SIEMENS

Data sheet 3LD2165-7UB01



SENTRON, Switch disconnector 3LD, change-over switch, 3-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for metric cable screw connection, knob-operated mechanism, black

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	Selector switch
display version for switch position indicator manual operation	1 ON - 0 OFF - 2 ON
type of switch	Molded-plastic enclosure for metric threaded joint
design of the actuating element	selector switch
color of the actuating element	black
design of handle	knob-operated mechanism, black
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
number of poles note	N + PE
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
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
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-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
Suitability	
suitability for use	
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
safety switch	Yes
maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	No
accessories	
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	4
number of connectable CO contacts for auxiliary contacts attachable maximum	0
Short circuit	
Short circuit conditional short-circuit current with line-side fuse protection	
	50 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch	50 kA
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	3.5 kA
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 • at 440 V for combination switch + gG fuse maximum	3.5 kA 3.5 kA
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	3.5 kA
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 • 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
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch	3.5 kA 3.5 kA 4 kA
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum	3.5 kA 3.5 kA
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum	3.5 kA 3.5 kA 4 kA
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum	3.5 kA 3.5 kA 4 kA 4 kA2.s
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	3.5 kA 3.5 kA 4 kA 4 kA2.s
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	3.5 kA 3.5 kA 4 kA 4 kA 4 kA 4 kA 4 kA 4 kA 5 kA
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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	3.5 kA 3.5 kA 4 kA 4 kA 4 kA 4 kA 5 s 4 kA 6 s 6 s 6 s 7 s 7 s 8 s 9 s 1 s 1 s 1 s 1 s 1 s 1 s 1 s 1
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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	3.5 kA 3.5 kA 4 kA 4 kA 4 kA 5 s 4 kA 6 s 6 s 6 s 6 s 6 s 6 s 6 s 6 s
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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	3.5 kA 3.5 kA 4 kA 4 kA2.s 4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 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	3.5 kA 3.5 kA 4 kA 4 kA2.s 4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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	3.5 kA 3.5 kA 4 kA 4 kA2.s 4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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 60947-	3.5 kA 3.5 kA 4 kA 4 kA 4 kA 2.5 4 kA 4 kA 4 kA 5 A 600 V
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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 60947-4-1 rated value active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	3.5 kA 3.5 kA 4 kA2.s 4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A 25 A
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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 active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value short-time withstand current (SCCR) at 600 V according to UL	3.5 kA 3.5 kA 4 kA 4 kA 4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A 25 A 600 V 10
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 • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 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 active power [hp] 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 60947-4-1 rated value short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	3.5 kA 3.5 kA 4 kA 4 kA 4 kA2.s 4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 A 25 A 25 A 600 V 10 15 5 kA

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)
 finely stranded with core end processing 	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)
• finely stranded with core end processing	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	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	894 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-25 °C
• maximum	55 °C
Approvals Certificates	

General Product Approval







Confirmation





General Product Approval

Test Certificates

Marine / Shipping

other



Miscellaneous



Miscellaneous



Confirmation

other Environment

<u>Miscellaneous</u> <u>Environmental Confirmations</u>

Environmental Confirmations 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=3LD2165-7UB01

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2165-7UB01

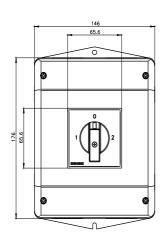
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

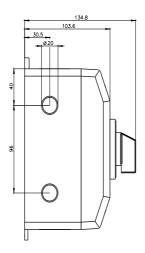
CAx-Online-Generator

http://www.siemens.com/cax

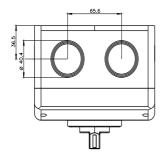
Tender specifications

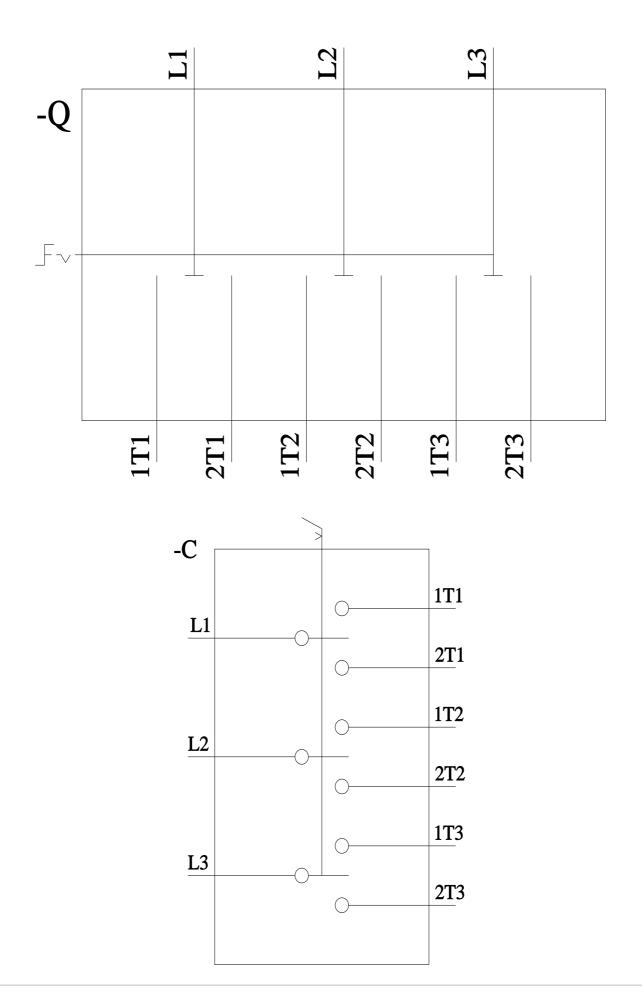
http://www.siemens.com/specifications











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