SIEMENS

Data sheet

3LD2165-3VB51



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 cable gland, rotary operating mechanism, black

Model		
product brand name	SENTRON	
product designation	3LD 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	PE + N	
size of switch disconnector	2	
mechanical service life (switching cycles) / typical	100 000	
electrical endurance (switching 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, 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
safety switchmaintenance/repair switch	Yes Yes
-	
maintenance/repair switch	
maintenance/repair switch Product details	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position accessories	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes Yes
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive	Yes Yes No
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum 	Yes Yes No No 3
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional emotor drive evoltage trigger number of connectable NC contacts / for auxiliary contacts	Yes Yes No No
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts 	Yes Yes No No 3
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts 	Yes Yes No No 3 5
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional emotor drive evoltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum	Yes Yes No No 3 5 0
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum 	Yes Yes No No 3 5 0 3
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse 	Yes Yes No No 3 5 0 3
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value 	Yes Yes No No 3 5 0 3
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch at 240 V / for combination switch + gG fuse / 	Yes Yes No No 3 5 0 3 4 8 mm
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch at 240 V / for combination switch + gG fuse / maximum 	Yes Yes No No 3 5 0 3 4 8 mm 50 kA 3.5 kA
 maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection at 690 V / by gG fuse / rated value let-through current / with closed switch at 240 V / for combination switch + gG fuse / 	Yes Yes No No 3 5 0 3 4 8 mm
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switch + gG fuse / maximum	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s
design of the fuse link	
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 25 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	25 A
according UL	
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
Connections	
AWG number / as coded connectable conductor cross section / solid	
• maximum	8
• minimum	14
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1,516mm ²)
 finely stranded / with core end processing 	1x (1,510mm ²)
stranded	1x (1,516mm²)
type of connectable conductor cross-sections / for auxiliary contacts	lateral qualitary quitab 0y (0.75 - 0.5mm2) du Amm2 frant qualitary
• solid	lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)
finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ²
stranded	lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)
type of electrical connection	
for main current circuit	box terminal
 for auxiliary contacts 	connection terminals
Mechanical Design	
height	188 mm
width	146 mm
depth	149 mm
type of device	fixed mounting
fastening method	Complete unit in enclosure
fastening method	
4-hole front mounting	No
 front mounting with central attachment 	Yes
rail mounting	No
net weight	874 g
Environmental conditions	
ambient temperature / during operation	25.10
• minimum	-25 °C
maximum	55 °C
ambient temperature / during storage	25 °C
● minimum ● maximum	-25 °C 55 °C
General Product Approval	



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=3LD2165-3VB51 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2165-3VB51 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2165-3VB51 CAx-Online-Generator http://www.siemens.com/cax Tender specifications

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