## SIEMENS

## Data sheet

## 3LD2003-1TP53

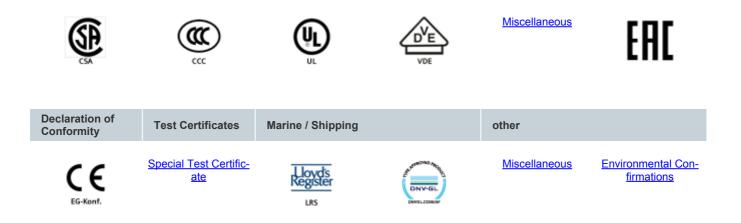


SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3-pole, Iu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, front-mounted, 1 NC, 1 NO, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle

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 actuating element	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	
type of device	fixed mounting	
type of switch	front mounted	
size of switch disconnector	1	
mechanical service life (switching cycles) / typical	100 000	
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	2.5 kA2.s	
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	2.5 kA2.s	
operating frequency / maximum	50 1/h	
Voltage		
insulation voltage / rated value	690 V	
surge voltage resistance / rated value	6 kV	
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]		
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> </ul>	0.5 W	
<ul> <li>per conductor / typical</li> </ul>	0.5 W	
Current		
operational current		
• at 40 °C / rated value	16 A	
● at 45 °C / rated value	16 A	

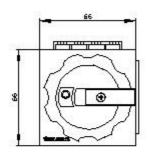
<ul> <li>at 50 °C / rated value</li> </ul>	16 A
• at 55 °C / rated value	16 A
• at AC / rated value	16 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	16 A
<ul> <li>at AC-21 / at 690 V / rated value</li> </ul>	16 A
<ul> <li>at AC-21 A / at 240 V / rated value</li> </ul>	16 A
<ul> <li>at AC-21 A / at 440 V / rated value</li> </ul>	16 A
operational current / of upstream fuse / rated value	20 A
let-through current / with closed switch	
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	3 kA
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	3 kA
Main circuit	
operating power	
<ul> <li>at AC-23 A / at 240 V / rated value</li> </ul>	4 kW
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	7.5 kW
<ul> <li>at AC-23 A / at 440 V / rated value</li> </ul>	7.5 kW
• at AC-23 A / at 690 V / rated value	7.5 kW
• at AC-3 / at 240 V / rated value	3 kW
• at AC-3 / at 400 V / rated value	5.5 kW
• at AC-3 / at 690 V / rated value	5.5 kW
operational current / rated value	16 A
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
<ul> <li>switch disconnector</li> </ul>	Yes
EMERGENCY OFF switch	Yes
<ul> <li>safety switch</li> </ul>	res
<ul> <li>safety switch</li> <li>maintenance/repair switch</li> </ul>	Yes
maintenance/repair switch	Yes
maintenance/repair switch Appearance	Yes
maintenance/repair switch Appearance color / of the actuating element	
maintenance/repair switch Appearance color / of the actuating element Product details	Yes
maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes red
maintenance/repair switch Appearance color / of the actuating element Product details product feature     can be locked into OFF position	Yes red Yes
maintenance/repair switch Appearance color / of the actuating element Product details product feature     can be locked into OFF position number of bracket locks / maximum	Yes red Yes 3
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature      can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum	Yes red Yes 3 4 mm
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature      can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / maximum  hasp thickness / of the bracket locks / maximum	Yes red Yes 3
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature      can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional	Yes red Yes 3 4 mm 8 mm
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature      can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional      motor drive	Yes red Yes 3 4 mm
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature      can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional      motor drive      voltage trigger	Yes red Yes 3 4 mm 8 mm No
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature      can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional      motor drive      voltage trigger  Short circuit	Yes red Yes 3 4 mm 8 mm No
maintenance/repair switch  Appearance      color / of the actuating element  Product details  product feature          • can be locked into OFF position      number of bracket locks / maximum      hasp thickness / of the bracket locks / minimum      hasp thickness / of the bracket locks / maximum      product extension / optional          • motor drive          • voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection	Yes red Yes 3 4 mm 8 mm No No
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature          can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional          motor drive          voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection          at 690 V / by gG fuse / rated value	Yes red Yes 3 4 mm 8 mm No
maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature          • can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional          • motor drive          • voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection          • at 690 V / by gG fuse / rated value  according UL	Yes red Yes 3 4 mm 8 mm No No No
maintenance/repair switch     Appearance     color / of the actuating element     Product details     product feature         • can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional         • motor drive         • voltage trigger     Short circuit     conditional short-circuit current / with line-side fuse     protection         • at 690 V / by gG fuse / rated value     according UL     operational current / at AC / according to UL 508/UL     60947-4-1 / rated value	Yes red Yes 3 4 mm 8 mm No No 50 kA 16 A
maintenance/repair switch     Appearance     color / of the actuating element     Product details     product feature         e can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional         e motor drive         e voltage trigger     Short circuit     conditional short-circuit current / with line-side fuse     protection         e at 690 V / by gG fuse / rated value     according UL     operational current / at AC / according to UL 508/UL	Yes red Yes 3 4 mm 8 mm No No No

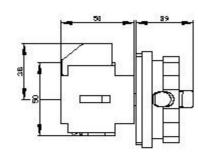
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	10
short-time withstand current (SCCR) / at 600 V / according to UL 508/UL 60947-4-1	5 kA
continuous current / of upstream fuse / according to UL / rated value	50 A
type of fuse / according to UL	RK5
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	2
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
AWG number / as coded connectable conductor cross section / solid	
• maximum	10
• minimum	18
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (16mm²)
<ul> <li>finely stranded / with core end processing</li> </ul>	1x (14mm²)
stranded	1x (16mm²)
type of connectable conductor cross-sections / for auxiliary contacts	
• 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> )
<ul> <li>finely stranded / with core end processing</li> </ul>	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	
<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: 20 A
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A
Mechanical Design	
height	84 mm
width	67 mm
depth	92.5 mm
fastening method	Built-in unit fixed-mounted version
fastening method	
<ul> <li>4-hole front mounting</li> </ul>	Yes
<ul> <li>front mounting with central attachment</li> </ul>	No
rail mounting	No
net weight	215 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	

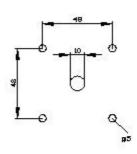


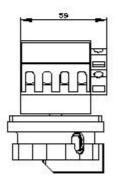
## Further information

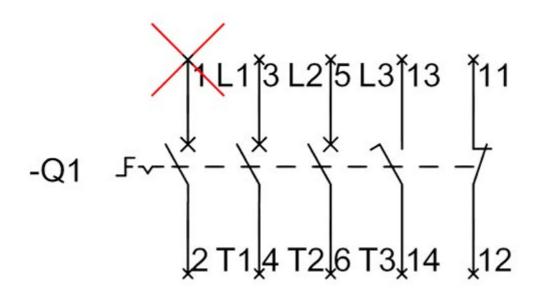
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2003-1TP53 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-1TP53 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2003-1TP53 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications





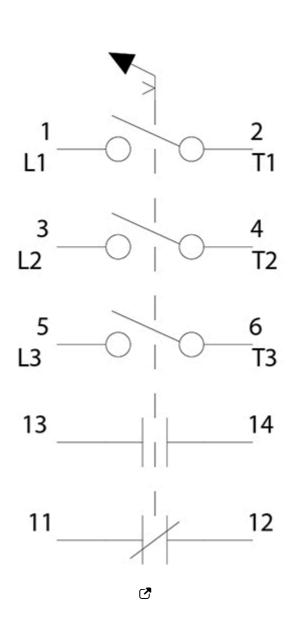






3LD20031TP53 Page 5/6

Subject to change without notice © Copyright Siemens



-Cl