SIEMENS

Data sheet

3LD2866-0TB51-0US2



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 125 A, Operating power / at AC-23 A at 400 V: 45 kW, molded-plastic encapsulation for inch cable gland, rotary operating mechanism, black

product branch name SENTRON product designation Switch disconnector design of the product Main switch display version for switch position indicator manual operation 1 ON + 0 OFF type of switch Molded-plastic enclosure for inch threaded joint design of the actualing element black method of poles 3 number of poles 3 number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) lypical 100 000 electricial endurance (operating cycles) lypical 100 000 electricial endurance (operating cycles) 6000 electricial endurance (operating cycles) 6001 electricial endurance (operating cycles) lypical 100 000 electricial endurance (operating cycles) lypical 600 V operating frequency maximu	Model				
design of the product Main switch display version for switch position indicator manual operation 1 ON - 0 OFF type of switch Molded-plastic enclosure for inch threaded joint design of the actualing element black design of the actualing element black design of handle rotary operating mechanism, black type of the driving mechanism motor drive No Central technical data	product brand name	SENTRON			
display version for switch position indicator manual operation 1 ON - 0 OFF type of switch Molded-plastic enclosure for inch threaded joint design of the actuating element black color of the actuating element black design of handle rotary operating mechanism, black type of the driving mechanism motor drive No General technical data Immber of poles number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) typical 100 000 electrical endurance (operating cycles) typical 00 000 operating voltage 6 insulation voltage rated value 600 V operating voltage 6 e at AC-rated value 640V operating voltage 6 e at AC rated value 600 V operating voltage 6 e at AC rated value 600 V operating voltage 6 e at AC rated value 600 V operating voltage 6 e at AC rated value 600 V operating voltage 6 e at AC-rated value 600 V operating voltage 12K <tr< td=""><td>product designation</td><td>Switch disconnector</td></tr<>	product designation	Switch disconnector			
type of switch Molded-plastic enclosure for inch threaded joint design of the actuating element Short rotary knob color of the actuating element black design of handle rotary operating mechanism, black type of the driving mechanism motor drive No Cenoral technical data number of poles number of poles 3 number of poles 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 operating frequency maximum 60 11/h degree of pollution 3 Voltage operating rotage rated value 690 V surge voltage resistance rated value 690 V operating frequency rated value 690 V operating rotage 61 Hz operating rotage 61 Hz operating rotage 61 Hz operating rotage 61 Hz operating frequency rated value 690 V operating frequency rated value 61 Hz <	design of the product	Main switch			
design of the actuating element Short rotary knob color of the actuating element black design of handle rotary operating mechanism, black type of the driving mechanism motor drive No Cenoral technical data number of poles number of poles 3 number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 000 operating frequency maximum 50 1/h degree of pollution 3 Voltage insulation voltage rated value e at AC-23 A at 690 V 6 600 V surge voltage resistance rated value 690 V surge voltage resistance rated value 690 V operating voltage 64 V operating voltage 600 V operating requency rated value 600 V operating requency rated value 600 V operating requency rated value 600 V operating trapector class protection class protection class IP on the front IP65 Dissipation 12 W operating state per pole 12 S A Alsi chrcutt 125 A operating state per pole 125	display version for switch position indicator manual operation	1 ON - 0 OFF			
color of the actuating element black design of handle rotary operating mechanism, black bype of the driving mechanism motor drive No General technical data Immber of poles number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 • at AC-23 A at 800 V 6 000 operating frequency maximum 50 1/h degree of pollution 3 Voltage 680 V surge voltage resistance rated value 680 V operating frequency maximum 600 V operating requency maximum 600 V operating requency rated value 690 V operating requency rated value 690 V operating frequency rated value 690 V operating frequency rated value 690 V operating requency rated value 690 V operating requency rated value 690 V operating frequency rated value 690 V operating requency rated value 120 V operating requency rated value 14 X, 12 protection class IP IPO65 de	type of switch	Molded-plastic enclosure for inch threaded joint			
design of handle rotary operating mechanism, black type of the driving mechanism motor drive No Central technical data Inumber of poles number of poles 3 number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 000 • at AC-23 A at 690 V 6 000 operating frequency maximum 50 1/h degree of pollution 3 Voltage 600 V insulation voltage rated value 690 V operating voltage 61 V operating frequency rated value 690 V operating frequency rated value 690 V operating voltage 61 Hz • ninimum 50 Hz • minimum 60 Hz Protection class IP IP65 Defection class IP on the front IP65 Dissipation IP65 Dissipation 12 W operational current 125 A • at AC-21 at 840 V rated value 125 A • at AC-21 At at 400 V rated value 125 A • at AC-21 At at 400 V rated value 125 A	design of the actuating element	Short rotary knob			
type of the driving mechanism motor drive No Genoral technical data	color of the actuating element	black			
General technical data number of poles 3 number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 000 operating frequency maximum 50 1/h degree of pollution 3 Voltage - insulation voltage rated value 690 V surge voltage resistance rated value 690 V operating frequency maximum 600 V operating requency rated value 690 V operating frequency rated value 690 V operating frequency rated value 690 V operating requency rate	design of handle	rotary operating mechanism, black			
number of poles 3 number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 000 operating frequency maximum 50 1/h degree of pollution 3 Voltage - insulation voltage rated value 690 V surge voltage resistance rated value 690 V operating frequency rated value 600 V operating frequency rated value 600 V operating frequency rated value 12 W protection class IP IP65 forection class IP on the front IP65 power loss [M] for rated value of the current at AC in hot operating state per pole 12 W operational current 12 W operational current 12 S A • at AC-21 at 690 V rated value 125 A </td <td>type of the driving mechanism motor drive</td> <td colspan="4">No</td>	type of the driving mechanism motor drive	No			
number of poles note N + PE size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 000 operating frequency maximum 60 00 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 64V operating requency rated value 690 V operating requency rated value 690 V operating frequency rated value 690 V operating requency rated value 690 V operating requency rated value 690 V operating frequency rated value 690 V operating frequency rated value 600 L protection class IP 600 L protection class IP IP65 Operational curent IP65 Operational curent 12 W operational curent 125 A • at AC-21 A at 200 V rated value 125 A • at AC-21 A at 400 V rated value 125 A	General technical data				
size of switch disconnector 4 mechanical service life (operating cycles) typical 100 000 electrical endurance (operating cycles) 6 • at AC-23 A at 690 V 6 operating frequency maximum 50 1/h degree of pollution 3 Voltage insulation voltage rated value 690 V surge voltage resistance rated value 690 V operating voltage resistance rated value 690 V operating frequency rated value 7 • minimum 50 Hz • maximum 60 Hz Protection class IP degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP85 Dissipation 12W power loss [W] for rated value 612 X Main circuit operational current • at AC-21 at 690 V rated value 125 A • at AC-21 A at 240 V rated value 125 A	number of poles	3			
mechanical service life (operating cycles) 100 000 electrical endurance (operating 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 frequency maximum 690 V surge voltage resistance rated value 690 V operating voltage 64V operating requency rated value 690 V operating frequency rated value 120 Hz protection class IP IP665 degree of protection NEMA rating 1, 4X, 12 protection class IP IP65 Dissipation 12 W operating state per pole 12 W operational current 12 S A e at AC-21 A at 240 V rated value 125 A e at AC-21 A at 400 V rated value	number of poles note	N + PE			
electrical endurance (operating cycles) e at AC-23 A at 690 V 6 000 operating frequency maximum 50 1/h degree of pollution 3 Voltage insulation voltage rated value 6 90 V surge voltage resistance rated value 6 kV operating requency rated value 6 kV operating frequency rated value 6 00 V • at AC rated value 690 V operating frequency rated value 690 V operating frequency rated value 60 Hz Protection class protection class IP greeter of protection NEMA rating 1, 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 Main circuit operational current • at AC-21 A at 240 V rated value 125 A • at AC-21 A at 400 V rated value 125 A	size of switch disconnector	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 resistance rated value 690 V surge voltage resistance rated value 6 kV operating voltage 6 kV operating voltage 6 kV operating voltage 6 kV operating frequency rated value 690 V operating frequency rated value 60 Hz Protection class IP IP65 degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP65 Dissipation 12 W operational current 12 W operational current 125 A • at AC-21 At et 00 V rated value 125 A <	mechanical service life (operating cycles) typical	100 000			
operating frequency maximum50 1/hdegree of pollution3Voltageinsulation voltage rated value690 Vsurge voltage resistance rated value690 Voperating voltage690 V• at AC rated value690 Voperating frequency rated value690 V• at AC rated value690 Voperating frequency rated value690 V• minimum50 Hz• maximum60 HzProtection class1P65degree of protection NEMA rating1, 4X, 12protection class IP on the frontIP65Dissipation12 Woperating state per pole12 WMain circuit0perating state per pole• at AC-21 at 690 V rated value125 A• at AC-21 A at 400 V rated value125 A• at AC-21 A at 400 V rated value125 A• at AC-21 A at 400 V rated value125 A	electrical endurance (operating cycles)				
degree of pollution 3 Voltage 690 V insulation voltage rated value 690 V surge voltage resistance rated value 6 kV operating voltage 6 kV • at AC rated value 690 V operating frequency rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class IP IP65 degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP65 Dissipation 12 W operating state per pole 12 W operating circuit • at AC-21 at 690 V rated value • at AC-21 A at 240 V rated value 125 A • at AC-21 A at 400 V rated value 125 A	• at AC-23 A at 690 V	6 000			
Voltage insulation voltage rated value 690 V insuge voltage resistance rated value 6 kV operating voltage 6 kV • 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 IP65 degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP65 Dissipation 12 W operating state per pole 12 W Main circuit operating state per pole • at AC-21 at 690 V rated value 125 A • at AC-21 A at 240 V rated value 125 A • at AC-21 A at 400 V rated value 125 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 IP65 degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP65 Dissipation IP65 Main circuit operating state per pole Main circuit operational current • at AC-21 at 690 V rated value 125 A • at AC-21 A at 400 V rated value 125 A		3			
surge voltage resistance rated value 6 kV operating voltage 690 V operating frequency rated value 600 Hz Protection class 600 Hz Protection class IP IP65 degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP65 Dissipation 1265 Dissipation 12 W operating state per pole 12 W operating state per pole 125 A e at AC-21 A at 240 V rated value 125 A e at AC-21 A at 400 V rated value 125 A	Voltage				
operating voltage 690 V operating frequency rated value 690 V operating frequency rated value 600 Hz minimum 50 Hz maximum 60 Hz Protection class 100 Hz protection class IP IP65 degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP65 Dissipation 12 W power loss [W] for rated value of the current at AC in hot operating state per pole 12 W Main circuit at AC-21 at 690 V rated value 125 A at AC-21 A at 400 V rated value 125 A 125 A	insulation voltage rated value	690 V			
• at AC rated value 690 V operating frequency rated value 50 Hz • minimum 60 Hz Protection class 60 Hz protection class IP IP65 degree of protection NEMA rating 1, 4X, 12 protection class IP on the front IP65 Dissipation IP65 Dissipation 12 W operational current 12 W operational current 125 A • at AC-21 A at 400 V rated value 125 A • at AC-21 A at 400 V rated value 125 A	surge voltage resistance rated value	6 kV			
operating frequency rated value50 Hz• maximum60 HzProtection class1065protection class IPIP65degree of protection NEMA rating1, 4X, 12protection class IP on the frontIP65Dissipation12 Wpower loss [W] for rated value of the current at AC in hot operating state per pole12 WMain circuit12 Woperational current4 AC-21 at 690 V rated value• at AC-21 At 2240 V rated value125 A• at AC-21 A at 400 V rated value125 A	operating voltage				
• minimum50 Hz• maximum60 HzProtection classIP65degree of protection NEMA rating1, 4X, 12protection class IP on the frontIP65degree of protection class IP on the frontIP65DissipationIP65DissipationIpower loss [W] for rated value of the current at AC in hot operating state per pole12 Woperational current	at AC rated value	690 V			
• maximum60 HzProtection classIP65protection class IPIP65degree of protection NEMA rating1, 4X, 12protection class IP on the frontIP65DissipationIP65DissipationIpower loss [W] for rated value of the current at AC in hot operating state per pole12 WMain circuitIoperational current125 A• at AC-21 at 690 V rated value125 A• at AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A	operating frequency rated value				
Protection classprotection class IPIP65degree of protection NEMA rating1, 4X, 12protection class IP on the frontIP65DissipationMain circuitoperational current12 Woperational current125 A• at AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A	• minimum	50 Hz			
protection class IPIP65degree of protection NEMA rating1, 4X, 12protection class IP on the frontIP65Dissipationpower loss [W] for rated value of the current at AC in hot operating state per poleMain circuit12 Woperational current • at AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A• at AC-21 A at 400 V rated value125 A	• maximum	60 Hz			
degree of protection NEMA rating1, 4X, 12protection class IP on the frontIP65Dissipationpower loss [W] for rated value of the current at AC in hot operating state per pole12 WMain circuit12 Woperational current • at AC-21 at 690 V rated value125 Aat AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A• at AC-21 A at 400 V rated value125 A	Protection class				
protection class IP on the front IP65 Dissipation Image: Constraint of the current at AC in hot operating state per pole 12 W Main circuit Image: Constraint of the current of the current of the current operational current Image: Constraint operational current • at AC-21 at 690 V rated value 125 A 125 A • at AC-21 A at 240 V rated value 125 A 125 A • at AC-21 A at 400 V rated value 125 A 125 A	protection class IP	IP65			
Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole 12 W Main circuit 12 W operational current 125 A • at AC-21 A at 240 V rated value 125 A • at AC-21 A at 240 V rated value 125 A • at AC-21 A at 240 V rated value 125 A • at AC-21 A at 400 V rated value 125 A	degree of protection NEMA rating	1, 4X, 12			
power loss [W] for rated value of the current at AC in hot operating state per pole 12 W Main circuit	protection class IP on the front	IP65			
operating state per pole Main circuit Operational current 125 A • at AC-21 A to 240 V rated value 125 A • at AC-21 A at 240 V rated value 125 A • at AC-21 A at 240 V rated value 125 A	Dissipation				
operational current• at AC-21 at 690 V rated value125 A• at AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A		12 W			
• at AC-21 at 690 V rated value125 A• at AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A	Main circuit				
• at AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A	operational current				
• at AC-21 A at 400 V rated value 125 A	• at AC-21 at 690 V rated value	125 A			
	• at AC-21 A at 240 V rated value	125 A			
• at AC-21 A at 440 V rated value 125 A	• at AC-21 A at 400 V rated value	125 A			
	• at AC-21 A at 440 V rated value	125 A			

a at AC 22 A at 400 V rated value	90.4
at AC-23 A at 400 V rated value	80 A
operating power	00.1111
• at AC-23 A at 240 V rated value	22 kW
 at AC-23 A at 400 V rated value 	45 kW
 at AC-23 A at 440 V rated value 	45 kW
 at AC-23 A at 690 V rated value 	37 kW
 at AC-3 at 240 V rated value 	22 kW
• at AC-3 at 400 V rated value	37 kW
• at AC-3 at 690 V rated value	30 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	No
 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	3
attachable maximum	
number of connectable NO contacts for auxiliary contacts attachable maximum	5
number of connectable CO contacts for auxiliary contacts attachable maximum	0
number of bracket locks maximum	3
hasp thickness of the bracket locks	4 8 mm
Short circuit	
conditional short-circuit current with line-side fuse protection	
• at 690 V by gG fuse rated value	20 kA
let-through current with closed switch	
 at 240 V for combination switch + gG fuse maximum 	10 kA
 at 440 V for combination switch + gG fuse maximum 	10 kA
 at 690 V for combination switch + gG fuse maximum 	10 kA
permissible	
I2t value with closed switch	
 at 240 V for combination switch + gG fuse maximum 	104 kA2.s
 at 440 V for combination switch + gG fuse maximum 	104 kA2.s
• at 690 V for combination switch + gG fuse maximum	104 kA2.s
design of the fuse link	
• for short-circuit protection of the main circuit required	fuse gL/gG: 125 A
 for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 10 A
operational current of upstream fuse rated value	125 A
according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	125 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	75
active power [hp] at AC at 600 V according to UL 508/UL 60947- 4-1 rated value	100
short-time withstand current (SCCR) at 600 V according to UL	10 kA

508/UL 60947-4-1							
	ostream fuse according to	UL rated value	200 A				
type of fuse according to			RK5				
Connections							
AWG number as coded solid	connectable conductor c	ross section					
 maximum 			1				
• minimum			12				
type of connectable con conductor	ductor cross-sections for	copper					
• solid			1x (450mm²)				
 finely stranded with 	ith core end processing		1x (43	5mm²)			
 stranded 			1x (45	0mm²)			
type of connectable con contacts	ductor cross-sections for	auxiliary					
• solid			lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)				
 finely stranded with 	ith core end processing		lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²				
stranded			lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)				
type of electrical connect	ction						
	 for main current circuit 			box terminal			
for auxiliary contacts			connection terminals				
Mechanical Design		_					
height				302 mm			
width			212 mm				
	depth			181 mm			
type of device			fixed mounting				
fastening method fastening method			Complete unit in enclosure				
4-hole front mour	ntina		No				
front mounting with central attachment			Yes				
 rail mounting 			No				
net weight			1 910 g				
Environmental condition	ns		Ū				
ambient temperature du	iring operation						
• minimum				-25 °C			
 maximum 			55 °C				
ambient temperature du	iring storage						
 minimum 	• minimum			-25 °C			
 maximum 			55 °C				
General Product Appr	oval						
	<u>Confirmation</u>			(U) u		<u>Miscellaneous</u>	
General Product Ap- proval	Declaration of Confor	mity	1	Test Certificates		Marine / Shipping	
EHC	CE EG-Konf.	UK CA	5	Special Test Certific- ate	<u>Miscellaneous</u>	Lloyds Register uis	
other		Environment					
Miscellaneous	Confirmation	Environmental Co firmations	<u>on-</u>				

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3LD2866-0TB51-0US2

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2866-0TB51-0US2

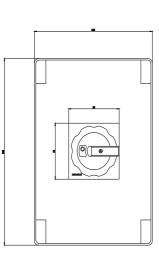
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2866-0TB51-0US2

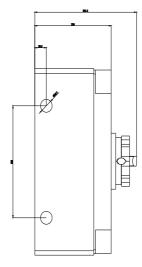
CAx-Online-Generator

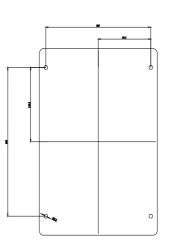
http://www.siemens.com/cax

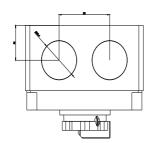
Tender specifications

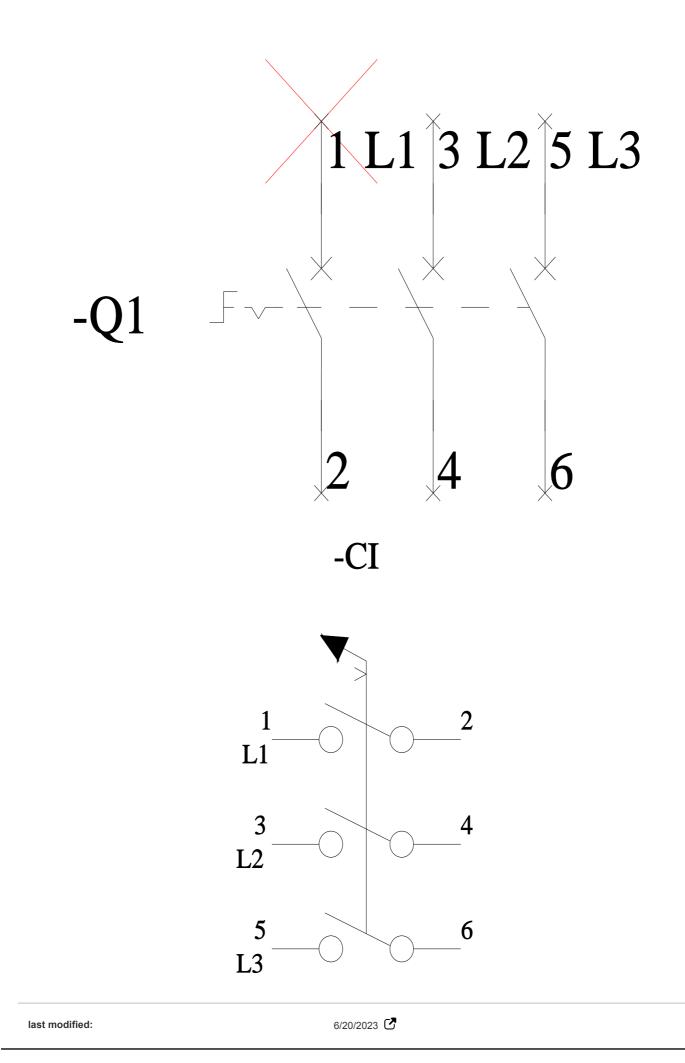
http://www.siemens.com/specifications











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