SIEMENS

Data sheet

3LD2030-1TL13



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4-pole, Iu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, installation in distribution boards, knob-operated mechanism, Red / yellow, handle direct at the switch

product brand name SENTRON product designation 3LD Switch disconnector design of the product EMERGENCY-STOP switch display version / for switch position indicator manual operation 10N - 0 OFF type of switch DIN-rail mounting design of the actuating element red number of poles 4 size of switch disconnector 1 number of poles 4 size of switch disconnector 1 insulation voltage / rated value 60 00 operating frequency / naximum 60 1/h degree of pollution 3 Voltage sat AC-23 A / at 60 V	Model	
design of the product EMERGENCY-STOP switch display version / for switch position indicator manual operation 10N - 0 OFF type of switch DIN-rail mounting design of the actuating element selector switch color / of the actuating element red design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive No General technical data number of poles attact of switch disconnector 1 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 680 V operating frequency / rated value 690 V operating roltage - e at A C / rated value 690 V summm 50 Hz operating frequency / rated value 690 V summm 50 Hz operating frequency / rated value 690 V operating roltage - e at A C / rated value 50 Hz	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 red color / of the actuating element red design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive No General technical data 1 number of poles 4 size of switch disconnector 1 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 100 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 680 V insulation voltage / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 60 Hz protection class IP IP40 protection class IP / on the front IP40	product designation	3LD Switch disconnector
operation DIN-rail mounting design of the actuating element selector switch color / of the actuating element red design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive No General technical data	design of the product	EMERGENCY-STOP switch
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color / of the actuating element red design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive No General technical data Immber of poles number of poles 4 size of switch disconnector 1 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 insulation voltage / rated value 690 V operating frequency / rated value 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 600 V operating frequency / rated value 70 Hz operating requency / rated value 70 Hz operating frequency / rated value 70 Hz operating requency / rated value 70 Hz operating requency / rated value 70 Hz operating requency / rated value 0.5 W	type of switch	DIN-rail mounting
design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive No General technical data number of poles number of poles 4 size of switch disconnector 1 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 insulation voltage / rated value 690 V operating frequency / maximum 600 V surge voltage resistance / rated value 690 V operating frequency / rated value 600 V operating frequency / rated value 60 Hz Protection class IP IP40 protection class IP / on the front IP40 possipation 0.5 W power loss	design of the actuating element	selector switch
type of the driving mechanism / motor drive No General technical data	color / of the actuating element	red
General technical data number of poles 4 size of switch disconnector 1 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value insulation voltage / rated value 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating voltage 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 60 Hz protection class IP 1 protection class IP 1P40 protection class IP 1P40 Dissipation 0.5 W operational current 0.5 W operational current 16 A	design of handle	knob-operated mechanism, red/yellow
number of poles 4 size of switch disconnector 1 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 operating requency / rated value 690 V operating voltage 6 kV operating requency / rated value 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 V operating stequency / rated value 690 V operation class IP IP40 protection class IP IP40 protection class IP / on the front IP40 Dissipation 0.5 W operational current / rated value 16 A operational current / rated value 16 A operatio	type of the driving mechanism / motor drive	No
size of switch disconnector 1 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 surge voltage resistance / rated value 690 V operating voltage 64V operating frequency / rated value 690 V operating frequency / rated value 60 Hz Protection class IP IP40 protection class IP / on the front IP40 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W operational current 0.5 W operational current 16 A operational	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 insulation voltage / rated value insulation voltage / rated value 690 V operating requency / maximum 6 kV operating voltage 6 kV operating voltage 690 V • at AC / rated value 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 60 Hz Protection class IP IP40 protection class IP / on the front IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in ht operating state / per pole 0.5 W current 0 0.5 W operational current / rated value 16 A opera	number of poles	4
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 690 V • at AC / rated value 690 V operating voltage 64 V • at AC / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class 1P40 protection class IP IP40 protection class IP / on the front IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W operational current / rated value 16 A operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	size of switch disconnector	1
• 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 690 V • at AC / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 Hz Protection class IP IP40 protection class IP / on the front IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current 0 0.5 W operational current / rated value 16 A operational current 16 A • at 40 °C / rated value 16 A <td>mechanical service life (switching cycles) / typical</td> <td>100 000</td>	mechanical service life (switching cycles) / typical	100 000
operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage 6 kV operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 V operating requency / rated value 60 Hz Protection class Protection class IP protection class IP / on the front IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W current 0.5 W 0.5 W operational current / rated value 16 A operational current 16 A operational current 16 A • at 40 °C / rated value 16 A	electrical endurance (switching cycles)	
degree of pollution 3 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 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 IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current 0perational current / rated value 16 A • at 40 °C / rated value 16 A 16 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 Protection class IP protection class IP / on the front IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current operational current / rated value 16 A • at 40 °C / rated value 16 A 46 °C / rated value	operating frequency / maximum	50 1/h
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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 protection class IP protection class IP / on the front IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current 16 A operational current 16 A • at 40 °C / rated value 16 A	Voltage	
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• at AC / rated value 690 V operating frequency / rated value 50 Hz • minimum 60 Hz Protection class 60 Hz protection class IP IP40 protection class IP / on the front IP40 Dissipation 0.5 W current 0.5 W operating state / per pole 0.5 W current 16 A operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	surge voltage resistance / rated value	6 kV
operating frequency / rated value 50 Hz • maximum 50 Hz • maximum 60 Hz Protection class Protection class IP protection class IP / on the front IP40 protection class IP / on the front IP40 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current operational current / rated value 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	operating voltage	
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protection class IP IP40 protection class IP / on the front IP40 Dissipation IP40 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current 0.5 W operational current / rated value 16 A operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	• maximum	60 Hz
protection class IP / on the front IP40 Dissipation 0.5 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current 0.5 W operational current / rated value 16 A operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	Protection class	
Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 0.5 W Current 0.5 W operational current / rated value 16 A operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	protection class IP	IP40
power loss [W] / for rated value of the current / at AC / in 0.5 W hot operating state / per pole 0.5 W Current 0 operational current / rated value 16 A operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	protection class IP / on the front	IP40
hot operating state / per pole Current operational current / rated value 16 A operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	Dissipation	
operational current / rated value16 Aoperational current	power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	0.5 W
operational current 16 A • at 40 °C / rated value 16 A • at 45 °C / rated value 16 A	Current	
 at 40 °C / rated value at 45 °C / rated value 16 A 16 A 	operational current / rated value	16 A
• at 45 °C / rated value 16 A	operational current	
	 at 40 °C / rated value 	16 A
• at 50 °C / rated value 16 A	• at 45 °C / rated value	16 A
	• at 50 °C / rated value	16 A

a at 55 °C / rated value	16 A
 at 55 °C / rated value at AC / rated value 	16 A 16 A
• at AC / rated value	
operational current	
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
• at AC-23 A / at 400 V / rated value	16 A
operating power	
• at AC-23 A / at 240 V / rated value	4 kW
 at AC-23 A / at 400 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 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	
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
motor drive	No
voltage trigger	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	1
number of connectable NO contacts / for auxiliary contacts	2
/ attachable / maximum	
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
number of bracket locks / maximum	2
hasp thickness / of the bracket locks	4 6 mm
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	
 at 240 V / for combination switch + gG fuse / maximum 	3 kA
 at 440 V / for combination switch + gG fuse / maximum 	3 kA
 at 690 V / for combination switch + gG fuse / maximum permissible 	3 kA
I2t value / with closed switch / at 240 V / for combination switch + gG fuse / maximum	2.5 kA2.s
l2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	2.5 kA2.s
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 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	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 (14mm ²)				
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	45 mm				
width	53 mm				
depth	91 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 	No				
rail mounting	Yes				
net weight	178.4 g				
Environmental conditions					
ambient temperature / during operation					
• minimum	-25 °C				
• maximum	55 °C				
ambient temperature / during storage	05.80				
• minimum	-25 °C				
• maximum	55 °C				
General Product Approval					
Confirmati	ion <u>Miscellaneous</u>				
CSA CCC	UL VDE				

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General Product Approval	Declaration of Con	formity	Test Certificates	Marine / Shipping	other
EHC	CE EG-Konf.	UK CA	<u>Special Test Certific-</u> <u>ate</u>	Llovd's Register us	<u>Miscellaneous</u>

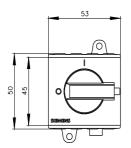
other

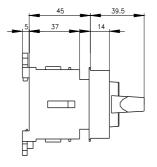
Environmental Confirmations

Further information

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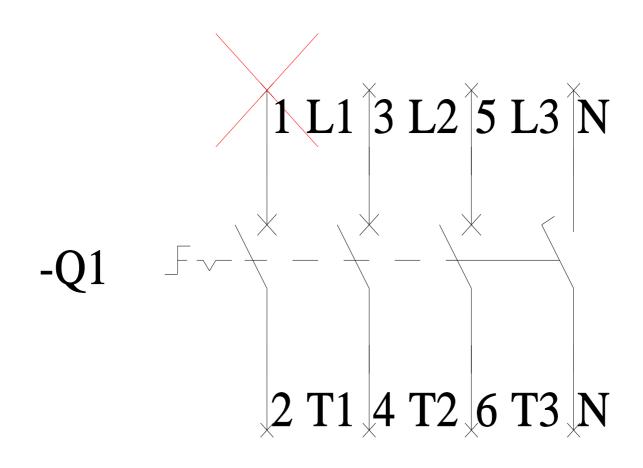
http://www.siemens.com/specifications



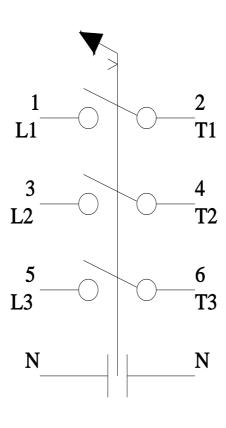








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