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	 at AC / rated value 	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
 at 45 °C / rated value at 50 °C / rated value 32 A 32 A 	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
 at AC-21 A / at 240 V / rated value 	32 A
 at AC-21 A / at 400 V / rated value 	32 A
 at AC-21 A / at 440 V / rated value 	32 A
 at AC-23 A / at 400 V / rated value 	22 A
operating power	
 at AC-23 A / at 240 V / rated value 	6 kW
 at AC-23 A / at 400 V / rated value 	12 kW
 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
 switch disconnector 	Yes
EMERGENCY OFF switch	Yes
 safety switch 	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	
 at 440 V / by gG fuse / rated value 	10 kA
 at 690 V / by gG fuse / rated value 	6 kA
let-through current / with closed switch	
 at 240 V / for combination switch + gG fuse / maximum 	4.5 kA
 at 440 V / for combination switch + gG fuse / maximum 	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
 at 440 V / for combination switch + gG fuse / maximum 	9 kA2.s
 at 690 V / for combination switch + gG fuse / maximum 	9 kA2.s

minimum maximum General Product Approval	-25 °C 55 °C Declaration of Conformity
minimummaximum	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
 front mounting with central attachment 	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
 finely stranded / with core end processing 	2x (0.75 1.5 mm ²), 1x 2.5 mm ²
• solid	2x (0.75 2.5 mm ²), 1x 4 mm ²
auxiliary contacts	
type of connectable conductor cross-sections / for	
stranded	1x (2.5 to 16 mm ²)
 finely stranded / with core end processing 	1x (2.516 mm ²)
solid	1x (2.5 to 16 mm ²)
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
 for short-circuit protection of the auxiliary switch / 	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

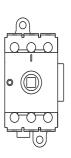
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD3210-0TK05

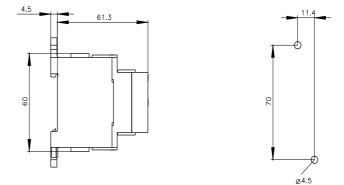
CAx-Online-Generator

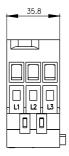
http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







Ø