SIEMENS

Data sheet 3LD2103-1TP51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, front-mounted, 1 NC, 1 NO, 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 color / of the actuating element design of he actuating element design of he actuating element black color / of the actuating element design of handle type of switch design of handle type of the driving mechanism / motor drive design of handle type of switch design of handle type of switch disconnector number of poles 3 size of switch disconnector electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / 6000 operating frequency / maximum degree of pollution 3 Voltage surge voltage resistance / rated value operating frequency / rated value of the current / at AC / in hot operating state / per pole Current 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 volve of the driving mechanism / motor drive General 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 requency / rated value operating frequency / rated value operating requency / rated value operating often of the front operation class IP / on the front power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value at 40 °C / rated value 5 A operational current at 40 °C / rated value 25 A operational current at 40 °C / rated value 25 A operational current at 40 °C / 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 Ceneral technical data number of poles size of switch disconnector electrical endurance (switching cycles) / typical floo 000 electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical floo 000 electrical endurance (switching cycles) /	product designation	3LD Switch disconnector	
operation type of switch design of the actuating element color / of the actuating element 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) / typical electrical endurance (switching cycles) • at AC-23 / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum 60 Hz Protection class protection class IP / on the front Dissipation power loss [IV] / for rated value of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value	design of the product	Main switch	
design of the actuating element black 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 2 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / e at AC-23 A / at 690 V 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / rated value 600 Hz Protection class IP / on the front 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 Current operational current / rated value 25 A		1 ON - 0 OFF	
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 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 frequency / rated value • at AC / rated value • minimum • maximum 50 Hz protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation operating state / per pole Current • at 40 °C / rated value 25 A operational current / rated value 25 A operational current • at 40 °C / rated value 25 A	type of switch	front mounted	
design of handle type of the driving mechanism / motor drive No General technical data number of poles size of switch disconnector 2 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 50 Hz • maximum 60 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value • 25 A	design of the actuating element	Short rotary knob	
type of the driving mechanism / motor drive General technical data number of poles 3 size of switch disconnector 2 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / 6 000 operating frequency / maximum 50 1/h degree of pollution Voltage insulation voltage / rated value operating vitage resistance / rated value operating frequency / rated value • at AC / rated value • operating frequency / rated value • minimum • maximum Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation Dissipation operating state / per pole Current • at 40 °C / rated value 25 A operational current / rated value at 40 °C / rated value 25 A	color / of the actuating element	black	
In umber 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 foo 1/h degree of pollution Voltage insulation voltage / rated value operating voltage • 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 • at 40 °C / rated value • operational current • at 40 °C / rated value 25 A	design of handle	rotary operating mechanism, black	
number of poles size of switch disconnector geochanical 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 voltage • at AC / rated value operating frequency / 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 • at 40 °C / rated value 25 A operational current / rated value • at 40 °C / rated value 25 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 foo 1/h degree of pollution voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum omaximum 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 25 A operational current o at 40 °C / rated value 25 A operational current o at 40 °C / rated value 25 A	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 operating voltage • at AC / rated value operating frequency / rated value • minimum 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 • at 40 °C / rated value 25 A operational current • at 40 °C / rated value 25 A	number of poles	3	
electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum foo 1/h degree of pollution 3 Voltage insulation voltage / rated value 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 • at 40 °C / rated value 25 A operational current • at 40 °C / rated value 25 A	size of switch disconnector	2	
at AC-23 A / at 690 V operating frequency / maximum degree of pollution 70tage insulation voltage / rated value surge voltage resistance / rated value operating voltage at AC / rated value operating frequency / rated value operating frequency / rated value operating frequency / rated value ominimum ominimu	mechanical service life (switching cycles) / typical	100 000	
operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz • 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 • at 40 °C / rated value • at 40 °C / rated value 25 A	electrical endurance (switching cycles)		
degree of pollution 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 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 Current operational current / rated value 25 A operational current • at 40 °C / rated value 25 A	• at AC-23 A / at 690 V	6 000	
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 Current operational current / rated value • at 40 °C / rated value 25 A	operating frequency / maximum	50 1/h	
insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz • 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 • at 40 °C / rated value 690 V 6 kV 6 kV 690 V 6 kV 690 V 10 Hz 690 V 10 Hz 10 Hz 10 Hz 10 Hz 10 Hz 11 Hz 11 Hz 12 Hz 12 Hz 13 Hz 14 Hz 15 Hz 16 Hz 16 Hz 17 Hz 18 Hz	degree of pollution	3	
surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz • maximum Frotection 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 of the value of the current operational current / rated value of value of value 25 A	Voltage		
operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz Frotection 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 • at 40 °C / rated value 690 V 690	insulation voltage / rated value	690 V	
 at AC / rated value operating frequency / rated value minimum maximum fo Hz Protection class protection class IP degree of protection NEMA rating 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 Current operational current / rated value at 40 °C / rated value 25 A 25 A 25 A 26 A 26 A	surge voltage resistance / rated value	6 kV	
operating frequency / rated value	operating voltage		
	at AC / rated value	690 V	
	operating frequency / rated value		
protection class IP degree of protection NEMA rating 1, 3R, 4X, 12 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 • at 40 °C / rated value IP65 1.1 W 1.1 W 25 A	• minimum	50 Hz	
protection class IP 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 Current operational current / rated value operational current • at 40 °C / rated value 1, 3R, 4X, 12 2, 5A	maximum	60 Hz	
degree of protection NEMA rating 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 Current operational current / rated value operational current • at 40 °C / rated value 25 A	Protection class		
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 • at 40 °C / rated value 1.1 W 25 A 25 A	protection class IP	IP65	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current • at 40 °C / rated value 25 A	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 • at 40 °C / rated value 25 A	protection class IP / on the front	IP65	
hot operating state / per pole Current operational current / rated value operational current operational current operational current 25 A 25 A	Dissipation		
operational current / rated value 25 A operational current • at 40 °C / rated value 25 A		1.1 W	
operational current • at 40 °C / rated value 25 A	Current		
• at 40 °C / rated value 25 A	operational current / rated value	25 A	
	operational current		
• at 45 °C / rated value 25 A	 at 40 °C / rated value 	25 A	
	• at 45 °C / rated value	25 A	

• at 55 °C / rated value	25 A 25 A
	25 A
Main circuit	2071
operational current	
·	25 A
	20 A
operating power	
	5 kW
at AC-23 A / at 400 V / rated value	10 kW
at AC-23 A / at 440 V / rated value	9.5 kW
at AC-23 A / at 690 V / rated value	10 kW
• at AC-3 / at 240 V / rated value	4 kW
• at AC-3 / at 400 V / rated value	8 kW
at AC-3 / at 690 V / rated value	7.5 kW
Auxiliary circuit	
	0
	1
· · · · · · · · · · · · · · · · · · ·	1
	500 V
	10 A
	500 V
Suitability	
suitability for use	
·	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
safety switch	Yes
·	Yes
Product details	
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
motor drive	No
voltage trigger	No
	2
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 	3.5 kA
at 440 V / for combination switch + gG fuse / maximum	3.5 kA
• at 690 V / for combination switch + gG fuse / maximum permissible	4 kA
I2t value / with closed switch / at 240 V / for combination switch + gG fuse / maximum	4 kA2.s
I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 kA2.s

I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s
design of the fuse link	
for short-circuit protection of the main circuit / required	fuse gL/gG: 25 A
 for short-circuit protection of the auxiliary switch / required 	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 (1,516mm²)
 finely stranded / with core end processing 	1x (1,510mm²)
• stranded	1x (1,516mm²)
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	229 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





Marine / Shipping

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=3LD2103-1TP51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2103-1TP51

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2103-1TP51

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











