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	
 at AC-21 A at 400 V rated value at AC-21 A at 440 V rated value 125 A 125 A 	• 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
	 at AC-21 A at 400 V rated value 	125 A
• at AC-23 A at 400 V rated value 80 A	 at AC-21 A at 440 V rated value 	125 A
	 at AC-23 A at 400 V rated value 	80 A

operating power	2011/1
• at AC-23 A at 240 V rated value	22 kW
 at AC-23 A at 400 V rated value 	45 kW
 at AC-23 A at 440 V rated value 	45 kW
 at AC-23 A at 690 V rated value 	37 kW
 at AC-3 at 240 V rated value 	22 kW
 at AC-3 at 400 V rated value 	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
 safety switch 	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
 at 240 V for combination switch + gG fuse maximum at 440 V for combination switch + gG fuse maximum 	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
 at 440 V for combination switch + gG fuse maximum 	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 required 	fuse gL/gG: 125 A
 for short-circuit protection of the auxiliary switch required 	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 ²)
 finely stranded with core end processing 	1x (435mm ²)
stranded	1x (450mm²)
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	112.5 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	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).

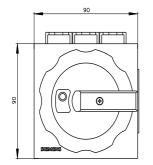
Information on the packaging

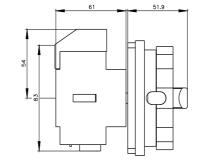
https://support.industry.siemens.com/cs/ww/en/view/109813875

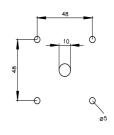
Information- and Downloadcenter (Catalogs, Brochures,...)

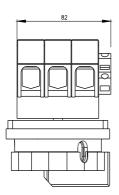
http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2804-1TP51 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2804-1TP51 Image database (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

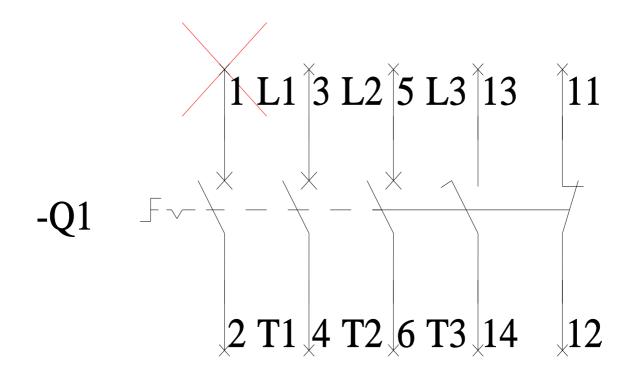
http://www.siemens.com/specifications



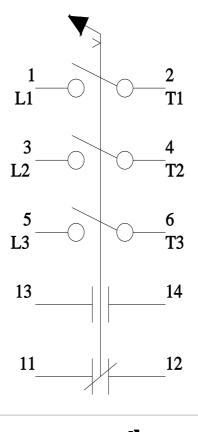








-CI



last modified:

6/20/2023 🖸