SIEMENS

Data sheet 3LD2050-1TL13



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4-pole, lu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, front-mounted, knob-operated mechanism, Red / yellow, central mounting 22.5 mm of the handle

product brand name design of the product design of the product display version / for switch position indicator manual operation type of switch design of the actuating element design of the actuating element design 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) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical insulation voltage / rated value operating frequency / maximum degree of pollution Voltago insulation voltage / rated value	Model		
design of the product display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive Conoral 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 voltage • at AC / rated value • minimum • maximum 60 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front pisspiton power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value • operational current / rated value operational current / rated value • for the maximum 1 ON - 0 OFF front mounted selectors switch front mounted selector switch red knob-operational current / rated value 1 ON - 0 OFF front mounted selectors switch red knob-operational current / for the current / at AC / in hot operational current • at 40 °C / rated value 1 ON - 0 OFF front mounted selectors switch red knob-operational current 1 ON - 0 OFF front mounted selector switch red knob-operational current 1 ON - 0 OFF front mounted selector switch red knob-operational current 1 ON - 0 OFF front mounted selectors witch red knob-operational current 1 ON - 0 OFF front mounted selector switch red knob-operational current 1 ON - 0 OFF 1 ON	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 ted design of handle type of switch front mounted selector switch color / of the actuating element ted design of handle type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / 6 000 operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage at AC / rated value operating frequency / rated value operation class IP protection class IP 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	product designation	3LD Switch disconnector	
operation type of switch design of the actuating element color / of the actuating element design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive No General technical data number of poles 4 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 for operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage resistance / rated value • a than C / rated value • maximum • at AC / rated value • minimum • maximum 50 Hz • maximum 50 Hz • maximum 50 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [IV] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • operational current / rated value operational current / rated value • at 40 °C / rated value	design of the product	EMERGENCY-STOP switch	
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design of handle 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) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value surge voltage resistance / rated value • at AC / rated value • at AC / rated value • operating frequency / rated value • minimum 50 Hz • maximum 60 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation Overation voltage / rated value of the current / at AC / in hot operating state / per pole Current Operational current / rated value 16 A Operational current / rated value 16 A Operational current / rated value 16 A	design of the actuating element	selector switch	
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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 Voltage insulation voltage / rated value operating voltage resistance / rated value • at AC / rated value • at AC / rated value • minimum • maximum Foo Hz Protection class IP degree of protection NEMA rating protection class IP / on the front power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value operational current / rated value of AC / rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value ot at 40 °C / rated value 16 A operational current / rated value ot at 40 °C / rated value	design of handle	knob-operated mechanism, red/yellow	
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size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 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 680 V operating voltage • at AC / rated value 690 V surge voltage resistance / rated value 690 V operating voltage • at AC / rated value 690 V operating frequency / rated value • minimum 50 Hz • maximum 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 16 A operational current / rated value 16 A	General technical data		
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at AC-23 A / at 690 V operating frequency / maximum degree of pollution 7	mechanical service life (switching cycles) / typical	100 000	
operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value • minimum • maximum Frotection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value 16 A	electrical endurance (switching cycles)		
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operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum Frotection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A operational current • at 40 °C / rated value 690 V 690 V	insulation voltage / rated value	690 V	
■ at AC / rated value Operating frequency / rated value ● minimum ● maximum On 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 ● at 40 °C / rated value 16 A	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 IP65 Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A operational current • at 40 °C / rated value 16 A	operating voltage		
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power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current • at 40 °C / rated value 16 A	protection class IP / on the front	IP65	
hot operating state / per pole Current operational current / rated value operational current operational current operational current 16 A 16 A	Dissipation		
operational current / rated value operational current operational current at 40 °C / rated value 16 A		0.5 W	
operational current • at 40 °C / rated value 16 A	Current		
• at 40 °C / rated value 16 A	operational current / rated value	16 A	
	operational current		
• at 45 °C / rated value 16 A	 at 40 °C / rated value 	16 A	
	• at 45 °C / rated value	16 A	

a at EO °C / rated value	16 A
• at 50 °C / rated value	16 A
at 55 °C / rated value at AC / rated value	16 A
at AC / rated value	16 A
Main circuit	
operational current	40.0
at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value at AC-21 / at 690 V / rated value	16 A
• at AC-21 A / at 240 V / rated value	16 A
• at AC-21 A / at 400 V / rated value	16 A
• at AC-21 A / at 440 V / rated value	16 A 16 A
at AC-23 A / at 400 V / rated value operating power	10 A
• at AC-23 A / at 240 V / rated value	4 kW
• at AC-23 A / at 240 V / rated value	8 kW
• at AC-23 A / at 440 V / rated value	7.5 kW
• at AC-23 A / at 690 V / rated value	8 kW
at AC-3 / at 240 V / rated value	3 kW
• at AC-3 / at 400 V / rated value	6 kW
at AC-3 / at 690 V / rated value	5.5 kW
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
number of CO contacts / for auxiliary contacts 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
main switch switch disconnector	Yes
Switch disconnector EMERGENCY OFF switch	Yes
• cafety switch	Vos
safety switch maintenance/repair switch	Yes
maintenance/repair switch	Yes Yes
maintenance/repair switch Product details	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position	
maintenance/repair switch Product details product feature / can be locked into OFF position accessories	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive	Yes Yes No
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger	Yes Yes No No
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 1
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes Yes No No
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 1
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0 2
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0 2
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0 2
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0 2 4 6 mm
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0 2 4 6 mm
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0 2 4 6 mm
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No 1 1 0 2 4 6 mm
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 1 1 0 2 4 6 mm 50 kA 3 kA
maintenance/repair switch Product details product feature / can be locked into OFF position accessories product extension / optional	Yes No No No 1 1 0 2 4 6 mm 50 kA 3 kA 3 kA

I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	3 kA2.s
design of the fuse link	
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 20 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	20 A
according UL	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	16 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	7.5
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	10
short-time with stand current (SCCR) / at 600 V / according to UL 508/UL 60947-4-1	5 kA
continuous current / of upstream fuse / according to UL / rated value	50 A
type of fuse / according to UL	RK5
Connections	
AWG number / as coded connectable conductor cross section / solid	
• maximum	10
• minimum	18
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (16mm²)
 finely stranded / with core end processing 	1x (14mm²)
• stranded	1x (16mm²)
type of connectable conductor cross-sections / for auxiliary contacts	
• solid	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
stranded	2x (0.75 2.5 mm²), 1x 4 mm²
type of electrical connection	
 for main current circuit 	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	66 mm
width	49 mm
depth	113.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
 4-hole front mounting 	No
 front mounting with central attachment 	Yes
rail mounting	No
net weight	199 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage	
• minimum	-25 °C
• maximum	55 °C
General Product Approval	



Confirmation







<u>Miscellaneous</u>

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping

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=3LD2050-1TL13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2050-1TL13

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2050-1TL13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











