## SIEMENS

## Data sheet

## 3LD2144-0TK51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, floor mounting with door coupling, rotary operating mechanism, black, central mounting 22.5 mm of the handle

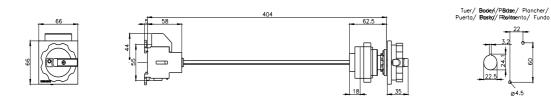
product brand nameSENTRONproduct designationSwitch disconnectordesign of the productMain switchdisplay version for switch position indicator manual operation1 ON - 0 OFFtype of switchFloor mounting with door couplingdesign of the actuating elementShort rotary knobcolor of the actuating elementblackdesign of handlerotary operating mechanism, blacktype of the driving mechanism motor driveNoGeneral technical datanumber of poles3size of switch disconnector2mechanical service life (operating cycles) typical100 000electrical endurance (operating cycles) typical6 000operating frequency maximum50 1/hdegree of pollution3	
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General technical data         number of poles       3         size of switch disconnector       2         mechanical service life (operating cycles) typical       100 000         electrical endurance (operating cycles)       6 000         • at AC-23 A at 690 V       6 000         operating frequency maximum       50 1/h         degree of pollution       3	
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electrical endurance (operating cycles)       • at AC-23 A at 690 V       operating frequency maximum       degree of pollution       3	
• at AC-23 A at 690 V     6 000       operating frequency maximum     50 1/h       degree of pollution     3	
operating frequency maximum     50 1/h       degree of pollution     3	
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, 3R, 4X, 12	
protection class IP on the front IP65	
Dissipation	
power loss [W] for rated value of the current at AC in hot 1.1 W 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
	5 KW
at AC-23 A at 400 V rated value	
at AC-23 A at 440 V rated value	9.5 kW 10 kW
at AC-23 A at 690 V rated value	
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	0
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	500 V
operating voltage of auxiliary contacts at AC maximum	10 A
continuous current of the auxiliary contact rated value	500 V
insulation voltage of the auxiliary switch rated value Suitability	500 V
suitability for use	
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
EMERGENCY OFF SWICH     safety switch	Yes
-	
maintenance/repair switch Product details	Yes
product feature can be locked into OFF position	Yes
accessories	100
product extension optional	
motor drive	No
voltage trigger	No
number of connectable NC contacts for auxiliary contacts	3
attachable maximum number of connectable NO contacts for auxiliary contacts	5
attachable maximum	
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	
<ul> <li>at 690 V by gG fuse rated value</li> </ul>	50 kA
let-through current with closed switch	
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	3.5 kA
<ul> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	3.5 kA
<ul> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	4 kA
I2t value with closed switch	
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
<ul> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
<ul> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
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 required</li> </ul>	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

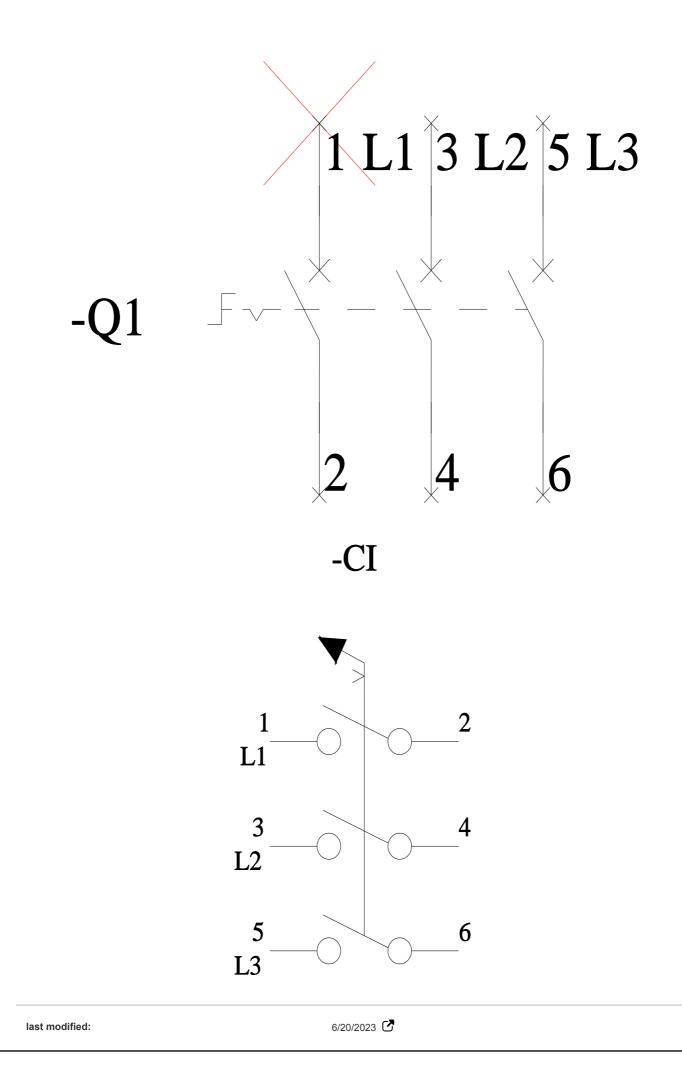
continuous current of up	ostream fuse according to UL	rated value	50 A				
type of fuse according to UL			RK5				
Connections							
AWG number as coded solid	connectable conductor cross	section					
<ul> <li>maximum</li> </ul>			8				
minimum			14				
type of connectable con conductor	ductor cross-sections for copp	ber					
<ul> <li>solid</li> </ul>				516mm²)			
<ul> <li>finely stranded with core end processing</li> </ul>			1x (1,510mm <sup>2</sup> )				
stranded type of connectable con contacts	ductor cross-sections for auxi	liary	1x (1,	516mm²)			
• solid				l auxiliary switch 2x (0,75 2,5mm <sup>2</sup> )	2,5mm²), 1x 4mm²; fro	nt auxiliary switch 1x	
<ul> <li>finely stranded w</li> </ul>	ith core end processing			l auxiliary switch 2x (0,75	1,5mm²), 1x 2,5mm²; fr	ront auxiliary switch 1x	
• stranded				I auxiliary switch 2x (0,75 2,5mm <sup>2</sup> )	2,5mm²), 1x 4mm²; fro	nt auxiliary switch 1x	
type of electrical connect	ction						
<ul> <li>for main current of</li> </ul>	circuit		box te	erminal			
<ul> <li>for auxiliary containing</li> </ul>	acts		conne	ection terminals			
Mechanical Design							
height		_	83 mr	n			
width			67 mr				
	depth			451.5 mm			
type of device		_		mounting	ion		
fastening method		_	Buiit-i	n unit fixed-mounted vers	ion		
fastening method • 4-hole front mour	ating		No				
	•		Yes				
<ul> <li>front mounting with central attachment</li> <li>rail mounting</li> </ul>			Yes				
net weight			431 g				
Environmental condition	ns						
ambient temperature du		_					
• minimum			-25 °C	2			
<ul> <li>maximum</li> </ul>			55 °C				
ambient temperature du	iring storage						
• minimum			-25 °C	<b>C</b>			
<ul> <li>maximum</li> </ul>			55 °C				
General Product Appr	oval						
<b>(T</b> )	(m)	Confirmation	L	ŝ	$\wedge$	Miscellaneous	
QP	(m)			("L)	<u> D'E</u>		
CSA	ccc			UL	VDE		
General Product Approval	Declaration of Conformity	/		Test Certificates	Marine / Shipping		
		אוו		Special Test Certific-	11	(All and a second secon	
FAL	(	ŬΚ		ate	Register	(2)	
LIIL	EG-Konf.	CA			urs	DOS.	
					0.5	115	
Marine / Shipping	other			Environment			
STREAM ARC	Miscellaneous	<b>Confirmation</b>	L	Environmental Con-			
				firmations			
DNV-GL							

Further information
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
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=3LD2144-0TK51
Service&Support (Manuals, Certificates, Characteristics, FAQs,)
https://support.industry.siemens.com/cs/ww/en/ps/3LD2144-0TK51
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams,) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2144-0TK51
CAx-Online-Generator
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Tender specifications
http://www.siemens.com/specifications









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