# **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	3LD Switch disconnector			
Design of the product	EMERGENCY-STOP 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, red/yellow			
Type of the driving mechanism / motor drive	No			
General technical data				
Number of poles	3			
Number of poles / Note	N + PE			
Type of device	fixed mounting			
Type of switch	Molded-plastic enclosure for metric threaded joint			
Size of switch disconnector	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 I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 kA2.s
Mechanical service life (switching cycles) / typical	100 000
Operating frequency / maximum	50 1/h
Type of fuse / according to UL	RK5
Voltage	
Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	6 kV
Current / at AC / rated value	25 A
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
<ul> <li>at AC / at 50/60 Hz / acc. to UL 508 / rated value</li> </ul>	600 V
Active power [hp] / at AC	-
• at 480 V / acc. to UL 508 / rated value	10
• at 600 V / acc. to UL 508 / rated value	15
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]	
<ul> <li>for rated value of the current / at AC / in hot</li> </ul>	1.1 W
operating state / per pole	
<ul> <li>per conductor / typical</li> </ul>	1.1 W
Current	
Operating current	
• at AC-23 A / at 690 V / rated value	11 A
<ul> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> </ul>	11 A 20 A
• at AC-23 A / at 400 V / rated value	20 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> </ul>	20 A 25 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> </ul>	20 A 25 A 25 A
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<ul> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> </ul>	20 A 25 A 25 A 25 A 25 A
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Let-through current / with closed switch	
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	3.5 kA
	3.5 kA
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	
Short-time withstand current (Icw)	
<ul> <li>limited to 1 s / rated value</li> </ul>	640 A
<ul> <li>at 690 V / limited to 1 s / rated value</li> </ul>	640 A
Main circuit	
Operating frequency	50.11
• 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	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
<ul> <li>switch disconnector</li> </ul>	Yes
EMERGENCY OFF switch	Yes
<ul> <li>safety switch</li> </ul>	Yes
<ul> <li>maintenance/repair switch</li> </ul>	Yes
Appearance	
Color / of the actuating element	red

Product details	
<ul> <li>Product function / can be locked into OFF</li> </ul>	Yes
position	
Number of bracket locks / maximum	3
Hasp thickness / of the bracket locks / minimum	4 mm
Hasp thickness / of the bracket locks / maximum	8 mm
Chart aircuit	
Short circuit Short-time withstand current (SCCR) / at 600 V / acc.	5 kA
to UL 508	
Conditional short-circuit current / with line-side fuse protection	
<ul> <li>at 690 V / by gG fuse / rated value</li> </ul>	50 kA
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
Connections	
AWG number / as coded connectable conductor	
cross section / solid	
• maximum	8
• minimum	14
Type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	box terminal
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals
Requirements	
Design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 25 A
<ul> <li>for short-circuit protection of the auxiliary switch</li> <li>/ required</li> </ul>	fuse gL/gG: 10 A
Mechanical Design	
Height	152 mm
Width	100 mm
Depth	117 mm
Mounting type	Complete unit in enclosure
Mounting type	
<ul> <li>front mounting with 4-hole attachment</li> </ul>	No
<ul> <li>front mounting with central attachment</li> </ul>	Yes
• rail mounting	No
Net weight	446 g

Environmental cond	ditions				
Ambient temperatur	e / during operation				
• minimum		-25 °C			
• maximum		55 °C			
Ambient temperatur	Ambient temperature / during storage / minimum		-25 °C		
Certificates					
Reference code					
• acc. to DIN EN 61346-2		S			
• acc. to DIN EN 81346-2		SF			
General Product Approval				Test Certific-	
					ates
$\overline{}$			$\wedge$	Miscellaneous	Miscellaneous
$(\mathbf{m})$	(SP	(UL)	DE		
CCC					
	CSA	UL	VDE		
Shipping Ap-	other				
proval					
	Environmental Con-				
H-IOVOS	firmations				



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#### 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=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, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2164-0TB53

CAx-Online-Generator http://www.siemens.com/cax

### **Tender specifications**

http://www.siemens.com/specifications













