# SIEMENS

### Data sheet

### 3LD2504-1TL51



SENTRON, Switch disconnector 3LD, main switch, 4-pole, lu: 63 A, Operating power / at AC-23 A at 400 V: 22 kW, front-mounted, 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         10N + 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	Model		
design of the product     Main switch       display version for switch position indicator manual operation     10N - 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       Ceneral technical data	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       black         color of the actuating element       black         design of handle       rotary operating mechanism, black         type of the driving mechanism motor drive       No         Ceneral technical data       number of poles         size of switch disconnector       3         size of switch disconnector       3         electrical endurance (operating cycles) typical       100 000         electrical endurance (operating cycles) typical       6000         electrical endurance (operating cycles)       6         electrical endurance (operating cycles)       6         voltage       electrical endurance (operating cycles)         electrical endurance (operating cycles)       6         uinsulation voltage rated value       690 V         surge voltage resistance rated value       690 V         operating frequency rated value       64 V         operating voltage       6         e at AC rated value       690 V         operating rotage       e at AC rated value         operating trace value       690 V         operating frequency rated value       60	product designation	Switch disconnector	
operation         front mounted           dosign of the actuating element         black           color of the actuating element         black           design of handle         rolary operating mechanism, black           type of the driving mechanism motor drive         No           Ceneral technical data	design of the product	Main switch	
design of the actuating element     Short rotary knob       color of the actuating element     black       design of handle     rotary operating mechanism, black       type of the driving mechanism motor drive     No       Ceneral technical data		1 ON - 0 OFF	
color of the actuating element         black           design of handle         rotary operating mechanism, black           type of the driving mechanism motor drive         No           Convert 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         number of poles       4         size of switch disconnector       3         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	design of handle	rotary operating mechanism, black	
number of poles     4       size of switch disconnector     3       mechanical service life (operating cycles) typical     100 000       electrical endurance (operating cycles)     6 000       operating frequency maximum     50 1/h       degree of pollution     3       Voltage     insulation voltage rated value       insulation voltage rated value     690 V       surge voltage resistance rated value     690 V       operating frequency maximum     60 HZ       operating requency rated value     690 V       operating frequency rated value     600 Hz       Protection class IP     1965       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     1965       Dissipation     4.5 W       operating skil per pole     4.5 W       Main circuit     63 A       operational current     63 A       ot AC-21 A at 200 V rated value     63 A	type of the driving mechanism motor drive	No	
size of switch disconnector     3       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     50 1/h       insulation voltage rated value     690 V       surge voltage resistance rated value     690 V       operating frequency rated value     1065       degree of protection class IP     IP65       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     IP65       D	General technical data		
mechanical service life (operating cycles)     100 000       electrical endurance (operating cycles)     6 000       operating frequency maximum     50 1/h       degree of pollution     3       Voltage     insulation voltage rated value       insulation voltage rated value     690 V       surge voltage resistance rated value     690 V       operating requency maximum     690 V       surge voltage resistance rated value     690 V       operating requency rated value     690 V       operating frequency rated value     690 V       operating requency rated value     690 V       operating requency rated value     690 V       operating frequency rated value     690 V       operating frequency rated value     60 Hz       Protection class     P       protection class IP     IP65       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP     IP65       Dissipation     P       power loss [W] for rated value of the current at AC in hot operating state per pole     4.5 W       Main circuit     Operational current     63	number of poles	4	
electrical endurance (operating cycles)       6 000         operating frequency maximum       50 1/h         degree of pollution       3         Voltage       insulation voltage rated value         insulation voltage rated value       690 V         surge voltage resistance rated value       690 V         operating frequency maximum       50 1/h         degree of pollution       3         voltage       690 V         insulation voltage resistance rated value       690 V         operating frequency rated value       690 V         operating frequency rated value       690 V         operating frequency rated value       690 V         operating requency rated value       690 V         operating requency rated value       60 Hz         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         Main circuit       operational current         operational current       63 A         ot AC-21 A at 240 V rated value       63 A         ot AC-21 A at 400 V rated value       63 A	size of switch disconnector	3	
• at AC-23 A at 690 V       6 000         operating frequency maximum       50 1/h         degree of pollution       3         Voltage       690 V         insulation voltage resistance rated value       690 V         operating voltage       6 kV         operating voltage       6 kV         operating voltage       6 kV         operating voltage       6 kV         operating frequency rated value       690 V         operating frequency rated value       60 Hz         Protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       4.5 W         operational current       63 A         • at AC-21 at et 00 V rated value       63 A         • at AC-21 A at 400 V rated value       63 A <th>mechanical service life (operating cycles) typical</th> <th>100 000</th>	mechanical service life (operating cycles) typical	100 000	
operating frequency maximum       50 1/h         degree of pollution       3         Voltage       690 V         insulation voltage rated value       690 V         surge voltage resistance rated value       690 V         operating frequency rated value       690 V         • at AC rated value       690 V         operating frequency rated value       690 V         • minimum       50 Hz         • maximum       60 Hz         Protection class IP       IP65         degree of protection NEMA rating       1, 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         Main circuit       63 A         • at AC-21 at 690 V rated value       63 A         • at AC-21 At 240 V rated value       63 A         • at AC-21 At 400 V rated value       63 A	electrical endurance (operating cycles)		
degree of pollution       3         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       690 V         • minimum       50 Hz         • maximum       60 Hz         Protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       4.5 W         operating state per pole       63 A         • at AC-21 at 260 V rated value       63 A         • at AC-21 At 400 V rated value       63 A         • at AC-21 At 400 V rated value       63 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       690 V         • minimum       50 Hz         • maximum       60 Hz         Protection class       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	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       IP65         Main circuit       operating state per pole         Main circuit       63 A         • at AC-21 at 690 V rated value       63 A         • at AC-21 A at 400 V rated value       63 A	•	3	
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       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP       IP65         degree of protection NEMA rating       1, SR, 4X, 12         protection class IP on the front       IP65         Dissipation       4.5 W         operating state per pole       4.5 W         Main circuit       63 A         • 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 400 V rated value       63 A	Voltage		
operating voltage     690 V       operating frequency rated value     690 V       operating frequency rated value     50 Hz       • minimum     60 Hz       Protection class     1, 3R, 4X, 12       protection class IP     IP65       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     IP65       Dissipation     1P65       power loss [W] for rated value of the current at AC in hot operating state per pole     4.5 W       Main circuit     63 A       operational current     63 A       • at AC-21 th at 240 V rated value     63 A       • at AC-21 A at 400 V rated value     63 A	insulation voltage rated value	690 V	
• at AC rated value       690 V         operating frequency rated value       50 Hz         • minimum       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       power loss [W] for rated value of the current at AC in hot operating state per pole         Main circuit       4.5 W         operational current       63 A         • at AC-21 A at 240 V rated value       63 A         • at AC-21 A at 400 V rated value       63 A	surge voltage resistance rated value	6 kV	
operating frequency rated value50 Hz• minimum50 Hz• maximum60 HzProtection classprotection 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 pole4.5 WMain circuitoperational current• at AC-21 at 690 V rated value63 A• at AC-21 A at 240 V rated value63 A• at AC-21 A at 400 V rated value63 A• at AC-21 A at 400 V rated value63 A	operating voltage		
• minimum50 Hz• maximum60 HzProtection classIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65DissipationIP65Main circuit4.5 Woperating state per pole4.5 Woperational current63 A• at AC-21 at 690 V rated value63 A• at AC-21 A at 240 V rated value63 A• at AC-21 A at 400 V rated value63 A	<ul> <li>at AC rated value</li> </ul>	690 V	
• maximum60 HzProtection classIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65DissipationIP65Main circuit4.5 Woperating state per pole63 A• at AC-21 at 690 V rated value63 A• at AC-21 A at 240 V rated value63 A• at AC-21 A at 400 V rated value63 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         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	• minimum	50 Hz	
protection class IPIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65power loss [W] for rated value of the current at AC in hot operating state per pole4.5 WMain circuit63 Aoperational current63 A• at AC-21 A at 240 V rated value63 A• at AC-21 A at 400 V rated value63 A	• maximum	60 Hz	
degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       4.5 W         power loss [W] for rated value of the current at AC in hot operating state per pole       4.5 W         Main circuit       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 400 V rated value       63 A	Protection class		
protection class IP on the frontIP65Dissipation4.5 Wpower loss [W] for rated value of the current at AC in hot operating state per pole4.5 WMain circuit9000000000000000000000000000000000000	protection class IP	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     63 A       • at AC-21 A at 240 V rated value     63 A       • at AC-21 A at 240 V rated value     63 A       • at AC-21 A at 240 V rated value     63 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       4.5 W         Main circuit	protection class IP on the front	IP65	
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 240 V rated value       63 A         • at AC-21 A at 240 V rated value       63 A	Dissipation		
operational current• at AC-21 at 690 V rated value63 A• at AC-21 A at 240 V rated value63 A• at AC-21 A at 400 V rated value63 A		4.5 W	
<ul> <li>at AC-21 at 690 V rated value</li> <li>at AC-21 A at 240 V rated value</li> <li>at AC-21 A at 400 V rated value</li> <li>63 A</li> <li>63 A</li> </ul>	Main circuit		
• at AC-21 A at 240 V rated value63 A• at AC-21 A at 400 V rated value63 A	operational current		
• at AC-21 A at 400 V rated value 63 A	• 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 440 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	

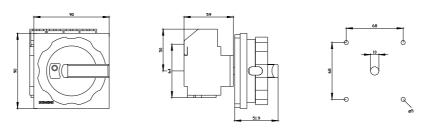
• at AC-23 A at 400 V rated value	43 A
operating power	
at AC-23 A at 240 V rated value	11 kW
• at AC-23 A at 400 V rated value	22 kW
• at AC-23 A at 440 V rated value	22 kW
at AC-23 A at 690 V rated value	19 kW
at AC-3 at 240 V rated value	11 kW
at AC-3 at 400 V rated value	19 kW
at AC-3 at 690 V rated value	15 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
suitability for use switch disconnector	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	
product details	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	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
<ul> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	6 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	21 kA2.s
<ul> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	21 kA2.s
• at 690 V for combination switch + gG fuse maximum	21 kA2.s
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit required</li> </ul>	fuse gL/gG: 63 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	63 A
according UL	63 A
	63 A 63 A
according UL operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value	
according UL operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL	63 A
according UL operational current at AC according to UL 508/UL 60947-4-1 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	63 A 600 V

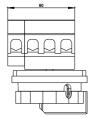
UL 508/UL 60947-4-1	
continuous current of upstream fuse according to UL rated	175 A
value	
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid maximum	
	6
•	14
type of connectable conductor cross-sections for copper	
conductor	
• solid	1x (2,535mm²)
<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 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 2,5mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	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	
<ul> <li>for main current circuit</li> </ul>	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	106 mm
width	90 mm
depth	110.5 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	489 g
Environmental conditions	
ambient temperature during operation	-25 °C
● minimum ● maximum	-25 °C
ambient temperature during storage	55 C
minimum	-25 °C
• maximum	55 °C
Approvals Certificates	
General Product Approval	
	: (YL) FHI
CCC EG-Konf.	
Marine / Shipping other	Environment
<u>Miscellaneous</u> Confirmation	
Register	firmations firmations
Uts	
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	

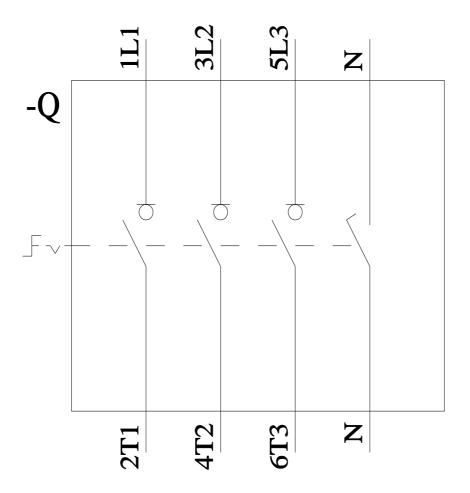
#### Industry Mall (Online ordering system)

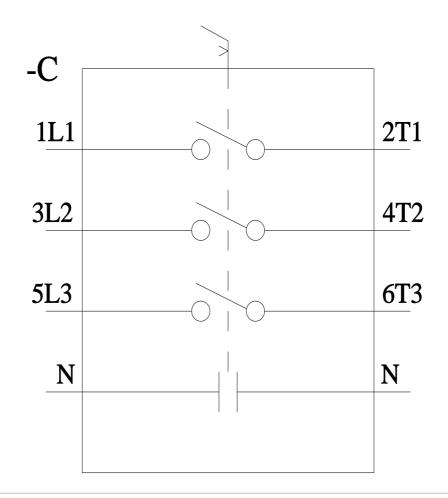
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Tender specifications http://www.siemens.com/specifications









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