SIEMENS

Data sheet

3LD2054-1TP51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 16 A, Operating power / at AC-23 A at 400 V: 7.5 kW, front-mounted, 1 NC, 1 NO, rotary operating mechanism, black, Central mounting 22.5 mm of the handle

Model	
product brand name	SENTRON
product designation	3LD 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 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	
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
Current	
operational current rated value	16 A
operational current	
 at 40 °C rated value 	16 A
 at 45 °C rated value 	16 A
• at 50 °C rated value	16 A
• at 55 °C rated value	16 A

• at AC rated value	16 A
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
• at AC-23 A at 400 V rated value	16 A
operating power	
• at AC-23 A at 240 V rated value	4 kW
 at AC-23 A at 400 V rated value 	8 kW
 at AC-23 A at 440 V rated value 	7.5 kW
at AC-23 A at 690 V rated value	8 kW
 at AC-3 at 240 V rated value 	3 kW
 at AC-3 at 400 V rated value 	6 kW
 at AC-3 at 690 V rated value 	5.5 kW
Auxiliary circuit	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	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
safety switch	Yes
maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	Yes
product feature can be locked into OFF position	Yes
accessories	Yes
accessories product extension optional	
accessories product extension optional • motor drive	No
accessories product extension optional • motor drive • voltage trigger	No No
accessories product extension optional • motor drive	No
accessories product extension optional • motor drive • voltage trigger number of connectable NC contacts for auxiliary contacts	No No
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	No No 1
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	No No 1
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	No No 1 1 0
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	No No 1 1 0 3
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 hasp thickness of the bracket locks	No No 1 1 0 3
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 hasp thickness of the bracket locks Short circuit	No No 1 1 0 3 4 8 mm
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value	No No 1 1 0 3
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection	No No 1 1 0 3 4 8 mm
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V by combination switch + gG fuse maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V by combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V by combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V by combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum permissible	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V by combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum <td< td=""><td>No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3</td></td<>	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 640 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum <t< td=""><td>No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA</td></t<>	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum <t< td=""><td>No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3</td></t<>	No No 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3 kA 3
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 connectable CO contacts for auxiliary contacts attachable maximum number of bracket locks maximum number of bracket locks maximum number of bracket locks maximum hasp thickness of the bracket locks Short circuit conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG	No No 1 1 1 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A

according UL	
operational current at AC according to UL 508/UL 60947-	16 A
4-1 rated value operating voltage at AC at 50/60 Hz according to UL	600 V
508/UL 60947-4-1 rated value active power [hp] at AC at 480 V according to UL 508/UL	7.5
60947-4-1 rated value	
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	10
short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	5 kA
continuous current of upstream fuse according to UL rated value	50 A
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid	
• maximum	10
• minimum	18
type of connectable conductor cross-sections for copper conductor	
• solid	1x (16mm²)
 finely stranded with core end processing 	1x (14mm ²)
• stranded	1x (16mm²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	2x (0.75 2.5 mm ²), 1x 4 mm ²
 finely stranded with core end processing stranded 	2x (0.75 1.5 mm²), 1x 2.5 mm² 2x (0.75 2.5 mm²), 1x 4 mm²
type of electrical connection	2X (0.75 2.5 mm), 1X 4 mm
for main current circuit	box terminal
for auxiliary contacts	connection terminals
-	
Mechanical Design height	84 mm
height width	84 mm 67 mm
height	
height width	67 mm 116.5 mm fixed mounting
height width depth type of device fastening method	67 mm 116.5 mm
height width depth type of device fastening method fastening method	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version
height width depth type of device fastening method fastening method • 4-hole front mounting	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No
height width depth 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	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g
height width depth 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	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C
height width depth 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	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g
height width depth 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	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C
height width depth 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 ambient temperature during storage	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C 55 °C
height width depth 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 ambient temperature during storage • minimum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C 55 °C -25 °C
height width depth 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 ambient temperature during storage • minimum • maximum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C 55 °C -25 °C
height width depth 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 ambient temperature during storage • minimum • maximum	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C 55 °C -25 °C 55 °C
height width depth type of device fastening method fastening method e 4-hole front mounting front mounting with central attachment e rail mounting net weight Environmental conditions ambient temperature during operation e minimum maximum ambient temperature during storage e minimum e maximum General Product Approval Confirmat	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C 55 °C -25 °C 55 °C ion Miscellaneous
height width depth 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 ambient temperature during storage • minimum • maximum General Product Approval Confirmat	67 mm 116.5 mm fixed mounting Built-in unit fixed-mounted version No Yes No 217 g -25 °C 55 °C -25 °C 55 °C ion Miscellaneous







Special Test Certificate



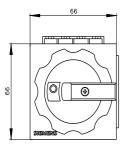
Miscellaneous

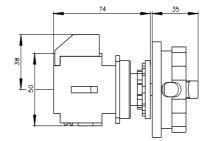
other

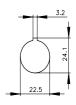
Environmental Confirmations

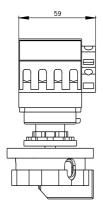
Further information

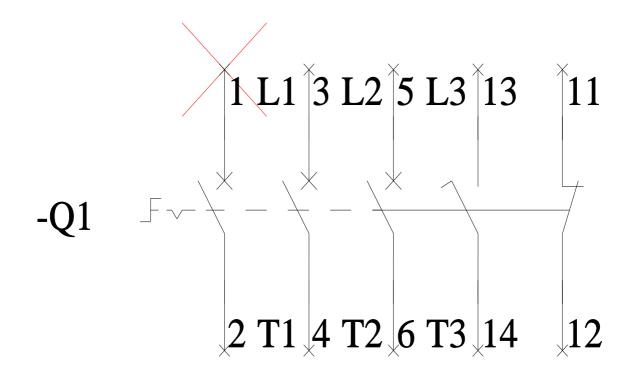
Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2054-1TP51 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2054-1TP51 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2054-1TP51 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications



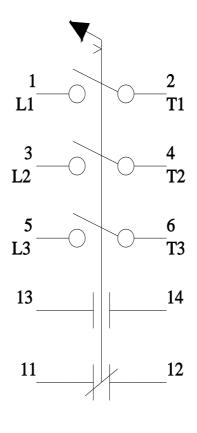








-CI



3LD20541TP51 Page 5/6