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		
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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	
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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	
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• 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	
 at AC-21 at 690 V rated value at AC-21 A at 240 V rated value at AC-21 A at 400 V rated value 63 A 63 A 	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	

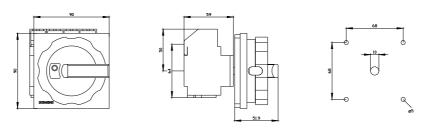
• at AC-23 A at 400 V rated value	43 A
operating power	
at AC-23 A at 240 V rated value	11 kW
• at AC-23 A at 400 V rated value	22 kW
• at AC-23 A at 440 V rated value	22 kW
at AC-23 A at 690 V rated value	19 kW
at AC-3 at 240 V rated value	11 kW
at AC-3 at 400 V rated value	19 kW
at AC-3 at 690 V rated 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
 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	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

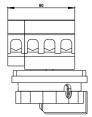
UL 508/UL 60947-4-1	
continuous current of upstream fuse according to UL rated	175 A
value	
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid maximum	
	6
•	14
type of connectable conductor cross-sections for copper	
conductor	
• solid	1x (2,535mm²)
 finely stranded with core end processing 	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 ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)
 finely stranded with core end processing 	lateral auxiliary switch 2x (0,75 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ²
• stranded	lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)
type of electrical connection	
 for main current circuit 	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	

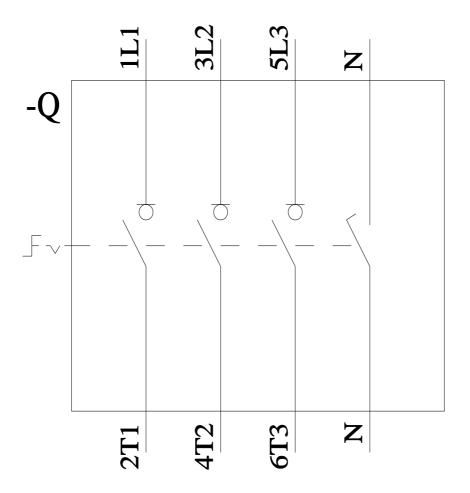
Industry Mall (Online ordering system)

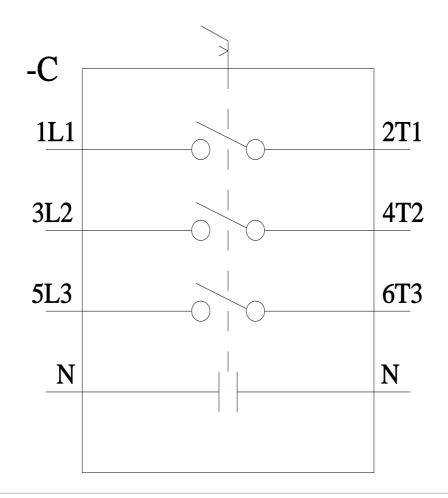
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