## SIEMENS

## Data sheet

## 3LD2804-1TP51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 125 A, Operating power / at AC-23 A at 400 V: 45 kW, front-mounted, 1 NC, 1 NO, rotary operating mechanism, black, 4-hole mounting of the handle

product brand 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         front mounted           design of the actualing element         black           design of the actualing element         No           General technical data         rolary operating mechanism, black           Operating technical data         100 000           electrical endurance (operating cycles) typical         100 000           electrical endurance (operating cycles) typical         6000           operating trougnet, maximum         50 1/h           surge ottabage resistance rated value         600 V           operating trougnet, maximum         50 Hz           operating trougnet, maximum         50 Hz <th>Model</th> <th></th>	Model	
design of the product     Main switch       display version for switch position indicator manual operation     1 ON - 0 CFF       type of switch     front mounted       design of the actuating element     black       design of the actuating element     No       Size of switch disconnector     4       mechanical service life (operating cycles) typical     100 000       electrical endurance (operating cycles)     6000       operating frequency maximum     50 1/h       degree of pollution     3       Voltage     el kV       operating requency rated value     690 V       operating frequency rated value     690 V       operating frequency rated value     690 V       operating frequency rated value     120 Hz	product brand name	SENTRON
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     black       design of handle     rotary operating mechanism, black       type of the driving mechanism motor drive     No       General technical data	product designation	Switch disconnector
type of switch         front mounted           design of the actuating element         Short rotary knob           color of the actuating element         black           design of the actuating element         black           design of the actuating element         black           design of the actuating element         black           General technical data         rotary operating mechanism, black           number of poles         3           size of switch disconnector         4           mechanical service life (operating cycles) typical         100 000           elettricial endurance (operating cycles)         6           • at AC-23 A at 690 V         6 000           operating frequency maximum         50 1/h           degree of pollution         3           Voltage         fequency maximum           forget resistance rated value         690 V           operating voltage resistance rated value         690 V           operating voltage         fequency rated value           • at AC rated value         690 V           operating voltage         fequency rated value           • at AC rated value         690 V           operating voltage         fequency rated value           foperating voltage         fequency rated value </td <td>design of the product</td> <td>Main switch</td>	design of the product	Main switch
design of the actualing element     Short rotary knob       color of the actualing element     black       design of handle     rotary operating mechanism, black       type of the driving mechanism motor drive     No       General technical data	display version for switch position indicator manual operation	1 ON - 0 OFF
color of the actualing element     black       design of handle     rotary operating mechanism, black       type of the driving mechanism motor drive     No       Genoral technical data	type of switch	front mounted
design of handle     rotary operating mechanism, black       type of the driving mechanism motor drive     No       General technical data	design of the actuating element	Short rotary knob
type of the driving mechanism motor drive         No           General technical data	color of the actuating element	black
General technical data       3         number of poles       3         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         Voltago       690 V         insulation voltage resistance rated value       690 V         operating voltage       6         • at AC rated value       690 V         operating voltage       6         • at AC rated value       690 V         operating voltage       6         • at AC rated value       690 V         operating voltage       6         • at AC rated value       690 V         operating frequency rated value       690 V         operating frequency rated value       690 V         operating frequency rated value       690 V         operating states       60 Hz         Protection class       90 V         operating voltage       12 M         protection class IP on the front       IP65         Dissipation       12 W         operating state per pole       12 M	design of handle	rotary operating mechanism, black
number of poles     3       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       operating frequency maximum     60 KV       operating voltage     680 V       operating frequency rated value     690 V       operating state per pole     1265       degree of protection NEMA rating     12 W       operating state per pole     12 W       operating state per pole     12 W       operating state per pole     1	type of the driving mechanism motor drive	No
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     6 000       operating frequency maximum     50 1/h       degree of pollution     3       Voltage     990 V       insulation voltage rated value     690 V       operating voltage resistance rated value     690 V       operating requency maximum     60 kV       operating related value     690 V       operating requency rated value     690 V       operating frequency rated value     60 Hz       Protection class IP     IP65       degree of protection NEMA rating     1, 3R, 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       Main circuit       operational current     125 A       • at AC-21 A at 240 V rated value     125 A	General technical data	
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     690 V       surge voltage resistance rated value     690 V       operating voltage     64V       operating voltage resistance rated value     690 V       operating voltage     64V       operating voltage     690 V       operating frequency rated value     690 V       operating rate value     690 V       operating frequency rated value     690 V       operating frequency rated value     70 Hz       operating frequency rated value     12 K       protection class IP     12 W       portextion class IP on the front	number of poles	3
electrical endurance (operating cycles)       6 000         operating frequency maximum       50 1/h         degree of pollution       3         Voltage       600 V         insulation voltage rated value       690 V         surge voltage resistance rated value       690 V         operating frequency maximum       50 Hz         insulation voltage rated value       690 V         operating voltage       64V         operating requency rated value       690 V         operating frequency rated value       60 Hz         Protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       12 W         operating state per pole       12 W         Main circuit       12 S A         • at AC-21 at 640 V rated value	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       insulation voltage rated value         insulation voltage rated value       690 V         surge voltage resistance rated value       690 V         operating voltage       680 V         operating voltage       690 V         operating voltage       690 V         operating frequency rated value       50 Hz         operating frequency rated value       100 Hz         Protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       12 W         operating state per pole       12 W         operational current       125 A         • at AC-21 At 240 V rated value       125 A         • at AC-21 At 400 V rated value       125 A         • at AC-21 At 400 V rated value	mechanical service life (operating cycles) typical	100 000
operating frequency maximum50 1/hdegree of pollution3Voltageinsulation voltage rated value690 Vsurge voltage resistance rated value690 Voperating voltage resistance rated value690 Voperating voltage690 Voperating frequency rated value690 Voperating frequency rated value690 Voperating frequency rated value690 Voperating frequency rated value60 HzProtection class1265protection NEMA rating1, 3R, 4X, 12protection NEMA rating1, 3R, 4X, 12protection NEMA rating12 Woperating state per pole12 WMain circuit12 Woperational current12 S A• at AC-21 A at 240 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	electrical endurance (operating cycles)	
result       3         Voltage       690 V         surge voltage resistance rated value       6 kV         operating voltage       6 kV         operating voltage       690 V         • at AC rated value       690 V         operating requency rated value       690 V         operating frequency rated value       600 Hz         Protection class       P         protection class IP       IP65         degree of protection NEMA rating       1, 3R, 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       125 A         operational current       125 A         • at AC-21 A to V rated value       125 A         • at AC-21 A at 440 V rated value       125 A         • at AC-21 A at 440 V rated value       125 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       6 kV         • at AC rated value       690 V         operating frequency rated value       60 Hz         Protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       IP65         Dissipation       12 W         operating state per pole       12 W         operational current       125 A         • at AC-21 at 690 V rated value       125 A         • at AC-21 A at 400 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         • at AC-21 A at 440 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, 3R, 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       125 A         • at AC-21 At 240 V rated value       125 A         • at AC-21 At 4400 V rated value       125 A         • at AC-21 At 4400 V rated value       125 A         • at AC-21 At 4400 V rated value       125 A         • at AC-21 At 4400 V rated value       125 A         • at AC-21 At 4400 V rated value       125 A	degree of pollution	3
surge voltage resistance rated value       6 kV         operating voltage       690 V         operating frequency rated value       690 V         operating frequency rated value       60 Hz         • minimum       60 Hz         Protection class       1200 Hz         protection class IP       IP65         degree of protection NEMA rating       1, 3R, 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       12 S A         operational current       12 S A         • at AC-21 A at 240 V rated value       12 S A         • at AC-21 A at 400 V rated value       12 S A         • at AC-21 A at 440 V rated value       12 S A         • at AC-21 A at 440 V rated value       12 S A	Voltage	
operating voltage690 Voperating frequency rated value690 Voperating frequency rated value60 Hz• minimum60 HzProtection class1protection class IP1965degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the front1965Dissipation12 Wpower loss [W] for rated value of the current at AC in hot operating state per pole12 WMain circuit0operational current125 A• at AC-21 at 690 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	insulation voltage rated value	690 V
• at AC rated value690 Voperating frequency rated value50 Hz• minimum60 HzProtection classIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65operating state per pole12 WMain circuit12 S Aoperational current125 A• 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 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	surge voltage resistance rated value	6 kV
operating frequency rated value50 Hz• minimum50 Hz60 HzProtection classprotection class IPIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65Dissipationpower loss [W] for rated value of the current at AC in hot operating state per pole0perational current12 W• at AC-21 at 690 V rated value125 A• at AC-21 A at 400 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	operating voltage	
• minimum50 Hz• maximum60 HzProtection classProtection class IPprotection class IPIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65Dissipation12 Wpower loss [W] for rated value of the current at AC in hot operating state per pole12 Woperational current12 W• at AC-21 at 690 V rated value125 A• at AC-21 A at 400 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	at AC rated value	690 V
• maximum60 HzProtection classIP65protection class IPIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65Dissipation state per pole12 WMain circuitIP65operating state per pole12 S A• at AC-21 A at 240 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	operating frequency rated value	
Protection class       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       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       operational current         • 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         • at AC-21 A at 440 V rated value       125 A	• minimum	50 Hz
protection class IPIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65Dissipationpower loss [W] for rated value of the current at AC in hot operating state per poleMain circuitoperational current • at AC-21 at 690 V rated valueat AC-21 A at 240 V rated value125 A• at AC-21 A at 400 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	• maximum	60 Hz
degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationI2 Wpower loss [W] for rated value of the current at AC in hot operating state per pole12 WMain circuitI2 Woperational current12 S 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• 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 440 V rated value125 A• at AC-21 A at 440 V rated value125 A• at AC-21 A at 440 V rated value125 A	Protection class	
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       12 W         operational current       12 S A         • at AC-21 A at 240 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       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       0         operational current       125 A         • at AC-21 A at 240 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A	degree of protection NEMA rating	1, 3R, 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         • 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         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 V rated value       125 A         • at AC-21 A at 400 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• at AC-21 A at 440 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• at AC-21 A at 440 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• at AC-21 A at 440 V rated value125 A	operational current	
<ul> <li>at AC-21 A at 400 V rated value</li> <li>at AC-21 A at 440 V rated value</li> <li>125 A</li> <li>125 A</li> </ul>	• at AC-21 at 690 V rated value	125 A
• at AC-21 A at 440 V rated value 125 A	• at AC-21 A at 240 V rated value	125 A
	<ul> <li>at AC-21 A at 400 V rated value</li> </ul>	125 A
• at AC-23 A at 400 V rated value 80 A	<ul> <li>at AC-21 A at 440 V rated value</li> </ul>	125 A
	<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	80 A

operating power	2011/1
• at AC-23 A at 240 V rated value	22 kW
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	45 kW
<ul> <li>at AC-23 A at 440 V rated value</li> </ul>	45 kW
<ul> <li>at AC-23 A at 690 V rated value</li> </ul>	37 kW
<ul> <li>at AC-3 at 240 V rated value</li> </ul>	22 kW
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	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	1
number of NO contacts for auxiliary contacts	1
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
<ul> <li>safety switch</li> </ul>	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	2
number of connectable NO contacts for auxiliary contacts attachable maximum	2
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
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	10 KA
0	10 KA 10 kA
at 690 V for combination switch + gG fuse maximum permissible	IU KA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	104 kA2.s
<ul> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	104 kA2.s
at 690 V for combination switch + gG fuse maximum	104 kA2.s
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit required</li> </ul>	fuse gL/gG: 125 A
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	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 508/UL 60947-4-1	10 kA

continuous current of upstream fuse according to UL rated value	200 A
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid	
• maximum	1
• minimum	12
type of connectable conductor cross-sections for copper	
conductor	
• solid	1x (450mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	1x (435mm <sup>2</sup> )
stranded	1x (450mm²)
type of connectable conductor cross-sections for auxiliary contacts	
● solid	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
• finely stranded with core end processing	lateral auxiliary switch 2x (0,75 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup>
• stranded	lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
type of electrical connection	
• for main current circuit	box terminal
<ul> <li>for auxiliary contacts</li> </ul>	connection terminals
Mechanical Design	
height	106 mm
width	90 mm
depth	112.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
<ul> <li>4-hole front mounting</li> </ul>	Yes
<ul> <li>front mounting with central attachment</li> </ul>	No
rail mounting	No
net weight	497 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	25.80
• minimum	-25 °C
maximum	55 °C
General Product Approval	
	Miscellaneous ERIC
Declaration of Conformity Marine / Ship	ping other Environment
UK CA EG-Konf.	Miscellaneous Confirmation Environmental Con- firmations
Further information Siemens has decided to exit the Russian market (see here).	

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).

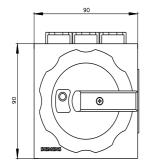
Information on the packaging

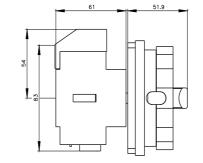
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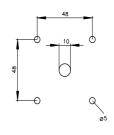
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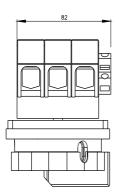
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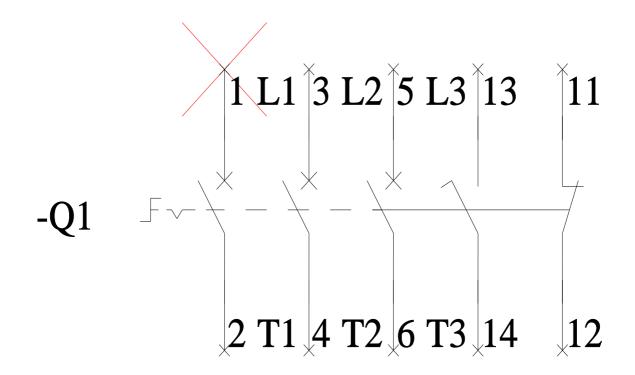
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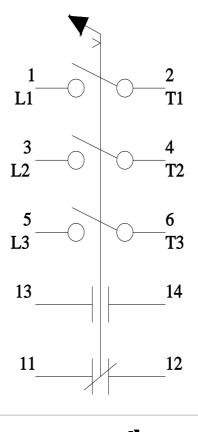








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