## **SIEMENS**

Data sheet 3LD2545-0TK53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3- pole, lu: 63 A, operating power / at AC-23 A 400 V: 22 kW, floor mounting with door coupling, rotary operating mechanism, Red / yellow, central mounting 22.5 mm 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	Floor mounting with door coupling
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	3
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	4.5 W
Main circuit	
operational current	
• at AC-21 at 690 V rated value	63 A
• at AC-21 A at 240 V rated value	63 A
• at AC-21 A at 400 V rated value	63 A
• at AC-21 A at 440 V rated value	63 A
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	43 A

operating power  at AC-23 A at 240 V rated value  at AC-23 A at 440 V rated value  at AC-23 A at 440 V rated value  at AC-23 A at 690 V rated value  at AC-3 at 240 V rated value  at AC-3 at 240 V rated value  at AC-3 at 240 V rated value  19 kW  at AC-3 at 490 V rated value  11 kW  at AC-3 at 490 V rated value  15 kW  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  operating voltage of auxiliary contacts  operating voltage of auxiliary contacts  operating voltage of auxiliary contacts at AC maximum  continuous current of the auxiliary contact rated value  insulation voltage of auxiliary contact rated value  insulation voltage rate value  insulation voltage rate value  insulation voltage rate value  insulation voltage rate value  insulation
at AC-23 A at 400 V rated value at AC-23 A at 440 V rated value 22 kW at AC-23 A at 4690 V rated value 19 kW at AC-3 at 240 V rated value 11 kW at AC-3 at 240 V rated value 15 kW  at AC-3 at 400 V rated value 15 kW  Auxiliary circuit number of CO contacts for auxiliary contacts 0 number of NC contacts for auxiliary contacts 0 continuous current of the auxiliary contact rated value 10 A insulation voltage of the auxiliary switch rated value  • Main switch • was witch disconnector • EMERGENCY OFF switch • Safety switch • safety switch • safety switch • contacts for auxiliary contacts  reproduct deature can be locked into OFF position  • montor drive • voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable C
at AC-23 A at 440 V rated value 19 kW 11 kW 11 kW 12 kW 12 kW 12 kW 12 kW 12 kW 13 kW 14 kC-3 at 240 V rated value 19 kW 15 k
at AC-33 at 460 V rated value at AC-3 at 240 V rated value 11 kW at AC-3 at 400 V rated value 11 kW at AC-3 at 690 V rated value 15 kW  Auxiliary circuit  number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts 0 number of NC contacts for auxiliary contacts 0 operating voltage of auxiliary contacts 0 operating voltage volta
at AC-3 at 240 V rated value at AC-3 at 490 V rated value 19 kW at AC-3 at 490 V rated value 15 kW  Auxiliary circuit  number of CO contacts for auxiliary contacts 0 number of NC contacts for auxiliary contacts 10 A insulation voltage of the auxiliary switch rated value 10 A insulation voltage of the auxiliary switch rated value  Sultability  suitability  suitability for use  main switch  switch disconnector  emain switch  yes  main switch  yes  emain switch  yes  emaintenance/repair switch  Yes  roduct details  product details  product detaile auxiliary contacts  product extension optional  emotor drive  voltage trigger  No  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  1 a hasp thickness of the bracket locks  4 8 mm
at AC-3 at 400 V rated value  at AC-3 at 690 V rated value  15 kW  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  operating voltage of auxiliary contacts at AC maximum  continuous current of the auxiliary contact rated value  insulation voltage of the auxiliary switch rated value  500 V  Sultability  suitability for use  main switch  switch disconnector  EMERGENCY OFF switch  safety switch  maintenance/repair switch  reproduct deature can be locked into OFF position  accessories  product eature can be locked into OFF position  who voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NC contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  1 septiments  1 skW  10 kW  10 A
at AC-3 at 690 V rated value  Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  operating voltage of auxiliary contacts at AC maximum  continuous current of the auxiliary contact rated value  insulation voltage of the auxiliary switch rated value  insulation voltage of the auxiliary contact rated value  insulation voltage of the auxiliary contact rated value  insulation voltage of the auxiliary contact rated value  insulation voltage of the auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum
Auxiliary circuit  number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  operating voltage of auxiliary contacts at AC maximum  continuous current of the auxiliary contact rated value  insulation voltage of the auxiliary switch rated value  suitability  suitability for use  main switch  switch disconnector  EMERGENCY OFF switch  main the contact of the auxiliary switch rated value  safety switch  main the contact of the contacts of the cont
number of CO contacts for auxiliary contacts  number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  operating voltage of auxiliary contacts at AC maximum  continuous current of the auxiliary contact at AC maximum  insulation voltage of the auxiliary switch rated value  suitability  suitabili
number of NC contacts for auxiliary contacts  number of NO contacts for auxiliary contacts  operating voltage of auxiliary contacts at AC maximum  continuous current of the auxiliary contact rated value  insulation voltage of the auxiliary switch rated value  suitability  suitability  suitability  suitability for use  main switch  maintenance/repair switch  maintenance/repair switch  product details  product details  product feature can be locked into OFF position  accessories  product extension optional  motor drive  motor drive  motor drive  motor drive  motor drive  motor droun ectable NC contacts for auxiliary contacts attachable maximum  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of stracket locks maximum  number of bracket locks maximum  1 and basp thickness of the bracket locks
number of NO contacts for auxiliary contacts  operating voltage of auxiliary contacts at AC maximum  continuous current of the auxiliary contact rated value  insulation voltage of the auxiliary switch rated value  Sout V  Suitability  suitability  suitability for use  • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch  Product details  product details  product detailre can be locked into OFF position  • motor drive • voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of bracket locks  have a contacts of the bracket locks  acconsories  product expension optional • motor drive • voltage trigger  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks  have the same and a contact of the bracket locks  4 8 mm
operating voltage of auxiliary contacts at AC maximum continuous current of the auxillary contact rated value insulation voltage of the auxillary switch rated value  500 V  Suitability  suitability  suitability  suitability  suitability  suitability  suitability or use  • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • safety switch • maintenance/repair switch  Product details  product details  product extension optional • motor drive • voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks  number of bracket locks  hasp thickness of the bracket locks  4 8 mm
continuous current of the auxiliary contact rated value insulation voltage of the auxiliary switch rated value  Suitability  suitability  suitability for use  • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch  • respectively switch • maintenance/repair switch  Product details  product details  product geature can be locked into OFF position  accessories  product extension optional • motor drive • voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  1 and a auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum
insulation voltage of the auxiliary switch rated value  Suitability  suitability  suitability for use  • main switch • switch disconnector • Suitability  • switch disconnector • Yes • EMERGENCY OFF switch • safety switch • maintenance/repair switch  Product details  product details  product feature can be locked into OFF position  accessories  product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  1 anumber of bracket locks  1 anumber of the bracket locks  2 anumber of the bracket locks  3 anumber of bracket locks  4 8 mm
Suitability  suitability for use  • main switch • switch disconnector • Suitability for use • switch disconnector • Suitability • switch disconnector • Suffery switch • safety switch • safety switch • maintenance/repair switch  Product details  product details  product feature can be locked into OFF position  accessories  Product extension optional • motor drive • voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  number of bracket locks maximum  1 anabilityes  Yes  No  No  No  1 accessories  5 attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  1 anabilityes  1 accessories  No  No  1 accessories  No  1 accessories  No  1 accessories  O accessorie
suitability for use  • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • safety switch • maintenance/repair switch  Product details  product feature can be locked into OFF position  accessories  product extension optional • motor drive • voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  1
<ul> <li>main switch</li> <li>switch disconnector</li> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> <li>Yes</li> <li>maintenance/repair switch</li> <li>Yes</li> </ul> Product details product feature can be locked into OFF position <ul> <li>accessories</li> </ul> product extension optional <ul> <li>motor drive</li> <li>voltage trigger</li> <li>No</li> </ul> number of connectable NC contacts for auxiliary contacts attachable maximum <ul> <li>number of connectable NO contacts for auxiliary contacts attachable maximum</li> <li>number of connectable CO contacts for auxiliary contacts attachable maximum</li> <li>number of bracket locks maximum</li> <li>number of bracket locks maximum</li> <li>number of bracket locks maximum</li> </ul>
switch disconnector     EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  product feature can be locked into OFF position  accessories  product extension optional     motor drive     voltage trigger     number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  1    number of bracket locks maximum  1    number of bracket locks maximum  1    number of bracket locks  3    attachable maximum  1    number of bracket locks maximum  1    number of bracket locks  3    attachable maximum  1    anumber of bracket locks maximum  1    anumber of bracket locks  4    anumber of bracket locks
EMERGENCY OFF switch safety switch maintenance/repair switch Yes  Product details  product feature can be locked into OFF position  Accessories  product extension optional motor drive voltage trigger No  number of connectable NC contacts for auxiliary contacts attachable maximum number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  number of bracket locks maximum  1
safety switch     maintenance/repair switch  Product details  product feature can be locked into OFF position  Accessories  product extension optional     motor drive     voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  1
<ul> <li>maintenance/repair switch</li> <li>Product details</li> <li>product feature can be locked into OFF position</li> <li>Accessories</li> <li>product extension optional         <ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts for auxiliary contacts attachable maximum</li> <li>number of connectable NO contacts for auxiliary contacts attachable maximum</li> <li>number of connectable CO contacts for auxiliary contacts attachable maximum</li> <li>number of connectable CO contacts for auxiliary contacts attachable maximum</li> <li>number of bracket locks maximum</li> <li>number of bracket locks maximum</li> <li>attachable maximum</li> <li>number of bracket locks maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> </ul> </li> <li>number of bracket locks maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> <li>attachable maximum</li> </ul> <li>attachable maximum</li>
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product feature can be locked into OFF position  accessories  product extension optional  • motor drive  • voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  1 a mumber of bracket locks  3 a maximum  4 8 mm
product extension optional
product extension optional  • motor drive  • voltage trigger  No  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  1 and 1 a
<ul> <li>motor drive</li> <li>voltage trigger</li> <li>number of connectable NC contacts for auxiliary contacts attachable maximum</li> <li>number of connectable NO contacts for auxiliary contacts attachable maximum</li> <li>number of connectable CO contacts for auxiliary contacts attachable maximum</li> <li>number of bracket locks maximum</li> <li>number of bracket locks maximum</li> <li>hasp thickness of the bracket locks</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>A</li> <li>A</li> <li>B mm</li> </ul>
● voltage trigger  number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  number of bracket locks maximum  1
number of connectable NC contacts for auxiliary contacts attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  hasp thickness of the bracket locks  3  0  4 8 mm
attachable maximum  number of connectable NO contacts for auxiliary contacts attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  hasp thickness of the bracket locks  3  4 8 mm
attachable maximum  number of connectable CO contacts for auxiliary contacts attachable maximum  number of bracket locks maximum  hasp thickness of the bracket locks  4 8 mm
attachable maximum  number of bracket locks maximum  hasp thickness of the bracket locks  4 8 mm
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 6 kA
• at 440 V for combination switch + gG fuse maximum 6 kA
at 690 V for combination switch + gG fuse maximum permissible  6 kA
I2t value with closed switch
• at 240 V for combination switch + gG fuse maximum 21 kA2.s
• at 440 V for combination switch + gG fuse maximum 21 kA2.s
• at 690 V for combination switch + gG fuse maximum 21 kA2.s
design of the fuse link
• for short-circuit protection of the main circuit required fuse gL/gG: 63 A
• for short-circuit protection of the auxiliary switch required fuse gL/gG: 10 A
operational current of upstream fuse rated value 63 A
according UL
operational current at AC according to UL 508/UL 60947-4-1 63 A rated value
operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value
active power [hp] at AC at 480 V according to UL 508/UL 60947- 4-1 rated value
active power [hp] at AC at 600 V according to UL 508/UL 60947- 4-1 rated value
short-time withstand current (SCCR) at 600 V according to UL 5 kA 508/UL 60947-4-1

	477.4
continuous current of upstream fuse according to UL rated value	175 A
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid	
• maximum	6
minimum	14
type of connectable conductor cross-sections for copper conductor	
• solid	1x (2,535mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (2.516 mm²)
stranded	1x (2,535mm²)
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)
• finely stranded with 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 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
type of electrical connection	
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	106 mm
width	90 mm
depth	468.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
• 4-hole front mounting	No
<ul> <li>front mounting with central attachment</li> </ul>	Yes
• rail mounting	Yes
net weight	697 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





**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=3LD2545-0TK53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2545-0TK53

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2545-0TK53

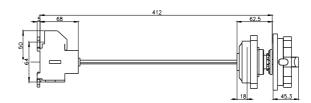
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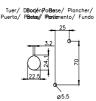
http://www.siemens.com/cax

**Tender specifications** 

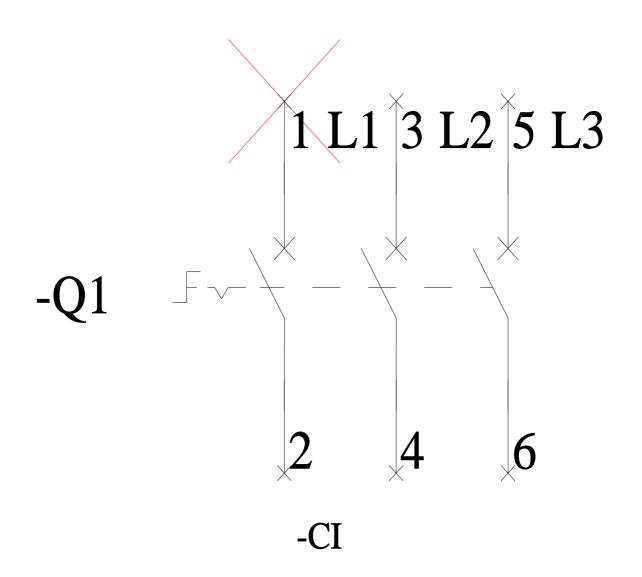
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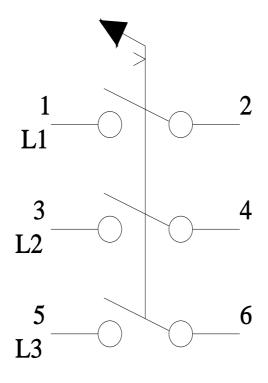












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