# SIEMENS

### Data sheet

### 3LD2164-2TD51-0AE2



SENTRON, Switch disconnector 3LD, main switch, 3-pole, Iu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for metric screw connection, 1 NC, 1 NO, rotary operating mechanism, black

Model		
product brand name	SENTRON	
product designation	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	3	
number of poles note	PE + N	
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		
<ul> <li>at AC rated value</li> </ul>	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	

<ul> <li>at AC-21 A at 440 V rated value</li> </ul>	25 A
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	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	1
number of NO contacts for auxiliary contacts	1
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	No
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	
product extension optional	
motor drive	No
voltage trigger	No
number of connectable NC contacts for auxiliary contacts	2
attachable maximum	
number of connectable NO contacts for auxiliary contacts attachable maximum	3
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	
• at 690 V by gG fuse rated value	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 parmissible</li> </ul>	4 kA
permissible I2t value with closed switch	
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
<ul> <li>at 440 V for combination switch + gG fuse maximum</li> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
<ul><li>design of the fuse link</li><li>for short-circuit protection of the main circuit required</li></ul>	fuse gL/gG: 25 A
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A 25 A
operational current of upstream fuse rated value according UL	20 A
	25 A
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	5 kA
UL 508/UL 60947-4-1 continuous current of upstream fuse according to UL rated	50 A
value	
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	
• solid	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x
<ul> <li>finely stranded with core end processing</li> </ul>	(0,75 2,5mm <sup>2</sup> ) lateral auxiliary switch 2x (0,75 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x
• stranded	2,5mm <sup>2</sup> lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x
	(0,75 2,5mm²)
type of electrical connection <ul> <li>for main current circuit</li> </ul>	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	164 mm
width	100 mm
depth	118 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
<ul> <li>rail mounting</li> </ul>	No
net weight	502 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	25.00
• minimum	-25 °C 55 °C
maximum Approvals Certificates	
General Product Approval	
<u>ش (۹</u> ) (۹	
CCC CSA EG-Konf.	
General Product Approval	Test Certificates Marine / Shipping other
<u>Miscellaneous</u>	Miscellaneous Miscellaneous
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Information on the packaging

https://support.industry.siemens <u>com/cs/ww/en/view/109813875</u>

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=3LD2164-2TD51-0AE2

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-2TD51-0AE2

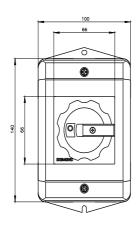
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2164-2TD51-0AE2

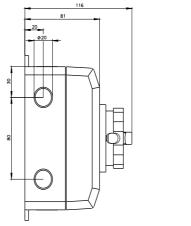
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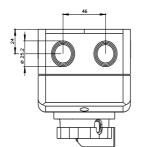
**Tender specifications** 

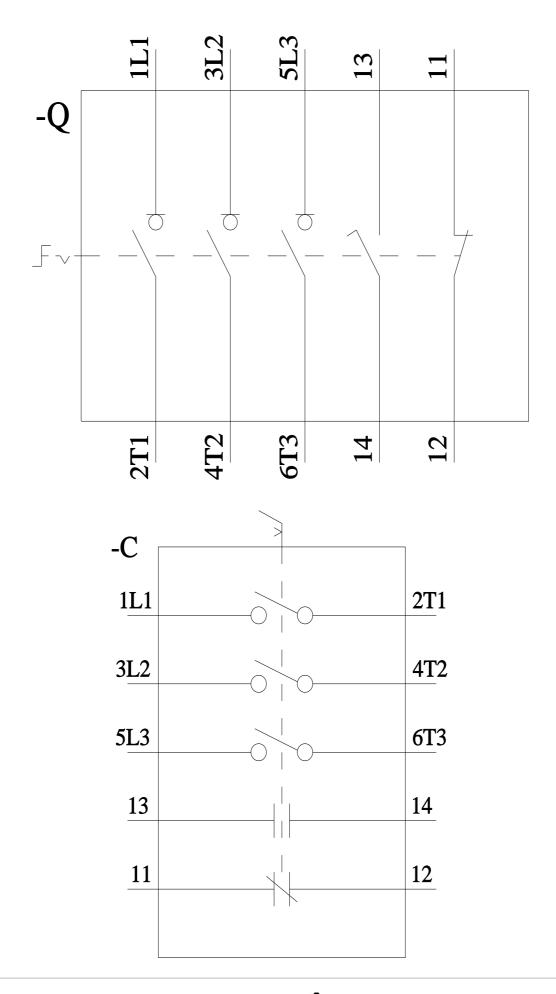
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