## SIEMENS

## Data sheet

## 3LD2164-1TC53

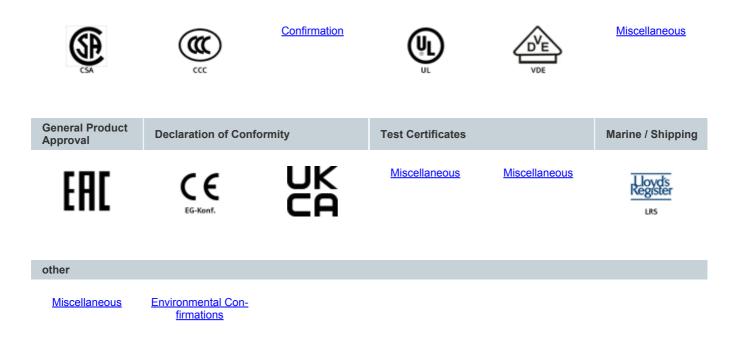


SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4pole, 25 A, operating power at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for metric cable gland, rotary operating mechanism, red/yellow

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	
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	4	
number of poles / note	PE	
size of switch disconnector	2	
mechanical service life (switching cycles) / typical	100 000	
electrical endurance (switching 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	
Current		
operational current / rated value	25 A	
operational current		
• at 40 °C / rated value	25 A	

• at 45 °C / rated value	25 A
• at 50 °C / rated value	25 A
• at 55 °C / rated value	25 A
at AC / rated value	25 A
Main circuit	
operational current	
<ul> <li>at AC-21 / at 690 V / rated value</li> </ul>	25 A
<ul> <li>at AC-21 A / at 240 V / rated value</li> </ul>	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
• at AC-3 / at 240 V / rated value	4 kW
<ul> <li>at AC-3 / at 400 V / rated value</li> </ul>	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
insulation voltage / of the auxiliary switch / rated value	500 V
Suitability	
suitability for use	
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	Yes
safety switch	Yes
maintenance/repair switch	Yes
Product details	
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
product extension / optional • motor drive	No
product extension / optional • motor drive • voltage trigger	No
product extension / optional • motor drive	
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts	No
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts	No 2
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum	No 2 3 0
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum	No 2 3 0 3
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks	No 2 3 0
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum	No 2 3 0 3
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit	No 2 3 0 3
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse	No 2 3 0 3
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value let-through current / with closed switch	No 2 3 0 3 4 8 mm
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value	No 2 3 0 3 4 8 mm
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit 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 /	No         2         3         0         3         4 8 mm
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit 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 /	No 2 3 0 3 4 8 mm 50 kA 3.5 kA
product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit 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 / by combination switch + gG fuse /	No 2 3 0 3 4 8 mm 50 kA 3.5 kA 3.5 kA

switch + gG fuse / maximum	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	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 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
• minimum	14
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1,516mm <sup>2</sup> )
<ul> <li>finely stranded / with core end processing</li> </ul>	1x (1,510mm <sup>2</sup> )
stranded	1x (1,516mm²)
type of connectable conductor cross-sections / for auxiliary contacts	lateral qualitary quitab 2y (0.75 - 0.5mm2) du dama2 frant qualitary
• solid	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup>
stranded	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
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	
4-hole front mounting	No
<ul> <li>front mounting with central attachment</li> </ul>	Yes
rail mounting	No
net weight	481 g
Environmental conditions	
ambient temperature / during operation	25.10
• minimum	-25 °C
maximum	55 °C
ambient temperature / during storage	25 °C
● minimum ● maximum	-25 °C 55 °C
General Product Approval	



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=3LD2164-1TC53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-1TC53

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

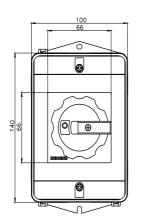
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2164-1TC53

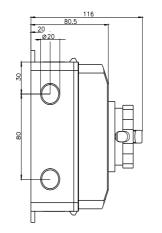
CAx-Online-Generator

http://www.siemens.com/cax

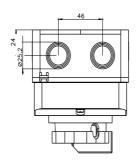
Tender specifications

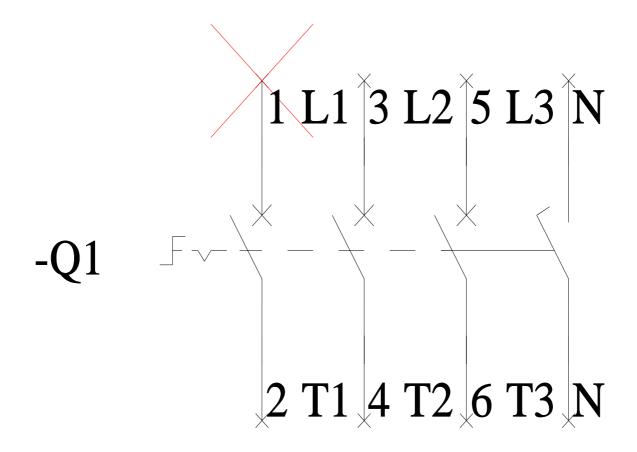
http://www.siemens.com/specifications

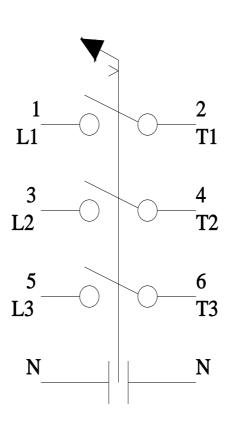












-CI

Ø