SIEMENS

Data sheet 3LD2003-0TK53



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

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	EMERGENCY-STOP switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	front mounted
design of the actuating element	Short rotary knob
color of the actuating element	red
design of handle	rotary operating mechanism, red/yellow
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
size of switch disconnector	1
mechanical service life (operating cycles) typical	100 000
electrical endurance (operating 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	6 kV
operating voltage	
at AC rated value	690 V
operating frequency rated value	
• minimum	50 Hz
• maximum	60 Hz
Protection class	
protection class IP	IP65
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	0.5 W
Main circuit	
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

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	3
number of connectable NO contacts for auxiliary contacts attachable maximum	3
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	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
 at 440 V for combination switch + gG fuse maximum 	2.5 kA2.s
• 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 SK5 Connections RK5 AWG number as coded connectable conductor cross section solid		
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 (16mm²) solid 1x (16mm²) stranded vith core end processing 1x (16mm²) solid 1x (16mm²) stranded vith core end processing 1x (15mm²) stranded vith core end processing 1x (15mm²) stranded vith core end processing 1x (15mm²) stranded 1x	continuous current of upstream fuse according to UL rated value	50 A
AWG number as coded connectable conductor cross section solid maximum minimum type of connectable conductor cross-sections for copper conductor solid finely stranded with core end processing stranded solid finely stranded with core end processing stranded finely stranded with core end processing stranded solid finely stranded with core end processing stranded stranded stranded solid finely stranded with core end processing stranded solid finely stranded with core end processing stranded stranded solid for maximary switch 2x (0.75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0.75 2,5mm²) stranded solid for maxiliary switch 2x (0.75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0.75 2,5mm²) stranded solid soli	type of fuse according to UL	RK5
solid	Connections	
minimum 18 type of connectable conductor cross-sections for copper conductor conductor o solid 1x (16mm²) i finely stranded with core end processing 1x (16mm²) o stranded 1x (16mm²) type of connectable conductor cross-sections for auxiliary contacts lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) o slid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x 2,5mm² o stranded with core end processing lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x 2,5mm² o stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) type of electrical connection box terminal o for auxiliary contacts box terminal o for auxiliary contacts box terminal depth 9 depth 9 <td></td> <td></td>		
type of connectable conductor cross-sections for copper conductor solid finely stranded with core end processing stranded type of connectable conductor cross-sections for auxiliary contacts solid finely stranded with core end processing stranded type of connectable conductor cross-sections for auxiliary contacts solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (2,5mm²) lateral auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 1x (0,	• maximum	10
condid 1x (16mm²) e finely stranded with core end processing 1x (14mm²) e stranded 1x (16mm²) type of connectable conductor cross-sections for auxiliary contacts lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) e solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) e stranded with core end processing lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) e stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) e stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) e stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) type of electrical connection box terminal e for auxiliary contacts connection terminals width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version e stening method Built-in unit fixed-mounted version e ret weight 203 g envi	• minimum	18
infinely stranded with core end processing is stranded type of connectable conductor cross-sections for auxillary contacts solid infinely stranded with core end processing ifinely stranded if east auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) if on auxili		
type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing • stranded • str	• solid	1x (16mm²)
type of connectable conductor cross-sections for auxiliary contacts solid solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm² 2,5mm² stranded lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75	 finely stranded with core end processing 	1x (14mm²)
e solid e finely stranded with core end processing e stranded e stranded e stranded e stranded e stranded e stranded e for main current circuit e for auxiliary contacts box terminal depth e gaze finely method e fastening method e 4-hole front mounting e 4-hole front mounting with central attachment e rail mounting e for ill mounting e for mounting with central attachment e minimum e mainimum e mainimum e 25 °C e mainimum e m	• stranded	1x (16mm²)
• finely stranded with core end processing • stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 2,5mm²; front auxiliary switch 1x (0,75 2,5mm²) type of electrical connection • for main current circuit • for auxiliary contacts box terminal • for auxiliary contacts connection terminals Mechanical Design height depth depth depth gy2.5 mm type of device fixed mounting fastening method eating method or all mounting with central attachment or all mounting operation eating method temperature during operation or all mounting torage or minimum or all mounting storage or minimum or all auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) box terminal auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) box terminal auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) box terminal auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) box terminal auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) box terminal auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) box terminal auxiliary switch 1x (0,75 2,5mm²) box terminal auxiliary switch 1x (0,75 2,5mm²) box terminal auxili		
• stranded • stranded 2,5mm² lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) type of electrical connection • for main current circuit • for auxiliary contacts Mechanical Design Height ### ### ### ### ### ### ### ### ### #	• solid	
type of electrical connection • for main current circuit • for auxiliary contacts connection terminals Mechanical Design height width depth you of device fixed mounting fastening method e4-hole front mounting • front mounting with central attachment • rail mounting net weight 203 g Environmental Conditions ambient temperature during operation • minimum • min	finely stranded with core end processing	
• for main current circuit • for auxiliary contacts Mechanical Design height 84 mm width 67 mm depth 92.5 mm type of device fastening method fastening method 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • minimum • minimum • minimum • minimum • 55 °C ambient temperature during storage • minimum • maximum 55 °C • maximum 55 °C	stranded	
• for auxiliary contacts Mechanical Design height 84 mm width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 203 g Environmental conditions ambient temperature during operation • minimum -25 °C ambient temperature during storage • minimum • maximum 55 °C	type of electrical connection	
height 84 mm width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting net weight 203 g Environmental conditions ambient temperature during operation • minimum -25 °C • maximum 55 °C ambient temperature during storage • minimum -25 °C • maximum 55 °C	for main current circuit	box terminal
height 84 mm width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 203 g Environmental conditions ambient temperature during operation • minimum -25 °C • maximum 555 °C ambient temperature during storage • minimum • -25 °C ambient temperature during storage • minimum • -25 °C • maximum 55 °C	for auxiliary contacts	connection terminals
width 67 mm depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method Yes front mounting with central attachment No rail mounting with central attachment No rail mounting No erail mounting No Environmental conditions ambient temperature during operation minimum -25 °C ambient temperature during storage minimum -25 °C ambient temperature during storage minimum -25 °C ambient maximum 55 °C	Mechanical Design	
depth 92.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version fastening method • 4-hole front mounting • front mounting with central attachment No • rail mounting • rail mounting net weight 203 g Environmental conditions ambient temperature during operation • minimum • maximum 55°C ambient temperature during storage • minimum • minimum -25°C ambient temperature during storage • minimum • maximum 55°C	height	84 mm
type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum • minimum • -25 °C ambient temperature during storage • minimum • minimum • -25 °C • maximum -25 °C • maximum -25 °C 55 °C	width	67 mm
fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • maximum • maximum -25 °C ambient temperature during storage • minimum -25 °C • maximum 55 °C	depth	92.5 mm
fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum 55°C ambient temperature during storage • minimum • -25°C • maximum 55°C	type of device	fixed mounting
4-hole front mounting front mounting with central attachment rail mounting No net weight Environmental conditions ambient temperature during operation minimum maximum minimum 55 °C ambient temperature during storage minimum -25 °C ambient temperature during storage minimum -25 °C ambient temperature during storage minimum -25 °C maximum -25 °C	fastening method	Built-in unit fixed-mounted version
front mounting with central attachment rail mounting No net weight 203 g Environmental conditions ambient temperature during operation minimum 725 °C maximum 55 °C ambient temperature during storage minimum -25 °C ambient temperature during storage maximum 55 °C	fastening method	
● rail mounting No net weight 203 g Environmental conditions ambient temperature during operation -25 °C ● maximum 55 °C ambient temperature during storage -25 °C ● minimum -25 °C ● maximum 55 °C	4-hole front mounting	Yes
net weight Environmental conditions ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum -25 °C • maximum 55 °C	 front mounting with central attachment 	No
ambient temperature during operation in minimum in maximum in minimum in m	• rail mounting	No
ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum -25 °C • maximum 55 °C	net weight	203 g
ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum -25 °C • maximum 55 °C	Environmental conditions	
 minimum maximum 55 °C ambient temperature during storage minimum maximum 55 °C 	ambient temperature during operation	
 maximum ambient temperature during storage minimum maximum 55 °C 	- · · · · · · · · · · · · · · · · · · ·	-25 °C
 minimum -25 °C maximum 55 °C 		55 °C
 minimum -25 °C maximum 55 °C 	ambient temperature during storage	
		-25 °C
General Product Approval	• maximum	55 °C
	General Product Approval	



Confirmation







Miscellaneous

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping







Special Test Certificate





other

Environment

Confirmation

Miscellaneous

Environmental Confirmations

Further information

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=3LD2003-0TK53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2003-0TK53

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

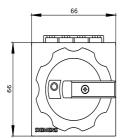
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-0TK53

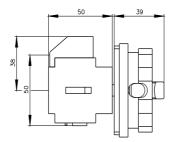
CAx-Online-Generator

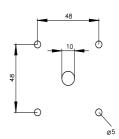
http://www.siemens.com/cax

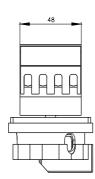
Tender specifications

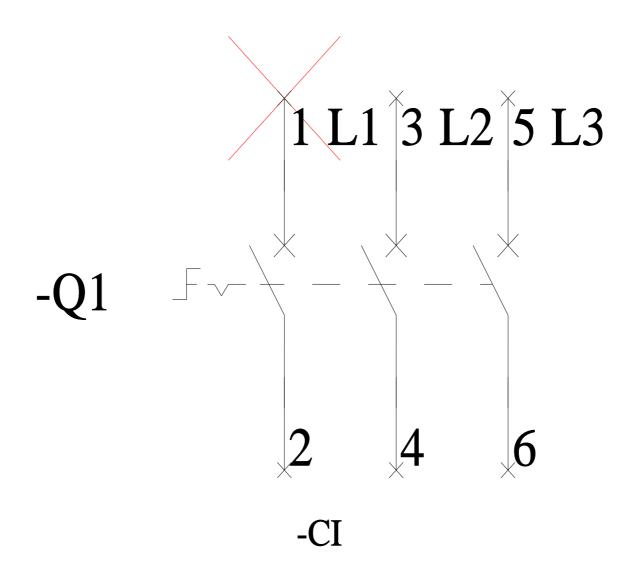
http://www.siemens.com/specifications

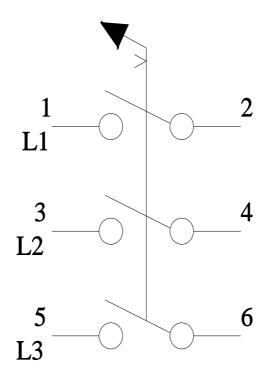












last modified: 6/20/2023 🖸