## 3LD2165-5VD51-0AE2

**Data sheet** 



SENTRON, Switch disconnector 3LD, main switch, 6-pole, lu: 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	Switch disconnector
design of the product	Main switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	Molded-plastic enclosure for metric threaded joint
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	6
number of poles note	N
size of switch disconnector	2
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
/oltage	
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
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
<ul><li>at AC-23 A at 440 V rated value</li></ul>	9.5 kW
<ul> <li>at AC-23 A at 690 V rated value</li> </ul>	10 kW
<ul> <li>at AC-3 at 240 V rated value</li> </ul>	4 kW
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	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	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
suitability for use switch disconnector	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	Yes
accessories	
product extension optional	
motor drive	No
	No
voltage trigger  number of connectable NC contacts for auxiliant contacts.	2
number of connectable NC contacts for auxiliary contacts attachable maximum	
number of connectable NO contacts for auxiliary contacts attachable maximum	3
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
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
<ul> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	4 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	4 kA2.s
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s 4 kA2.s
_	
• at 440 V for combination switch + gG fuse maximum	4 kA2.s
at 440 V for combination switch + gG fuse maximum     at 690 V for combination switch + gG fuse maximum  design of the fuse link	4 kA2.s
<ul> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s 4 kA2.s
at 440 V for combination switch + gG fuse maximum     at 690 V for combination switch + gG fuse maximum  design of the fuse link     for short-circuit protection of the main circuit required	4 kA2.s 4 kA2.s fuse gL/gG: 25 A
at 440 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum  design of the fuse link for short-circuit protection of the main circuit required for short-circuit protection of the auxiliary switch required	4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A
at 440 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum  design of the fuse link for short-circuit protection of the main circuit required for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1	4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A
at 440 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum  design of the fuse link for short-circuit protection of the main circuit required for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL	4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A
at 440 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum  design of the fuse link for short-circuit protection of the main circuit required for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1 rated value	4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A
at 440 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum  design of the fuse link  for short-circuit protection of the main circuit required for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value  according UL  operational current at AC according to UL 508/UL 60947-4-1 rated value  operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value  active power [hp] at AC at 480 V according to UL 508/UL	4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A 25 A

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
Connections	
AWG number as coded connectable conductor cross section solid maximum	
•	8
•	14
type of connectable conductor cross-sections for copper conductor	
• solid	1x (1,516mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (1,510mm²)
• stranded	1x (1,516mm²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²
stranded	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
Mechanical Design	
height	201 mm
width	146 mm
depth	149 mm
type of device	fixed mounting
fastening method	Complete unit in enclosure
fastening method	
<ul> <li>4-hole front mounting</li> </ul>	No
<ul> <li>front mounting with central attachment</li> </ul>	Yes
rail mounting	No
net weight	894 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
maximum	55 °C
ambient temperature during storage	
• minimum	-25 °C
maximum	55 °C

## **General Product Approval**









Confirmation



General Product Approval

**Test Certificates** 

Marine / Shipping

other

**Miscellaneous** 

Environmental Confirmations

Environment

**Miscellaneous** 



Confirmation

Environment

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)

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2165-5VD51-0AE2

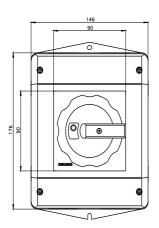
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

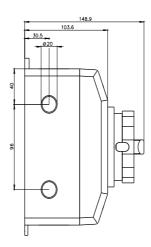
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2165-5VD51-0AE2

**CAx-Online-Generator** 

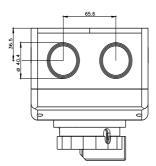
Tender specifications

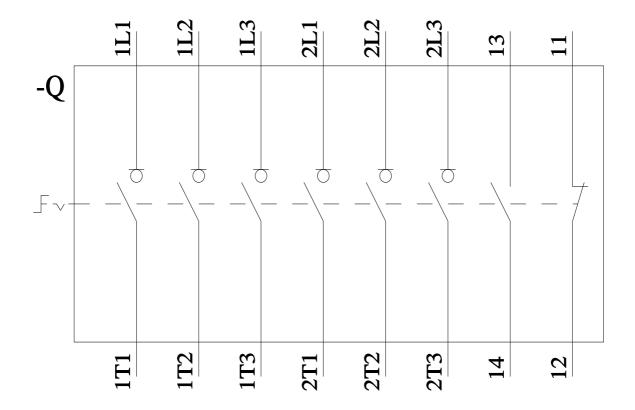
http://www.siemens.com/specifications

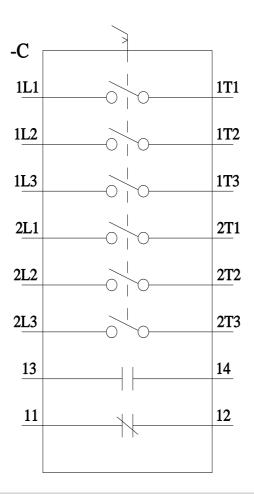












last modified: 6/20/2023 🖸

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Siemens:

3LD21655VD510AE2