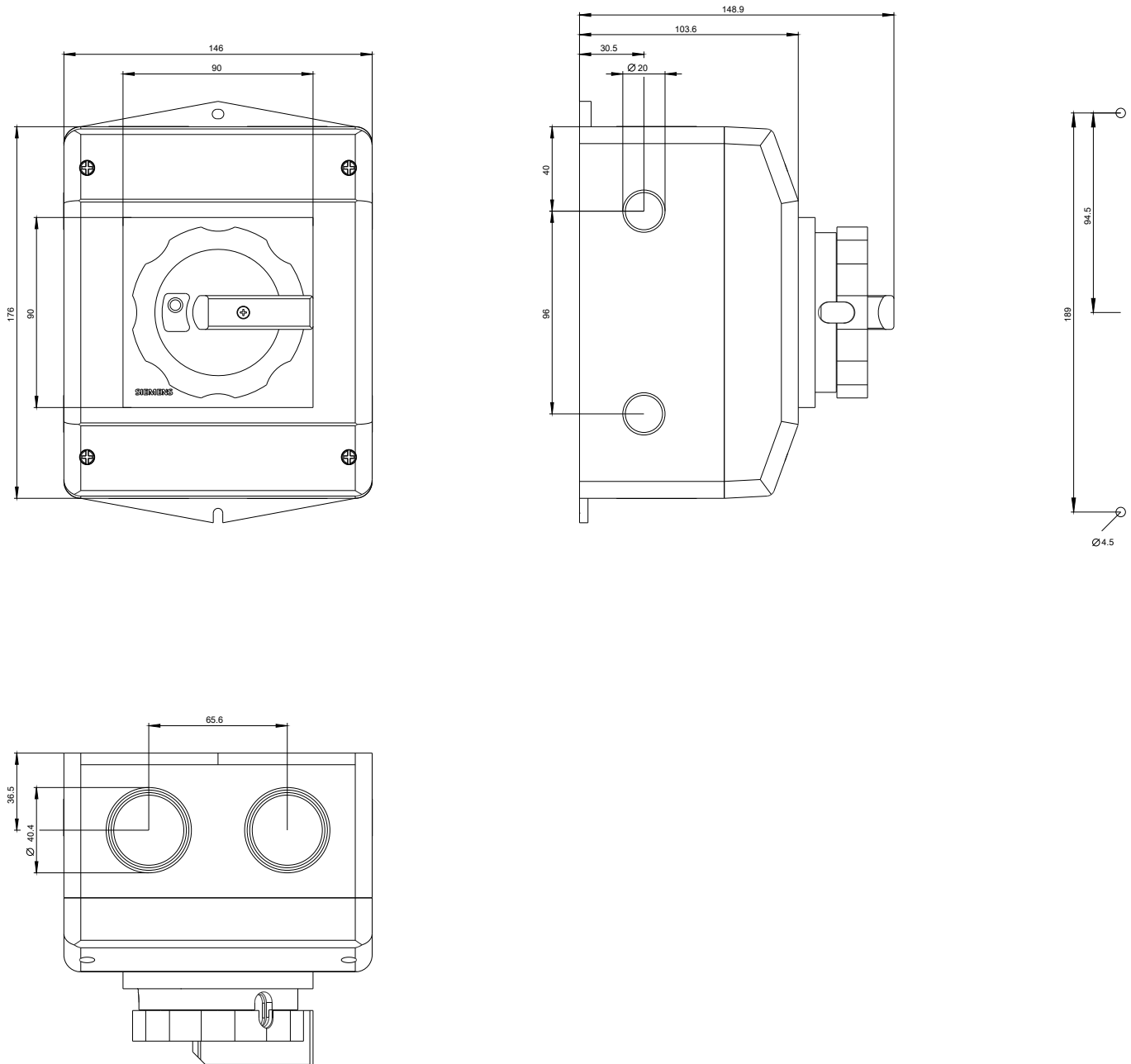
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2165-4VD51

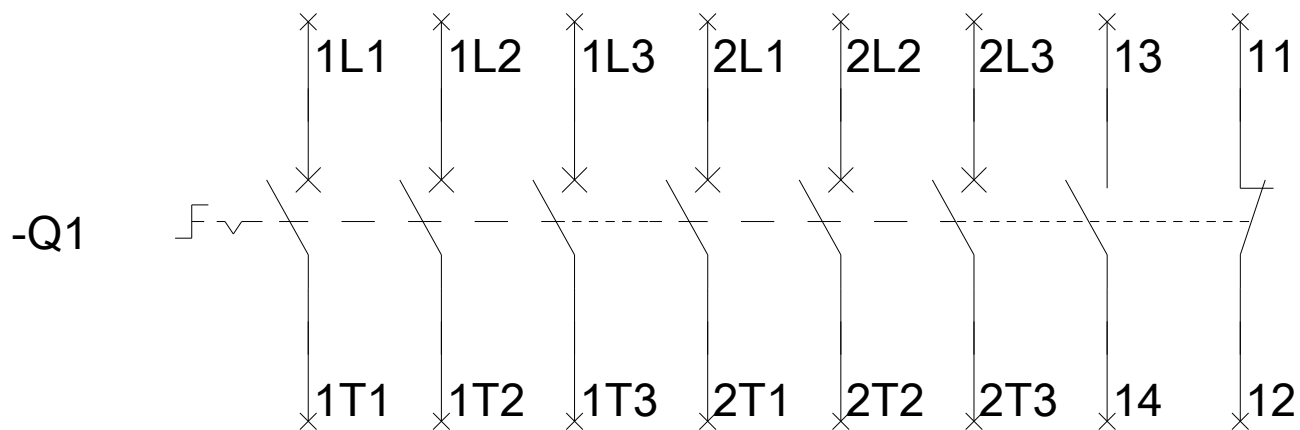
CAX-Online-Generator

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

Tender specifications

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





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