SIEMENS

Data sheet

3LD3110-1TL05



Load disconnector 3LD3, lu 25 A Main switch 3-pole + N Rated operating capacity at AC-23 A at 400V 9.0kW Installation in distribution boards, Basic switch without Knob-operated mechanism with auxiliary switch 1OE + 1S

product brand name SENTRON product designation 3LD Switch disconnector 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 handle without type of the driving mechanism / motor drive No Ceneral technical data number of poles / note number of poles / note 4 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 00 000 electrical endurance (switching cycles) / typical 6000 operating frequency / maximum 50 1/h degree of polution 3 Voltage 600 V surge voltage resistance / rated value 600 V operating frequency / rated value 60 Hz	Model	
design of the product Switch display version / for switch position indicator manual operation 10N - 0 OFF lype of switch DIN-rail mounting design of the actuating element Without handle design of the actuating element Without bype of the driving mechanism / motor drive No General technical data Inumber of poles 4 number of poles 4 number of poles 4 electrical endurance (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 6000 electrical endurance (switching cycles) 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 600 V surge voltage / rated value 690 V operating frequency / rated value 690 V e at AC-23 A / at 690 V 600 V surge voltage resistance / 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 700 Hz operating frequency / rated value 60 Hz Protection class IP	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 handle type of the driving mechanism / motor drive No General technical data mumber of poles number of poles / nole 4 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 Voitage estatoc / rated value operating frequency / rated value 690 V surge voitage resistance / rated value 690 V operating frequency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 60 Hz	product designation	3LD Switch disconnector
operation DN-rail mounting design of the actuating element Without handle 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 / note number of poles / note 4 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 6000 electrical endurance (switching cycles) 6000 operating frequency / maximum 50 1/h degree of polution 3 Voltage eat AC / rated value operating voltage resistance / rated value 680 V operating voltage resistance / rated value 690 V operating voltage resistance / rated value 690 V operating requency / rated value 690 V operating trequency / rated value 690 V operating trequency / rated value 60 Hz Protection class IP IP20 protection class IP / on the front IP20 Dissipation 1.1 W	design of the product	Switch
design of the actuating element Without handle dype of the driving mechanism / motor drive No General technical data Immber of poles number of poles 4 number of poles / note 4 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 • at AC-23 A / at 690 V 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 100 000 insulation voltage / rated value 690 V operating frequency / maximum 690 V operating voltage resistance / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V operating voltage 61 KV operating frequency / rated value 60 V e at AC / rated value 690 V operating frequency / rated value 100 Hz 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 1.1 W Current operational current / rated value 25 A operational curre		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 4 number of poles / note 4 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 • at AC-23 A / at 690 V 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage	design of handle	without
number of poles 4 number of poles / note 4 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 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 690 V operating voltage • at AC / rated value • minimum 50 Hz • minimum 50 Hz • maximum 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 1.1 W Current 25 A operational current / rated value 25 A operational current 25 A • at 45 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	type of the driving mechanism / motor drive	No
number of poles / note 4 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 690 V insulation voltage / rated value 690 V operating voltage 6 kV operating voltage 6 kV operating frequency / rated value 690 V operating frequency / rated value 60 Hz Protection class IP IP20 protection class IP / on the front IP20 Dissipation 1.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 25 A operational current / rated value 25 A operational current / rated value 25 A operational current / rated value 25 A operational current / rated value </td <td>General technical data</td> <td></td>	General technical data	
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electrical endurance (switching cycles) 6 000 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 voltage 6 kV operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 V operation class IP 1P20 protection class IP / on the front IP20 Dissipation 1.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.1 W operational current / rated value 25 A operational current / rated value 25 A e at 45 °C / rated value 25 A	number of poles / note	4
• 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 operation class IP 120 protection class IP IP20 protection class IP / on the front IP20 Dissipation 1.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.1 W operational current 25 A operational current 25 A operational current 25 A out at 45 °C / rated value 25 A ot 40 °C / rated valu	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 690 V • at AC / rated value 690 V operating frequency / rated value 50 Hz maximum 60 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 1.1 W operational current 25 A operational current 25 A operational current 25 A • at 40 °C / rated value 25 A • at 50 °C / rat	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 • maximum 50 Hz • maximum 60 Hz Protection class IP20 protection class IP IP20 protection class IP / on the front IP20 Dissipation 1.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.1 W operational current 25 A operational current 25 A operational current 25 A operational current 25 A • at 40 °C / rated value 25 A • at 50 °C / rated value 25 A	• 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 1 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 1.1 W Operational current 25 A • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 45 °C / rated value 25 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 1.1 W Operational current 25 A operational current 25 A • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 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 1.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.1 W operational current 25 A operational current 25 A • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 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 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 1.1 W Operational current / rated value 25 A operational current 25 A • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A	insulation voltage / rated value	690 V
• at AC / rated value 690 V operating frequency / rated value 50 Hz • minimum 50 Hz • maximum 60 Hz Protection class 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 1.1 W Operational current / rated value 25 A operational current 440 °C / rated value • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	surge voltage resistance / rated value	6 kV
operating frequency / rated value 50 Hz • minimum 50 Hz • maximum 60 Hz Protection class IP20 protection class IP / on the front IP20 protection class [P / on the front IP20 Dissipation IP20 Dever loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.1 W Operational current / rated value 25 A operational current 44 40 °C / rated value • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	operating voltage	
• minimum50 Hz• maximum60 HzProtection classIP20protection class IPIP20protection class IP / on the frontIP20DissipationIP20DissipationIpower loss [W] / for rated value of the current / at AC / in hot operating state / per pole1.1 WOperational current / rated value25 Aoperational current25 A• at 40 °C / rated value25 A• at 45 °C / rated value25 A• at 50 °C / rated value25 A	at AC / rated value	690 V
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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 1.1 W Current 25 A operational current / rated value 25 A operational current 440 °C / rated value • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 45 °C / rated value 25 A	• maximum	60 Hz
protection class IP / on the front IP20 Dissipation 1.1 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 1.1 W Current 25 A operational current / rated value 25 A operational current 25 A • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	Protection class	
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power loss [W] / for rated value of the current / at AC / in 1.1 W hot operating state / per pole 1.1 W Current 25 A operational current / rated value 25 A operational current 25 A • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	protection class IP / on the front	IP20
hot operating state / per pole Current operational current / rated value 25 A operational current • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	Dissipation	
operational current / rated value25 Aoperational current25 A• at 40 °C / rated value25 A• at 45 °C / rated value25 A• at 50 °C / rated value25 A		1.1 W
operational current 25 A • at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	Current	
• at 40 °C / rated value 25 A • at 45 °C / rated value 25 A • at 50 °C / rated value 25 A	operational current / rated value	25 A
• at 45 °C / rated value25 A• at 50 °C / rated value25 A	operational current	
• at 50 °C / rated value 25 A	• at 40 °C / rated value	25 A
	• at 45 °C / rated value	25 A
a at EE °C / rated value	• at 50 °C / rated value	25 A
• at 55 C / Taled Value 25 A	● at 55 °C / rated value	25 A

at AC / rated value	25 A
Main circuit	
operational current	
at AC-21 / at 690 V / rated value	25 A
• at AC-21 A / at 240 V / rated value	25 A
• at AC-21 A / at 400 V / rated value	25 A
• at AC-21 A / at 440 V / rated value	25 A
• at AC-23 A / at 400 V / rated value	20 A
operating power	
• at AC-23 A / at 240 V / rated value	4 kW
 at AC-23 A / at 400 V / rated value 	10 kW
 at AC-23 A / at 440 V / rated value 	9 kW
 at AC-23 A / at 690 V / rated value 	9 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	
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	1
number of NO contacts / for auxiliary contacts	1
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	4
/ attachable / maximum number of connectable CO contacts / for auxiliary contacts	0
/ attachable / maximum	
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 	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
 at 440 V / for combination switch + gG fuse / maximum 	4 kA2.s
 at 690 V / for combination switch + gG fuse / maximum 	4 kA2.s

maximum maximum ambient temperature / during storage minimum maximum General Product Approval	-25 °C 55 °C -25 °C 55 °C Declaration of Conformity
maximum ambient temperature / during storage minimum maximum	55 °C -25 °C 55 °C
maximum ambient temperature / during storage minimum	55 °C -25 °C
maximum ambient temperature / during storage	55 °C
• maximum	
- (10100000	
• minimum	
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
depth	64 mm
height width	60 mm 60 mm
Mechanical Design	60 mm
for auxiliary contacts	Box terminais
for main current circuit for auxiliany contacts	box terminal Box terminals
type of electrical connection	have terminal
• stranded	2x (0.75 2.5 mm²), 1x 4 mm²
 finely stranded / with core end processing 	2x (0.75 1.5 mm²), 1x 2.5 mm²
• 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
rated value	50 A
to UL 508/UL 60947-4-1 continuous current / of upstream fuse / according to UL /	50 A
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	15
508/UL 60947-4-1 / rated value	
508/UL 60947-4-1 / rated value active power [hp] / at AC / at 480 V / according to UL	10
60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL	600 V
operational current / at AC / according to UL 508/UL	25 A
according UL	
operational current / of upstream fuse / rated value	25 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
 for short-circuit protection of the main circuit / required 	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=3LD3110-1TL05 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD3110-1TL05

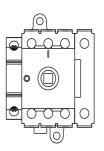
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD3110-1TL05

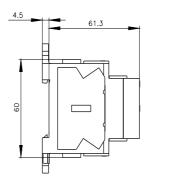
CAx-Online-Generator

http://www.siemens.com/cax

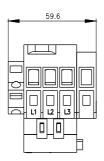
Tender specifications

http://www.siemens.com/specifications









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