



SENTRON, Switch disconnecter 3LD, main switch, 3-pole, Iu: 100 A, Operating power / at AC-23 A at 400 V: 37 kW, front-mounted, rotary operating mechanism, black, 4-hole mounting of the handle

Model

product brand name	SENTRON
product designation	3LD Switch disconnecter
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 disconnecter	4
mechanical service life (switching cycles) typical	100 000
electrical endurance (switching 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	7.5 W
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Current

operational current rated value	100 A
operational current	
• at 40 °C rated value	100 A
• at 45 °C rated value	100 A
• at 50 °C rated value	100 A
• at 55 °C rated value	100 A

• at AC rated value	100 A
Main circuit	
operational current	
• at AC-21 at 690 V rated value	100 A
• at AC-21 A at 240 V rated value	100 A
• at AC-21 A at 400 V rated value	100 A
• at AC-21 A at 440 V rated value	100 A
• at AC-23 A at 400 V rated value	70 A
operating power	
• at AC-23 A at 240 V rated value	18.5 kW
• at AC-23 A at 400 V rated value	37 kW
• at AC-23 A at 440 V rated value	37 kW
• at AC-23 A at 690 V rated value	30 kW
• at AC-3 at 240 V rated value	18.5 kW
• at AC-3 at 400 V rated value	30 kW
• at AC-3 at 690 V rated value	22 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
• switch disconnecter	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	3
number of connectable NO contacts for auxiliary contacts attachable maximum	3
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	10 kA
• at 440 V for combination switch + gG fuse maximum	10 kA
• at 690 V for combination switch + gG fuse maximum permissible	10 kA
I ² t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	64 kA ² .s
• at 440 V for combination switch + gG fuse maximum	64 kA ² .s
• at 690 V for combination switch + gG fuse maximum	64 kA ² .s
design of the fuse link	
• for short-circuit protection of the main circuit required	fuse gL/gG: 100 A
• for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
operational current of upstream fuse rated value	100 A

according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	100 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	60
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	75
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 (4...50mm ²)
• finely stranded with core end processing	1x (4...35mm ²)
• stranded	1x (4...50mm ²)
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	107 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	492.7 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-25 °C
• maximum	55 °C
General Product Approval	



[Confirmation](#)



[Miscellaneous](#)

General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)



other

[Miscellaneous](#)

[Environmental Confirmations](#)

Further information

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=3LD2704-0TK51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2704-0TK51>

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

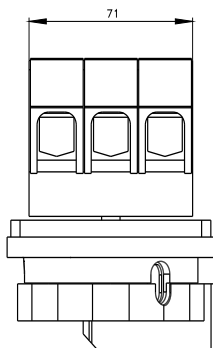
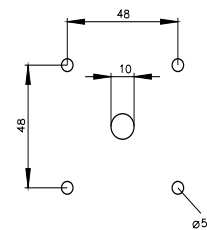
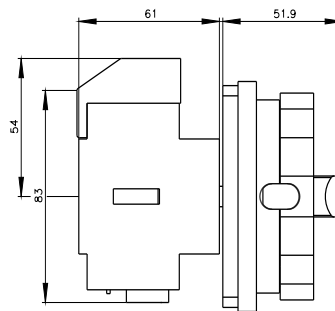
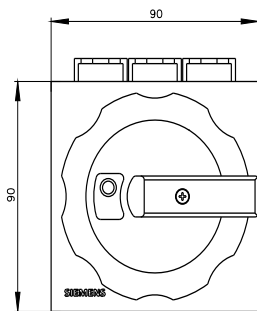
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2704-0TK51

CAX-Online-Generator

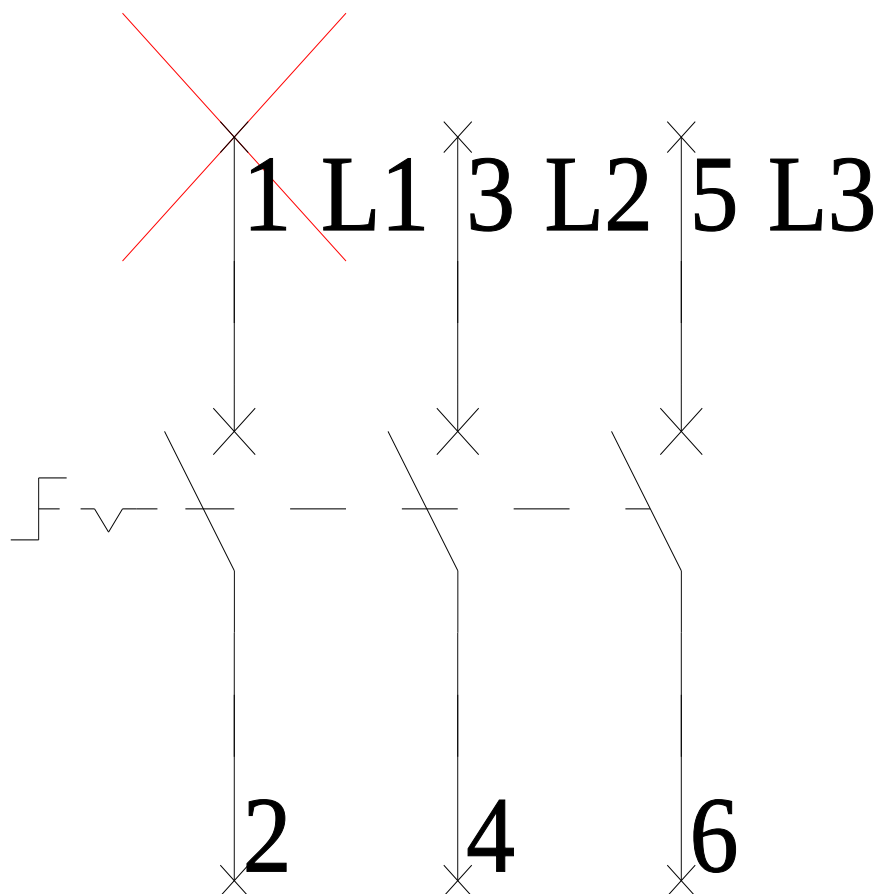
<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



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