SIEMENS

Data sheet 3LD2003-2EP53



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, 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	
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 (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		
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	
Current		
operational current / rated value	16 A	
operational current		
 at 40 °C / rated value 	16 A	
 at 45 °C / rated value 	16 A	

 at 50 °C / rated value at 55 °C / rated value at AC / rated value 16 A Main circuit operational current at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value at AC-21 A / at 400 V / rated value at AC-21 A / at 400 V / rated value at AC-21 A / at 400 V / rated value at AC-21 A / at 400 V / rated value 	
at AC / rated value Main circuit operational current at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value 16 A 16 A	
Main circuit operational current • at AC-21 / at 690 V / rated value • at AC-21 A / at 240 V / rated value 16 A 16 A	
operational current • at AC-21 / at 690 V / rated value • at AC-21 A / at 240 V / rated value 16 A 16 A	
 at AC-21 / at 690 V / rated value at AC-21 A / at 240 V / rated value 16 A 16 A 	
• at AC-21 A / at 240 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	
 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 440 V / rated value 7.5 kW	
• at AC-23 A / at 690 V / rated value 8 kW	
• at AC-3 / at 240 V / rated value 3 kW	
at AC-3 / at 400 V / rated value 6 kW 5 F IAM	
at AC-3 / at 690 V / rated value 5.5 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	
• 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	
• motor drive No	
• voltage trigger No	
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 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 / 3 kA maximum	
• at 690 V / for combination switch + gG fuse / 3 kA maximum permissible	
I2t value / with closed switch / at 240 V / for combination switch + gG fuse / maximum 2.5 kA2.s	
I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	

I2t value / with closed switch / 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	16 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	7.5
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
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)
 finely stranded / with core end processing 	1x (14mm²)
stranded	1x (16mm²)
type of connectable conductor cross-sections / for auxiliary contacts	
• 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)
type of electrical connection	
for main current circuit	box terminal
 for auxiliary contacts 	connection terminals
Mechanical Design	
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	
 4-hole front mounting 	Yes
 front mounting with central attachment 	No
• rail mounting	No
net weight	227 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage	
• minimum	-25 °C
maximum	55 °C
General Product Approval	





Confirmation





Miscellaneous

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping

other







Special Test Certificate



Miscellaneous

other

Environmental Confirmations

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=3LD2003-2EP53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-2EP53

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-2EP53

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











