SIEMENS

Data sheet 3LD2003-0TK51



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

product brand name product designation design of the product display version / for switch position indicator manual operation type of switch design of the actuating element Short rotary knob closing of the actuating element Short rotary knob closing of handle type of switch design of handle type of the driving mechanism / motor drive Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum 50 Hz degree of protection class IP degree of protection NEMA rating protection class IP / on the front power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current power loss [W] / for rated value operating state / per pole Current operational current / at AC / in hot operational current / rated value	Model		
design of the product display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element design of handle rotary operating mechanism / motor drive design of handle rotary operating mechanism, black type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector 1 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value • parting voltage • at AC / rated value • minimum • maximum Fool Hz • maximum Fool Hz degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss IM / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value of operational current / rated value	product brand name	SENTRON	
display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element black design of handle type of the driving mechanism / motor drive No General technical data number of poles 3 size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value operating voltage • at AC-/ rated value • minimum • maximum for high employments in the front protection class IP degree of protection NEMA rating protection class IP degree of pole Dissipation power loss [Vf] / for rated value of the current / at AC / in hot operating state / per pole Current opperational current / rated value operational current / rated value of the current / at AC / in hot operating state / per pole Current opperational current / rated value operational current / rated value of the current / at AC / in hot operating state / per pole	product designation	3LD Switch disconnector	
operation type of switch design of the actuating element color / of the actuating element black rotary operating mechanism, black type of the driving mechanism / motor drive No General technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage resistance / rated value • minimum • at AC / rated value • minimum • maximum 50 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operating state / per pole Current operational current / rated value operational current / rated value operational current operational current 16 A	design of the product	Main switch	
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color / of the actuating element design of handle type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating frequency / rated value • at AC / rated value • at AC / rated value • minimum • maximum Protection class protection class IP degree of protection NEMA rating protection class IP / or the front power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current center of the actuating mechanism, black rotary operating mechanism, black rotary operating mechanism, black rotary operating mechanism, black No 8 8 8 8 8 8 8 8 9 8 8 9 8 8	type of switch	front mounted	
design of handle type of the driving mechanism / motor drive Seneral technical data	design of the actuating element	Short rotary knob	
type of the driving mechanism / motor drive General technical data number of poles size of switch disconnector 1 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum • maximum 50 Hz • motoction class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A	color / of the actuating element	black	
number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value surge voltage resistance / rated value operating frequency / rated value • at AC / rated value • foo V operating voltage • at AC / rated value • minimum • maximum • maximum • foo Hz Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current / rated value 16 A operational current	design of handle	rotary operating mechanism, black	
number of poles size of switch disconnector 1 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V 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 9 operating frequency / rated value • minimum 50 Hz • maximum 50 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A	type of the driving mechanism / motor drive	No	
size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 70	General technical data		
mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value • at AC / rated value • at AC / rated value • minimum • maximum 50 Hz Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A operational current / rated value 16 A	number of poles	3	
electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage resistance / rated value • at AC / rated value • minimum • maximum foo Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A0 16 A0 17 A0 18 A0 19 A0 10 A0	size of switch disconnector	1	
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operating frequency / maximum 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 690 V operating frequency / rated value • minimum • maximum 60 Hz Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A operational current / rated value 16 A	electrical endurance (switching cycles)		
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surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum foo Hz Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current / rated value 16 kV 68 kV 690 V 69	Voltage		
operating voltage	insulation voltage / rated value	690 V	
at AC / rated value operating frequency / rated value ominimum omaximum omaximum of 0 Hz Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A operational current	surge voltage resistance / rated value	6 kV	
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degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current 1, 3R, 4X, 12 IP65 0.5 W 16 A	Protection class		
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power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current	degree of protection NEMA rating	1, 3R, 4X, 12	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current 16 A	protection class IP / on the front	IP65	
hot operating state / per pole Current operational current / rated value operational current	Dissipation		
operational current / rated value 16 A operational current		0.5 W	
operational current	Current		
	operational current / rated value	16 A	
a at 40 °C / rated value	operational current		
♥ at 40 O / Tateu value	 at 40 °C / rated value 	16 A	
• at 45 °C / rated value 16 A	• at 45 °C / rated value	16 A	

at 50 °C / rated value	16 A
at 50 C / rated value at 55 °C / rated value	16 A
at AC / rated value	16 A
Main circuit	10 A
operational current	16 A
• at AC-21 / at 690 V / rated value	16 A 16 A
• at AC-21 A / at 240 V / rated value	
• at AC-21 A / at 400 V / rated value	16 A
 at AC-21 A / at 440 V / rated value at AC-23 A / at 400 V / rated value 	16 A 16 A
	10 A
operating power ● 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 440 V / rated value	7.5 kW
• at AC-23 A / at 440 V / rated value	8 KW
at AC-23 A 7 at 090 V 7 fated value at AC-3 / at 240 V / rated value	3 kW
	6 kW
at AC-3 / at 400 V / rated value at AC-3 / at 600 V / rated value at AC-3 / at 600 V / rated value	
at AC-3 / at 690 V / rated value Applicate aircuit	5.5 kW
Auxiliary circuit	0
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	v.
• main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
safety switch	Yes
maintenance/repair switch	Yes
Product details	V
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	N
motor drive	No
voltage trigger	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	3
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	
 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
I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	2.5 kA2.s

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	188 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







<u>Miscellaneous</u>

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping







Special Test Certificate





other

Miscellaneous

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=3LD2003-0TK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-0TK51

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-0TK51

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











