## **SIEMENS**

Data sheet 3LD2223-7UK01



SENTRON, Switch disconnector 3LD, change-over switch, 3-pole, lu: 32 A, Operating power / at AC-23 A at 400 V: 11.5 kW, front-mounted, knob-operated 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 thandle knob-operated mechanism, black type of switch design of thandle type of switch design of the actuating element design of thandle knob-operated mechanism, black type of the driving mechanism / motor drive No  Ceneral technical data  number of poles size of switch disconnector 2 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 • at AC / rated value • minimum • at AC / rated value • minimum  50 Hz  • maximum  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  Curront • at 40 °C / rated value • operational current / rated value • all AC value of the current / at AC / in hot operating state / per pole  Curront • at 40 °C / rated value • all AC value value of the current / at AC / in hot operational current • at 40 °C / rated value • all AC value value of the current / at AC / in hot operational current • at 40 °C / rated value • all AC value value • all AC value value of the current / at AC / in hot operational current • at 40 °C / rated value • all AC value value • all AC value value of the current / at AC / in hot operational current • at 40 °C / rated value • all AC value value • all AC value value of the current / at AC / in hot operational current • at 40 °C / rated value • all AC value	Model		
design of the product display version / for switch position indicator manual operation type of switch front mounted design of the actuating element color / of the actuating element design of handle knob-operated mechanism, black type of the driving mechanism / motor drive No  Ceneral technical data number of poles size of switch disconnector act 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  Fool Hz  • maximum  Fool Hz  degree of protection NEMA rating protection class IP / on the front Dissipation  Dissipation  Voltage under rated value of the current / at AC / in hot operating state / per pole  Current Operational current / rated value operating size / / Protection class IP / on the front Dissipation Operational current / rated value of the current / at AC / in hot operating state / per pole  Current Operational current / rated value operational current / rated value of the current / at AC / in hot operating state / per pole  Current Operational current / rated value Operational current / rated value of the current / at AC / in hot operating state / per pole  Current 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  Foot Hz  degree of protection class IP  degree of protection class IP  degree of protection NEMA rating protection class IP  degree of pole  insulation voltage I rated value of the current / at AC / in hot operating state / per pole  Current operational current / rated value  32 A  operational current / rated value  32 A  operational current / rated value  operational current / rated value of the current / at AC / in hot operating state / per pole  Current operational current / rated value  operational current / rated value of perational current / rated value  operational current / rated value of perational current / rated value  operational current / rated value of perational current / rated value  operational current / rated value of perational current / rated value  operational current / rated value	product designation	3LD Switch disconnector	
operation type of switch design of the actuating element color / of the actuating element black design of handle knob-operated 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  Dissipation  Overating state / per pole  Current operational current / rated value	design of the product	Selector switch	
design of the actuating element black color / of the actuating element black design of handle knob-operated mechanism, black 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 100 000 electrical endurance (switching cycles) / e at AC-23 A 1 at 90 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 690 V operating frequency / rated value 690 Hz  Protection class IP 60 Hz  Protection class IP 1P65 degree of protection NEMA rating 1, 3R, 4X, 12 IP65 Dissipation 1, 3R, 4X, 12 IP65 Dissipation 1, 3R, 4X, 12 IP65  Current operational current / rated value 32 A operational current / rated value 32 A		1 ON - 0 OFF - 2 ON	
color / of the actuating element 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 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 plass   JR   JR   JR   JR   protection class IP / or the front 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 of the current / at AC / in hot operating state / per pole  Current operational current / rated value operational current / rated value operational current	type of switch	front mounted	
design of handle knob-operated mechanism, black 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 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3  Voltage  insulation voltage / rated value 690 V  operating voltage resistance / rated value 690 V  operating frequency / rated value 690 V  operating frequency / rated value 690 V   poperating requency / rated value 690 V  operating voltage 600 Hz  Protection class IP 1, 3R, 4X, 12  protection class IP 2, 5B, 5B, 5B, 5B, 5B, 5B, 5B, 5B, 5B, 5B	design of the actuating element	selector switch	
type of the driving mechanism / motor drive  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 degree of pollution 3  Voltage insulation voltage / rated value 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  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  operational current  32 A	color / of the actuating element	black	
number of poles size of switch disconnector pechanical 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 operating frequency / rated value operating voltage at AC / rated value operating frequency / rated value operation class IP for 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 / rated value operational current	design of handle	knob-operated mechanism, black	
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 degree of pollution 3  Voltage insulation voltage / rated value operating voltage resistance / rated value • at AC / rated value • minimum • maximum  60 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 operational current / rated value  32 A operational current / rated value 32 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  70tage  insulation voltage / rated value  surge voltage resistance / rated value  • at AC / rated value  operating voltage  • 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  32 A  operational current / rated value  32 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 • maximum  50 Hz  Protection class  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 32 A operational current / rated value 32 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  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  32 A  operational current	size of switch disconnector	2	
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 for 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 operational current / rated value operational current	mechanical service life (switching cycles) / typical	100 000	
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 32 A operational current	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 • maximum 60 Hz  Protection class 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 32 A operational current / rated value 32 A	• at AC-23 A / at 690 V	6 000	
insulation voltage / rated value  surge voltage resistance / rated value  operating voltage  • at AC / rated value  operating frequency / rated value  • minimum  • maximum  for 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  insulation voltage / rated value of the current / at AC / in hot operating state / per pole  32 A  operational current / rated value  33 A	operating frequency / maximum	50 1/h	
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 operational current / rated value operational current	degree of pollution	3	
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  32 A  operational current	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 operational current	surge voltage resistance / rated value	6 kV	
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  32 A  operational current	operating voltage		
minimum     maximum     m	at AC / rated value	690 V	
● 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 32 A  operational current	operating frequency / rated value		
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 32 A operational current	• 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  32 A  operational current	• maximum	60 Hz	
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	Protection class		
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 32 A  operational current	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	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	protection class IP / on the front	IP65	
hot operating state / per pole  Current  operational current / rated value operational current	Dissipation		
operational current / rated value 32 A operational current		1.8 W	
operational current	Current		
	operational current / rated value	32 A	
• at 40 °C / rated value 32 A	operational current		
	<ul> <li>at 40 °C / rated value</li> </ul>	32 A	
• at 45 °C / rated value 32 A	• at 45 °C / rated value	32 A	

at 50 °C / rated value	32 A
at 50 °C / rated value      at 55 °C / rated value	32 A 32 A
at AC / rated value	32 A 32 A
Main circuit	32 A
operational current	
·	32 A
<ul> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> </ul>	32 A
• at AC-21 A / at 400 V / rated value	32 A
• at AC-21 A / at 440 V / rated value	32 A 22 A
at AC-23 A / at 400 V / rated value	22 A
operating power	G IAM
• at AC-23 A / at 240 V / rated value	6 kW 12 kW
• at AC-23 A / at 400 V / rated value	
• at AC-23 A / at 440 V / rated value	11.5 kW
• at AC-23 A / at 690 V / rated value	12 kW
• at AC-3 / at 240 V / rated value	5.5 kW
• at AC-3 / at 400 V / rated value	10 kW
at AC-3 / at 690 V / rated value	9.5 kW
Auxiliary circuit	
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	
main switch	Yes
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	No
<ul><li>safety switch</li></ul>	Yes
maintenance/repair switch	Yes
Product details	
product feature / can be locked into OFF position	No
accessories	
product extension / optional	
<ul> <li>motor drive</li> </ul>	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
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	
<ul> <li>at 240 V / for combination switch + gG fuse / maximum</li> </ul>	4.5 kA
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	4.5 kA
at 690 V / for combination switch + gG fuse / maximum permissible	5 kA
I2t value / with closed switch / at 240 V / for combination switch + gG fuse / maximum	9 kA2.s
I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	9 kA2.s
	9 kA2.s 9 kA2.s

• for short aircuit protection of the main aircuit /	fuse at /aC: 40 A
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 40 A
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	40 A
according UL	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	32 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	20
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	20
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	80 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)
<ul> <li>finely stranded / with core end processing</li> </ul>	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	
<ul> <li>for main current circuit</li> </ul>	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	92 mm
width	67 mm
depth	103 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	V.
4-hole front mounting	Yes
front mounting with central attachment	No No
• rail mounting	No
net weight	363 g
Environmental conditions	
ambient temperature / during operation	25 °C
minimum     maximum	-25 °C 55 °C
	00 0
ambient temperature / during storage  • minimum	-25 °C
• maximum	-25 °C
General Product Approval	
Ocheral Froduct 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=3LD2223-7UK01

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2223-7UK01

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2223-7UK01

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications











