## **SIEMENS**

Data sheet 3LD2164-0TB53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3- pole, lu: 25 A, operating power / at AC-23 A 400 V: 9.5 kW, Molded plastic encapsulation for metric cable gland, rotary operating mechanism, red/yellow

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	EMERGENCY-STOP 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	red
design of handle	rotary operating mechanism, red/yellow
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)	
<ul> <li>at AC-23 A at 690 V</li> </ul>	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
<ul> <li>at AC-21 A at 400 V rated value</li> </ul>	25 A

<ul> <li>at AC-21 A at 440 V rated value</li> </ul>	
	25 A
at AC-23 A at 400 V rated value	20 A
operating power	
<ul> <li>at AC-23 A at 240 V rated value</li> </ul>	5 kW
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	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
<ul> <li>at AC-3 at 690 V rated value</li> </ul>	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
suitability for use switch disconnector	Yes
suitability for use EMERGENCY OFF switch	Yes
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	165
product extension optional	Na
motor drive	No
voltage trigger	No
number of connectable NC contacts for auxiliary contacts attachable maximum	3
number of connectable NO contacts for auxiliary contacts attachable maximum	5
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	
Short circuit  conditional short-circuit current with line-side fuse protection	
conditional short-circuit current with line-side fuse	50 kA
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	50 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	
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  • at 690 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	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 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  • at 440 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 kA2.s 4 kA2.s 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  • 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 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 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 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  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	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	3.5 kA 3.5 kA 4 kA 4 kA2.s 4 kA2.s fuse gL/gG: 25 A fuse gL/gG: 10 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
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals
Mechanical Design	
height	152 mm
width	100 mm
depth	117 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	446 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

Miscellaneous Environmental Con-

## Information on the packaging

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=3LD2164-0TB53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-0TB53

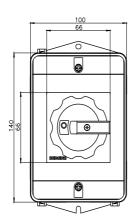
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2164-0TB53">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2164-0TB53</a>

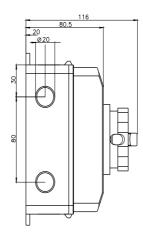
**CAx-Online-Generator** 

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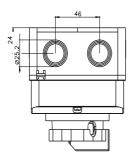
**Tender specifications** 

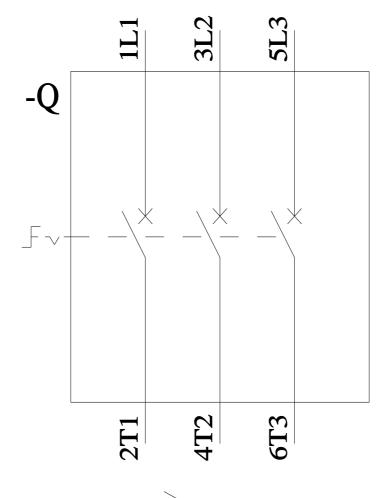
http://www.siemens.com/specifications

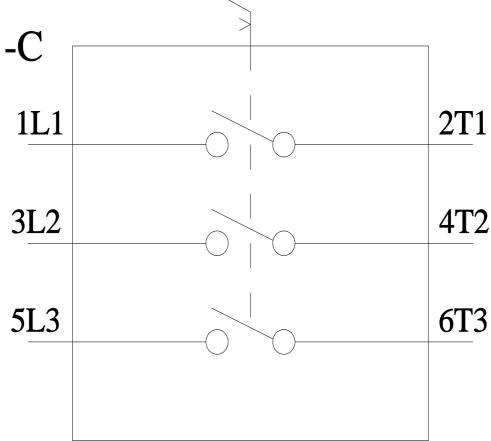












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