## **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

Model		
product brand name	SENTRON	
product designation	3LD Switch disconnector	
design of the product	Main switch	
display version for switch position indicator manual	1 ON - 0 OFF	
operation		
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	4	
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	12 W	
Current		
operational current rated value	125 A	
operational current		
<ul> <li>at 40 °C rated value</li> </ul>	125 A	
<ul> <li>at 45 °C rated value</li> </ul>	125 A	
<ul> <li>at 50 °C rated value</li> </ul>	125 A	
• at 55 °C rated value	125 A	

• at AC rated value	125 A
Main circuit	
operational current	
• at AC-21 at 690 V rated value	125 A
<ul> <li>at AC-21 A at 240 V rated value</li> </ul>	125 A
<ul> <li>at AC-21 A at 400 V rated value</li> </ul>	125 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	
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
<ul> <li>at AC-3 at 690 V rated value</li> </ul>	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
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	No
<ul><li>safety switch</li></ul>	Yes
<ul><li>maintenance/repair switch</li></ul>	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	2
attachable maximum	
number of connectable NO contacts for auxiliary contacts	2
attachable maximum	
number of connectable CO contacts for auxiliary contacts	0
attachable maximum number of bracket locks maximum	3
	3 4 8 mm
hasp thickness of the bracket locks	4 8 mm
Short circuit	
conditional short-circuit current with line-side fuse protection	
at 690 V by gG fuse rated value	20 kA
let-through current with closed switch	
at 240 V for combination switch + gG fuse maximum	10 kA
• at 440 V for combination switch + gG fuse maximum	10 kA
• at 690 V for combination switch + gG fuse maximum	10 kA
permissible	
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	
• for short-circuit protection of the main circuit	fuse gL/gG: 125 A
required	
<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
applicational outlone of apolitically factor value	

according III	
according UL	405.4
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 (450mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (435mm²)
• stranded	1x (450mm²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²
• stranded	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
type of electrical connection	
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	106 mm
width	90 mm
depth	112.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	V
4-hole front mounting	Yes
front mounting with central attachment     reil mounting	No No
<ul> <li>rail mounting</li> <li>net weight</li> </ul>	497 g
Environmental conditions	457 g
ambient temperature during operation  • minimum	-25 °C
maximum	55 °C
	33 0
ambient temperature during storage  • minimum	-25 °C
maximum	55 °C
General Product Approval	



Confirmation







Miscellaneous











**Special Test Certific-**

<u>ate</u>

other

Confirmation

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=3LD2804-1TP51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2804-1TP51

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2804-1TP51

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications













