SIEMENS

Data sheet 3LD2003-1TL53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4- pole, lu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, front-mounted, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	EMERGENCY-STOP switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	front mounted
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
size of switch disconnector	1
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	
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 operating state per pole	0.5 W
Main circuit	
operational current	
at AC-21 at 690 V rated value	16 A
• at AC-21 A at 240 V rated value	16 A
• at AC-21 A at 400 V rated value	16 A
• at AC-21 A at 440 V rated value	16 A

at AC-23 A at 400 V rated value	16 A
operating power	1071
at AC-23 A at 240 V rated value	4 kW
at AC-23 A at 240 V rated value at AC-23 A at 400 V rated value	8 kW
at AC-23 A at 400 V rated value at AC-23 A at 440 V rated value	7.5 kW
• at AC-23 A at 690 V rated value	8 kW
at AC-25 A at 690 V rated value at AC-3 at 240 V rated value	3 kW
at AC-3 at 400 V rated value	6 kW
at AC-3 at 400 V rated value at AC-3 at 690 V rated value	5.5 kW
Auxiliary circuit	5.5 KW
number of CO contacts for auxiliary contacts	0
-	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 continuous current of the auxiliary contact rated value	10 A
	500 V
insulation voltage of the auxiliary switch rated value	500 V
Suitability	V
suitability for use main switch	Yes Yes
suitability for use switch disconnector	
suitability for use EMERGENCY OFF switch	Yes
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	Voc
product feature can be locked into OFF position accessories	Yes
product extension optional	
motor drive	No
voltage trigger number of connectable NC contacts for auxiliary contacts	No 2
attachable maximum	
number of connectable NO contacts for auxiliary contacts attachable maximum	2
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	
 at 240 V for combination switch + gG fuse maximum 	3 kA
 at 440 V for combination switch + gG fuse maximum 	3 kA
at 690 V for combination switch + gG fuse maximum permissible	3 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	2.5 kA2.s
 at 440 V for combination switch + gG fuse maximum 	2.5 kA2.s
at 690 V for combination switch + gG fuse maximum	3 kA2.s
design of the fuse link	
• for short-circuit protection of the main circuit required	fuse gL/gG: 20 A
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
operational current of upstream fuse rated value	20 A
according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	
operating voltage at AC at 50/60 Hz according to UL 508/UL	16 A
60947-4-1 rated value	16 A 600 V
active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value	
active power [hp] at AC at 480 V according to UL 508/UL	600 V

continuous current of upstream fuse according to UL rated value RK5 Connections RK5 AWG number as coded connectable conductor cross section soild maximum 10 4 10 9 10 10 18 1 type of connectable conductor cross-sections for copper conductor 10 4 solid 1 k (1.6mm²) 6 finely stranded with core end processing 1 k (1.6mm²) 6 solid 1 k (1.6mm²) 6 finely stranded with core end processing 1 k (1.6mm²) 6 finely stranded with core end processing 1 ateral auxiliary switch 2k (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) 6 finely stranded with core end processing 1 ateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) 6 finely stranded with core end processing 1 ateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) 6 finely stranded with core end processing 1 ateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) 6 for main current circuit 6 box terminal 6 for main current circuit 9 box terminal 6 for main current circuit 9 c maxima 8 dwi	UL 508/UL 60947-4-1	
value RKS Sonnections RKS AWG number as coded connectable conductor cross section solid maximum 10 • • • • • • • • • • • • • • • • • • •		50 A
AWG number as coded connectable conductor cross section solid maximum • 10 10 11 type of connectable conductor cross-sections for copper conductor • solid • finely stranded with core end processing • stranded type of connectable conductor cross-sections for auxiliary • stranded with core end processing • stranded with core end processing • stranded with core end processing or auxiliary • stranded with core end processing • stranded • stranded with core end processing • stranded •		
AWG number as coded connectable conductor cross section solid maximum 10 18	type of fuse according to UL	RK5
section solid maximum i gasterion solid maximum type of connectable conductor cross-sections for copper conductor solid inley stranded with core end processing istranded with core end processing stranded with core end processing stranded type of connectable conductor cross-sections for auxiliary contacts solid inley stranded with core end processing stranded solid inley stranded with core end processing stranded inlegal auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) cype of electrical connection for main current circuit for main current circuit for auxiliary contacts box terminal stranded	Connections	
type of connectable conductor cross-sections for copper conductor solid innely stranded with core end processing solid solid solid stranded type of connectable conductor cross-sections for auxiliary contacts solid s		
type of connectable conductor cross-sections for copper conductor solid finely stranded with core end processing stranded type of connectable conductor cross-sections for auxiliary contacts solid finely stranded with core end processing finely stranded with core end processing stranded solid finely stranded with core end processing finely stranded with core end processing stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) stranded to remain current circuit for main current circuit for auxiliary contacts box terminal depth for auxiliary contacts 48 mm depth fixed mounting fastening method for front mounting with central attachment for in mounting with central attachment for in mounting with central attachment for minument conditions minimum fixed fixed mounting fixed mounting minimum fixed fixed mounting fixed auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (2,5mm²) fixed mounting fixed auxiliary switch 2x (0,75 2,5mm²), 1x 4m	•	10
condid solid (solid) (•	18
• finely stranded 1x (14mm²) type of connectable conductor cross-sections for auxillary contacts solid • solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) • finely stranded with core end processing lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm² • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x 2,5mm² • stranded connection obx terminal • for main current circuit obx terminal • for auxiliary contacts obx terminals width 67 mm depth 92.5 mm type of device fixed mounting fastening method fixed mounting • 4-hole front mounting Yes • 4-hole front mounting with central attachment No • rail mounting Yes • front mounting with central attachment No • rail mounting 25 °C • minimum -25 °C • maximum 25 °C • minimum -25 °C • minimum -25 °C • minimum -	31	
type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing • stranded • str	• solid	1x (16mm²)
type of connectable conductor cross-sections for auxilliary contacts solid so	 finely stranded with core end processing 	1x (14mm²)
eontacts • solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) • finely stranded with core end processing lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm² • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) • for delectrical connection • for main current circuit • for auxiliary contacts • connection terminals ###################################	• stranded	1x (16mm²)
• stranded 2,5mm² lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) type of electrical connection • for main current circuit box terminal • for auxiliary contacts connection terminals Mechanical Design Method depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version 4 -hole front mounting Yes • front mounting with central attachment No • rail mounting No er weight 215 g Environmental conditions 215 g Environmental conditions 55 °C ambient temperature during operation - 25 °C • maximum - 25 °C • minimum - 25 °C <td>• solid</td> <td></td>	• solid	
type of electrical connection	 finely stranded with core end processing 	
• for main current circuit • for auxiliary contacts connection terminals Mechanical Design height 84 mm depth 92.5 mm type of device fastening method 4-hole front mounting • front mounting with central attachment • rail mounting net weight able temperature during operation • minimum • 55 ° C ambient temperature during storage • minimum • minimum • minimum • 25 ° C • maximum • minimum • 55 ° C	• stranded	
• for auxiliary contacts Mechanical Design height 84 mm width 67 mm depth 92.5 mm type of device fixed mounting fastening method • 4-hole front mounting with central attachment nerill mounting with central attachment No • rail mounting net weight 215 g Environmental conditions ambient temperature during operation • minimum	type of electrical connection	
height 84 mm width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting net weight 215 g Environmental conditions ambient temperature during operation • minimum • maximum - 25 °C ambient temperature during storage • minimum • minimum • -25 °C ambient temperature during storage • minimum • maximum - 25 °C 55 °C	• for main current circuit	box terminal
height 84 mm width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting net weight 215 g Environmental conditions ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum • -25 °C ambient temperature during storage • minimum • minimum • 25 °C ambient temperature during storage • minimum • minimum • 25 °C • maximum 55 °C	 for auxiliary contacts 	connection terminals
width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method Yes front mounting with central attachment No rail mounting with central attachment No rail mounting with central attachment No net weight 215 g Environmental conditions ambient temperature during operation minimum -25 °C ambient temperature during storage minimum -25 °C	Mechanical Design	
depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 215 g Environmental conditions Servironmental conditions ambient temperature during operation -25 °C • maximum 55 °C ambient temperature during storage -25 °C • minimum -25 °C • minimum -25 °C • maximum 55 °C	height	84 mm
type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • maximum • minimum • maximum -25 °C ambient temperature during storage • minimum • maximum -25 °C -25 °C -25 °C -25 °C -55 °C	width	67 mm
Fastening method Fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • maximum • minimum • c-25 °C ambient temperature during storage • minimum • minimum • -25 °C ambient temperature during storage • minimum • minimum • -25 °C ambient temperature during storage • minimum • minimum • -25 °C	depth	92.5 mm
fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum 55°C ambient temperature during storage • minimum • minimum -25°C ambient temperature during storage • minimum • 7-25°C ambient temperature during storage • minimum • 55°C	type of device	fixed mounting
4-hole front mounting front mounting with central attachment rail mounting No ret weight 215 g mounting ambient temperature during operation minimum maximum 55 °C ambient temperature during storage minimum -25 °C ambient temperature during storage minimum -25 °C ambient temperature during storage minimum 55 °C	fastening method	Built-in unit fixed-mounted version
front mounting with central attachment rail mounting No net weight 215 g Environmental conditions ambient temperature during operation minimum rail mounting maximum -25 °C ambient temperature during storage minimum -25 °C ambient temperature during storage minimum -25 °C ambient temperature during storage minimum -25 °C maximum -25 °C	fastening method	
● rail mounting No net weight 215 g Environmental conditions ambient temperature during operation -25 °C ● maximum -25 °C ambient temperature during storage -25 °C • minimum -25 °C • maximum -25 °C • maximum -55 °C	 4-hole front mounting 	Yes
net weight Environmental conditions ambient temperature during operation • minimum • maximum 55°C ambient temperature during storage • minimum • maximum -25°C • maximum 55°C	 front mounting with central attachment 	No
ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum • maximum -25 °C 55 °C	rail mounting	No
ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum • maximum -25 °C 55 °C	net weight	215 g
● minimum -25 °C • maximum 55 °C ambient temperature during storage ● minimum -25 °C • maximum 55 °C	Environmental conditions	
● maximum 55 °C ambient temperature during storage -25 °C ● minimum -25 °C • maximum 55 °C	ambient temperature during operation	
ambient temperature during storage	• minimum	-25 °C
 ■ minimum -25 °C ■ maximum -25 °C 	• maximum	55 °C
• maximum 55 °C	ambient temperature during storage	
	• minimum	-25 °C
Approvals Certificates	• maximum	55 °C
	Approvals Certificates	

General Product Approval







Confirmation





General Product Approval

Marine / Shipping

other

Miscellaneous







Confirmation

Miscellaneous

Environment

Environmental Confirmations

Environmental Confirmations

Further information

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=3LD2003-1TL53

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-1TL53

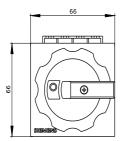
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-1TL53

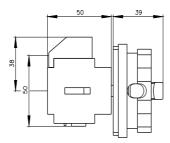
CAx-Online-Generator

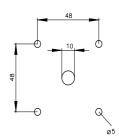
http://www.siemens.com/cax

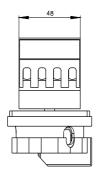
Tender specifications

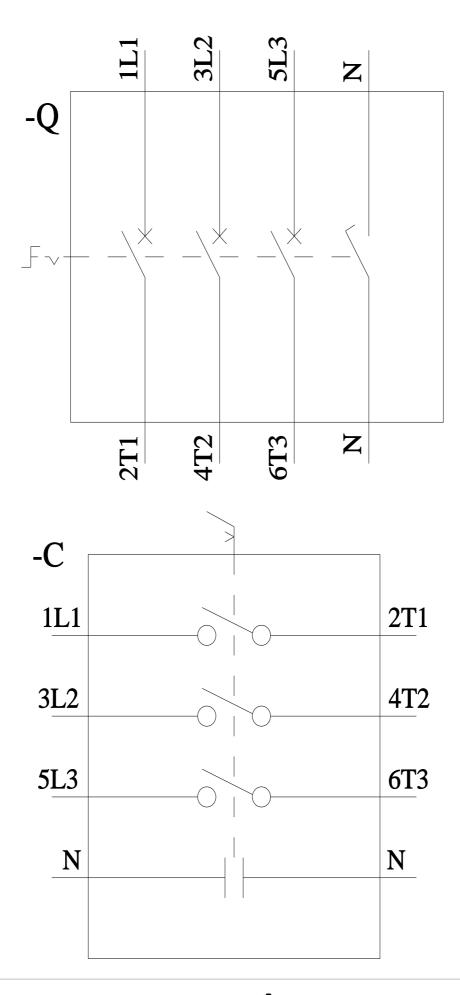
http://www.siemens.com/specifications











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