# SIEMENS

### Data sheet

## 3LD3210-0TK05



Load disconnector 3LD3, lu 32 A Main switch 3-pole Rated operating capacity for AC-23 A at 400V 11.5kW Installation in distribution boards, Basic switch without Knob-operated mechanism

product brand name         SENTRON           product designation         3LD Switch disconnector           design of the product         Switch           display version / for switch position indicator manual operation         10N - 0 OFF           type of switch         DIN-rail mounting           design of the actuating element         Without handle           design of handle         Without           type of the driving mechanism / motor drive         No           General technical data         number of poles           number of poles         3           number of poles         3           number of poles         3           electrical endurance (switching cycles) / typical         100 000           electrical endurance (switching cycles)         6 000           operating frequency / maximum         50 1/h           degree of pollution         3           Voltage         6 800 V           operating frequency / natimum         60 kV           operating frequency / natimum         60 kV           operating frequency / natid value         690 V           surge vollage resistance / rated value         690 V           operating frequency / rated value         60 kV           operating frequency / rated value         60 kV <th>Model</th> <th></th>	Model	
design of the product       Switch         display version / for switch position indicator manual operation       1 ON - 0 OFF         type of switch       DIN-rail mounting         design of the actuating element       Without handle         design of the actuating element       Without handle         design of the driving mechanism / motor drive       No         Ceneral technical data       number of poles         number of poles / note       3         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         operating frequency / rated value       690 V         surge voltage resistance / rated value       690 V         operating frequency / rated value       690 V         operating frequency / rated value       600 V         operating frequenc	product brand name	SENTRON
display version / for switch position indicator manual operation       1 ON - 0 OFF         type of switch       DIN-rail mounting         design of the actuating element       without         type of the driving mechanism / motor drive       No         General technical data       mumber of poles         number of poles / note       3         mechanical service life (switching cycles) / typical       100 000         electrical endurance (switching cycles) / typical       100 000         electrical endurance (switching cycles) / typical       6 000         operating frequency / maximum       50 1/h         degree of pollution       3         Voltage       690 V         insulation voltage / rated value       690 V         operating frequency / rated value       50 Hz         operating frequency / rated	product designation	3LD Switch disconnector
operation         DIN-rail mounting           design of the actuating element         Without handle           design of the actuating element         Without handle           design of the actuating mechanism / motor drive         No           Ceneral technical data         number of poles           number of poles / note         3           number of poles / note         3           mechanical service life (switching cycles) / typical         100 000           electrical endurance (switching cycles) / typical         6000           operating frequency / maximum         50 1/h           degree of polution         3           Voltage            insulation voltage / rated value         690 V           operating frequency / rated value         690 V           operating trequency / rated value         690 V           operating frequency / rated value         60 Hz           Protection class IP         IP20           protection class IP         IP20           protection class IP / on the front         IP20           Dissipation         32 A	design of the product	Switch
design of the actualing element     Without handle       design of handle     without       type of the driving mechanism / motor drive     No       General technical data     Immber of poles       number of poles / note     3       mechanical service life (switching cycles) / typical     100 000       electrical endurance (switching cycles)     6 000       operating frequency / maximum     50 1/h       degree of pollution     3       Voitage     600 V       insulation voltage / rated value     690 V       operating frequency / maximum     60 V       operating voltage resistance / rated value     690 V       operating frequency / rated value     100 V       operating frequency / rated value     690 V       operating trace value     690 V       operating frequency / rated value     60 V       operating frequency / rated value     1920       protection class IP     IP20       protection class IP / on the front     IP20		1 ON - 0 OFF
design of handle     without       type of the driving mechanism / motor drive     No       General technical data	type of switch	DIN-rail mounting
type of the driving mechanism / motor drive       No         General technical data	design of the actuating element	Without handle
General technical data         number of poles       3         number of poles / note       3         mechanical service life (switching cycles) / typical       100 000         electrical endurance (switching cycles)       6000         • at AC-23 A / at 690 V       6000         operating frequency / maximum       50 1/h         degree of pollution       3         Voltage       insulation voltage / rated value         insulation voltage / rated value       690 V         surge voltage resistance / rated value       690 V         operating frequency / maximum       50 HZ         • at AC / rated value       690 V         operating frequency / rated value       690 V         • at AC / rated value       690 V         • operating frequency / rated value       690 V         • portection class IP       IP20         protection class IP / on the front       IP20         Dissipation       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Operational current       3	design of handle	without
number of poles       3         number of poles / note       3         mechanical service life (switching cycles) / typical       100 000         electrical endurance (switching cycles) / typical       100 000         electrical endurance (switching cycles) / typical       6 000         operating frequency / maximum       50 1/h         degree of pollution       3         Voltage       6 000         insulation voltage / rated value       690 V         surge voltage resistance / rated value       690 V         operating voltage       6 kV         • at AC / rated value       690 V         operating frequency / rated value       60 Hz         • minimum       50 Hz         • minimum       50 Hz         protection class IP       IP20         protection class IP / on the front       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Operational current       32 A         operational current       32 A <td>type of the driving mechanism / motor drive</td> <td>No</td>	type of the driving mechanism / motor drive	No
number of poles / note       3         mechanical service life (switching cycles) / typical       100 000         electrical endurance (switching cycles)       6         • at AC-23 A / at 690 V       6 000         operating frequency / maximum       50 1/h         degree of pollution       3         Voltage       680 V         insulation voltage / rated value       690 V         surge voltage resistance / rated value       690 V         operating frequency / rated value       690 V         operating frequency / rated value       690 V         operating frequency / rated value       600 V         operating frequency / rated value       690 V         operating frequency / rated value       600 V         operating frequency / rated value       600 V         operating frequency / rated value       50 Hz         • minimum       50 Hz         • minimum       60 Hz         Protection class IP       IP20         protection class IP / on the front       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Operational current / rated value       32 A         operational current / rated value       32 A         operational current	General technical data	
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       690 V         insulation voltage / rated value       690 V         surge voltage resistance / rated value       690 V         operating requency / rated value       690 V         operating voltage       690 V         • at AC / rated value       690 V         operating requency / rated value       690 V         operating frequency / rated value       600 Hz         Protection class       P         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       32 A         operational current / rated value       32 A         operational current / rated value       32 A         operational current / rated value       32 A         e at 45 °C / rate	number of poles	3
electrical endurance (switching cycles)       6 000         operating frequency / maximum       50 1/h         degree of pollution       3         Voltage       690 V         insulation voltage / rated value       690 V         operating voltage       64 V         • at AC - rated value       690 V         operating voltage       64 V         • at AC / rated value       690 V         operating voltage       64 V         • at AC / rated value       690 V         operating frequency / rated value       690 V         operating frequency / rated value       690 V         operating trequency / rated value       690 V         operating trequency / rated value       690 V         operation class IP       Protection class IP         protection class IP       IP20         Dissipation       IP20         Dissipation       1.8 W         porterions [sute / per pole       32 A         operational current / rated value       32 A	number of poles / note	3
• at AC-23 A / at 690 V       6 000         operating frequency / maximum       50 1/h         degree of pollution       3         Voltage       690 V         insulation voltage / rated value       690 V         surge voltage resistance / rated value       690 V         operating voltage       6 kV         operating voltage       6 kV         operating frequency / rated value       690 V         operating frequency / rated value       600 Hz         Protection class IP       Protection class IP         protection class IP / on the front       IP20         Dissipation       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         operational current / rated value       32 A         operational current / at 40 °C / rated value       32 A         • at 40 °C / r	mechanical service life (switching cycles) / typical	100 000
operating frequency / maximum         50 1/h           degree of pollution         3           Voltage         690 V           insulation voltage / rated value         690 V           surge voltage resistance / rated value         690 V           operating voltage         64 V           • at AC / rated value         690 V           operating frequency / rated value         690 V           operation class         12           protection class IP         IP20           protection class IP / on the front         IP20           Dissipation         IP20           power loss [W] / for rated value of the current / at AC / in hot operating state / per pole         1.8 W           operational current         32 A           • at 40 °C / rated value	electrical endurance (switching cycles)	
degree of pollution       3         Voltage       insulation voltage / rated value       690 V         surge voltage resistance / rated value       6 kV         operating voltage       6 kV         • at AC / rated value       690 V         operating requency / rated value       690 V         • at AC / rated value       690 V         operating frequency / rated value       690 V         • maximum       50 Hz         • maximum       60 Hz         Protection class       IP20         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       32 A         operational current       32 A         operational current<	• at AC-23 A / at 690 V	6 000
Voltage         insulation voltage / rated value       690 V         surge voltage resistance / rated value       6 kV         operating voltage       690 V         • at AC / rated value       690 V         operating frequency / rated value       690 V         • minimum       50 Hz         • maximum       60 Hz         Protection class       1P20         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A	operating frequency / maximum	50 1/h
insulation voltage / rated value       690 V         surge voltage resistance / rated value       6 kV         operating voltage       690 V         • at AC / rated value       690 V         operating frequency / rated value       690 V         • minimum       50 Hz         • maximum       60 Hz         Protection class       Protection class IP         protection class IP / on the front       IP20         protection class IP / on the front       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         current       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	degree of pollution	3
surge voltage resistance / rated value       6 kV         operating voltage       690 V         operating frequency / rated value       690 V         operating frequency / rated value       60 Hz         • maximum       60 Hz         Protection class       1P20         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         operational current       32 A	Voltage	
operating voltage       690 V         operating frequency / rated value       690 V         operating frequency / rated value       50 Hz         • minimum       50 Hz         • maximum       60 Hz         Protection class       IP20         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Operational current / rated value       32 A         operational current       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	insulation voltage / rated value	690 V
• at AC / rated value       690 V         operating frequency / rated value       50 Hz         • minimum       60 Hz         • maximum       60 Hz         Protection class       1P20         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       1.8 W         operating state / per pole       32 A         operational current / rated value       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	surge voltage resistance / rated value	6 kV
operating frequency / rated value       50 Hz         • minimum       60 Hz         Protection class       60 Hz         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       1.8 W         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Operational current / rated value       32 A         operational current       at 40 °C / rated value       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	operating voltage	
• minimum       50 Hz         • maximum       60 Hz         Protection class       •         protection class IP       IP20         protection class IP / on the front       IP20         protection class IP / on the front       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Current       32 A         operational current / rated value       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	<ul> <li>at AC / rated value</li> </ul>	690 V
• maximum60 HzProtection classIPprotection class IPIP20protection class IP / on the frontIP20DissipationIP20power loss [W] / for rated value of the current / at AC / in hot operating state / per pole1.8 WOperational current / rated value32 Aoperational current / rated value32 A	operating frequency / rated value	
Protection class       IP20         protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Current       32 A         operational current / rated value       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	• minimum	50 Hz
protection class IP       IP20         protection class IP / on the front       IP20         Dissipation       IP20         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Current       32 A         operational current / rated value       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	• maximum	60 Hz
protection class IP / on the front       IP20         Dissipation	Protection class	
Dissipation         power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Current       0         operational current / rated value       32 A         operational current       32 A         operational current       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	protection class IP	IP20
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole       1.8 W         Current       32 A         operational current / rated value       32 A         operational current       32 A         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	protection class IP / on the front	IP20
hot operating state / per pole         Current         operational current / rated value       32 A         operational current         • at 40 °C / rated value       32 A         • at 45 °C / rated value       32 A         • at 50 °C / rated value       32 A	Dissipation	
operational current / rated value     32 A       operational current     32 A       • at 40 °C / rated value     32 A       • at 45 °C / rated value     32 A       • at 50 °C / rated value     32 A		1.8 W
operational current     32 A       • at 40 °C / rated value     32 A       • at 45 °C / rated value     32 A       • at 50 °C / rated value     32 A	Current	
• at 40 °C / rated value32 A• at 45 °C / rated value32 A• at 50 °C / rated value32 A	operational current / rated value	32 A
<ul> <li>at 45 °C / rated value</li> <li>at 50 °C / rated value</li> <li>32 A</li> <li>32 A</li> </ul>	operational current	
• at 50 °C / rated value 32 A	• at 40 °C / rated value	32 A
	• at 45 °C / rated value	32 A
• at 55 °C / rated value 32 A	• at 50 °C / rated value	32 A
	• at 55 °C / rated value	32 A

at AC / rated value	32 A
Main circuit	
operational current	
• at AC-21 / at 690 V / rated value	32 A
<ul> <li>at AC-21 A / at 240 V / rated value</li> </ul>	32 A
<ul> <li>at AC-21 A / at 400 V / rated value</li> </ul>	32 A
<ul> <li>at AC-21 A / at 440 V / rated value</li> </ul>	32 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	22 A
operating power	
<ul> <li>at AC-23 A / at 240 V / rated value</li> </ul>	6 kW
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	12 kW
<ul> <li>at AC-23 A / at 440 V / rated value</li> </ul>	11.5 kW
<ul> <li>at AC-23 A / at 690 V / rated value</li> </ul>	12 kW
<ul> <li>at AC-3 / at 240 V / rated value</li> </ul>	5.5 kW
<ul> <li>at AC-3 / at 400 V / rated value</li> </ul>	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
EMERGENCY OFF switch	Yes
<ul> <li>safety switch</li> </ul>	Yes
maintenance/repair switch	Yes
Product details	
special product feature	Basic Switch
product feature / can be locked into OFF position	No
accessories	
product extension / optional	
• motor drive	No
voltage trigger	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	4
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Short circuit	
conditional short-circuit current / with line-side fuse	
protection	
<ul> <li>at 440 V / by gG fuse / rated value</li> </ul>	10 kA
<ul> <li>at 690 V / by gG fuse / rated value</li> </ul>	6 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
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	5 kA
I2t value / with closed switch	
<ul> <li>at 240 V / for combination switch + gG fuse / maximum</li> </ul>	9 kA2.s
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	9 kA2.s
<ul> <li>at 690 V / for combination switch + gG fuse / maximum</li> </ul>	9 kA2.s

minimum     maximum General Product Approval	-25 °C 55 °C Declaration of Conformity
<ul><li>minimum</li><li>maximum</li></ul>	55 °C
• minimum	
ambient temperature / during storage	
• maximum	55 °C
• minimum	-25 °C
ambient temperature / during operation	
Environmental conditions	
net weight	200 g
• rail mounting	Yes
<ul> <li>front mounting with central attachment</li> </ul>	No
• 4-hole front mounting	No
fastening method	
fastening method	Built-in unit fixed-mounted version
type of device	fixed mounting
width depth	64 mm
height	60 mm 36 mm
Mechanical Design	60 mm
for auxiliary contacts	Box terminals
for main current circuit	box terminal
type of electrical connection	
• stranded	2x (0.75 2.5 mm²), 1x 4 mm²
<ul> <li>finely stranded / with core end processing</li> </ul>	2x (0.75 1.5 mm <sup>2</sup> ), 1x 2.5 mm <sup>2</sup>
• solid	2x (0.75 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>
auxiliary contacts	
type of connectable conductor cross-sections / for	
stranded	1x (2.5 to 16 mm <sup>2</sup> )
<ul> <li>finely stranded / with core end processing</li> </ul>	1x (2.516 mm <sup>2</sup> )
solid	1x (2.5 to 16 mm <sup>2</sup> )
type of connectable conductor cross-sections / for copper conductor	
• minimum	14
• maximum	6
section / solid	
AWG number / as coded connectable conductor cross	
Connections	
type of fuse / according to UL	RK5
continuous current / of upstream fuse / according to UL / rated value	50 A
to UL 508/UL 60947-4-1	-
short-time withstand current (SCCR) / at 600 V / according	5 kA
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	20
active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value	20
operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value	600 V
60947-4-1 / rated value	
operational current / at AC / according to UL 508/UL	32 A
according UL	
required operational current / of upstream fuse / rated value	32 A
<ul> <li>for short-circuit protection of the auxiliary switch /</li> </ul>	fuse gL/gG: 10 A
• for short-circuit protection of the main circuit /	fuse gL/gG: 25 A
design of the fuse link	_

#### other

**Miscellaneous** 

#### 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=3LD3210-0TK05

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD3210-0TK05

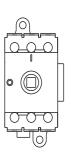
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD3210-0TK05

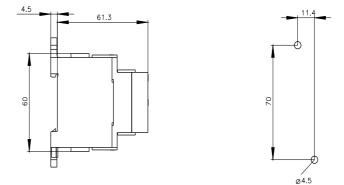
CAx-Online-Generator

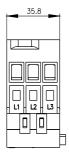
http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







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