SIEMENS

Data sheet 3LD2704-0TK53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3- pole, lu: 100 A, operating power / at AC-23 A 400 V: 37 kW, front-mounted, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	EMERGENCY-STOP 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	red
design of handle	rotary operating mechanism, red/yellow
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	7.5 W
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 240 V rated value	30 kW
at AC-3 at 490 V rated value at AC-3 at 690 V rated value	22 kW
Auxiliary circuit	ZZ IVVV
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	500 V
	Vec
suitability for use switch disconnector	Yes Yes
suitability for use SWEDGENGY OFF switch	Yes
suitability for use EMERGENCY OFF switch	
suitability for use safety switch	Yes Yes
suitability for use maintenance/repair switch	res
Product details	Yes
product feature can be locked into OFF position accessories	169
product extension optional	
motor drive	No
	No
voltage trigger number of connectable NC contacts for auxiliary contacts	3
attachable maximum	
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
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	64 kA2.s
• at 440 V for combination switch + gG fuse maximum	64 kA2.s
• at 690 V for combination switch + gG fuse maximum	64 kA2.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	10 kA

continuous current of upstream fuse according to UL rated value Type of fuse according to UL AWG number as coded connectable conductor cross section solid maximum • 1 1 • 12 **Yop of connectable conductor cross-sections for copper conductor • solid 1 (450mm²) • finely stranded with core end processing 1 (450mm²) • stranded 2 (450mm²) • finely stranded with core end processing 2 (450mm²) • finely stranded with core end processing 3 (450mm²) • finely stranded with core end processing 4 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 5 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • finely stranded with core end processing 6 (450mm²) • for main current circuit 6 (450mm²) • for main current circuit 7 (450mm²) • fo	UL 508/UL 60947-4-1	
value KRS AWG number as coded connectable conductor cross section solid maximum * * * * * * * * * * * * * * * * * * *		200 A
AWG number as coded connectable conductor cross section sold maximum • 1 2 type of connectable conductor cross-sections for copper conductor • solid • finely stranded with core end processing • stranded type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing • stranded type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing or tax (450mm²) • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • stranded type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing • stranded type of electrical connection • for main current circuit • for main current circuit • for auxiliary contacts • connection terminals ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) ### Auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²		
AWG number as coded connectable conductor cross section solid maximum Table Table	type of fuse according to UL	RK5
section solid maximum type of connectable conductor cross-sections for copper conductor solid inely stranded with core end processing istranded type of connectable conductor cross-sections for auxiliary stranded type of connectable conductor cross-sections for auxiliary contacts solid istranded type of connectable conductor cross-sections for auxiliary contacts solid isteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded with core end processing istranded with core end processing istranded isteral auxiliary switch 2x (0,75 2,5mm²), 1x 2,5mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded isteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded isteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded isteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded isteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded isteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded isteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) istranded	Connections	
type of connectable conductor cross-sections for copper connectable conductor cross-sections for copper connectable conductor cross-sections for auxiliary cinted with core end processing 1x(450mm²) 1x(450m²		
type of connectable conductor cross-sections for copper conductor solid finely stranded with core end processing sitranded type of connectable conductor cross-sections for auxiliary contacts stranded tipe of connectable conductor cross-sections for auxiliary contacts solid sitranded stranded with core end processing finely stranded with core end processing sitranded stranded st	•	1
conductor 1 x (450mm²) solid 1 x (450mm²) effirely stranded with core end processing 1 x (450mm²) stype of connectable conductor cross-sections for auxiliary contacts I alteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm² auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm², front auxiliary switch 1x 2,5mm² e solid I alteral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm², front auxiliary switch 1x 2,5mm² e stranded I alteral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x 2,5mm² type of electrical connection 0,75 2,5mm² e for main current circuit box terminal e for auxiliary contacts connection terminals Mochanical Dosign 107 mm width 90 mm depth 112.5 mm type of device fixed mounting fastening method fixed mounting e 4-hole front mounting with central attachment No e 1 almounting Yes Environmental conditions Environmental conditions e minimum -25 °C e minimum -25 °C	•	12
initially strained with core end processing is stranded type of connectable conductor cross-sections for auxiliary contacts is solid is lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is stranded with core end processing is lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is stranded is lateral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is stranded is a terral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is stranded is a terral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is stranded is a terral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75 1,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) is a terral auxiliary switch 2x (0,75	7 1	
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) finely stranded with core end processing lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm², front auxiliary switch 1x 2,5mm² stranded 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 connection terminals dechanical 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 Patening with central attachment No lateral mounting with central attachment No lateral mounting No lateral lateral mounting No lateral lateral mounting No lateral mounting N	• solid	1x (450mm²)
type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing • stranded • stranded • stranded • stranded • for auxiliary switch 2x (0,75 2,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm² • stranded • for 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 • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • connection terminals ###################################	 finely stranded with core end processing 	1x (435mm²)
contacts • solid lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) • finely stranded with core end processing lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm² e stranded lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) type of electrical connection e for main current circuit box terminal connection terminals depth eight 107 mm width 90 mm depth 112.5 mm type of device fixed mounting fastening method e 4-hole front mounting e 4-hole front mounting i rint mounting with central attachment e rail mounting with central attachment e rail mounting in the conditions metweight 497 g environmental conditions ambient temperature during operation e minimum e maximum e minimum e minimu	stranded	1x (450mm²)
• finely stranded with core end processing • stranded • stranded • stranded • stranded • stranded stype of electrical connection • for main current circuit • for auxiliary contacts to connection terminals ### April 107 mm ##		
e stranded 2,5mm² lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) type of electrical connection	• solid	
type of electrical connection	 finely stranded with core end processing 	
• for main current circuit • for auxiliary contacts connection terminals Mechanical Design height 107 mm width 90 mm depth 112.5 mm type of device fixed mounting fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight ambient temperature during operation • minimum • 55 °C ambient temperature during storage • minimum • minimum • -25 °C ambient temperature during storage • minimum • -25 °C ambient temperature during storage • minimum • -25 °C ambient temperature during storage • minimum • -25 °C	• stranded	
• for auxiliary contacts 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 net weight 497 g Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • minimum • 25 °C ambient temperature during storage • minimum • 25 °C	type of electrical connection	
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 Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting net weight 497 g Environmental conditions ambient temperature during operation • minimum • maximum 55° C ambient temperature during storage • minimum -25° C	 for main current circuit 	box terminal
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 Yes • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting with central attachment No net weight 497 g Environmental conditions ambient temperature during operation • minimum • maximum 55°C ambient temperature during storage • minimum - 25°C	 for auxiliary contacts 	connection terminals
width 90 mm depth 112.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version e 4-hole front mounting Yes e front mounting with central attachment No e rail mounting No net weight 497 g Environmental conditions ambient temperature during operation e minimum e maximum 555 °C ambient temperature during storage e minimum -25 °C	Mechanical Design	
depth 112.5 mm type of device fixed mounting fastening method Built-in unit fixed-mounted version • 4-hole front mounting Yes • front mounting with central attachment No • rail mounting No net weight 497 g Environmental conditions ambient temperature during operation -25 °C • maximum 55 °C ambient temperature during storage -25 °C	height	107 mm
type of device fixed mounting fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight end to minimum maximum maximum maximum minimum minimu	width	90 mm
fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • maximum • maximum -25 °C ambient temperature during storage • minimum -25 °C	depth	112.5 mm
fastening method	type of device	fixed mounting
4-hole front mounting front mounting with central attachment rail mounting No ret weight Environmental conditions ambient temperature during operation minimum	fastening method	Built-in unit fixed-mounted version
front mounting with central attachment rail mounting net weight 497 g Environmental conditions ambient temperature during operation minimum -25 °C ambient temperature during storage minimum -25 °C	fastening method	
● rail mounting No net weight 497 g Environmental conditions ambient temperature during operation -25 °C ● maximum 55 °C ambient temperature during storage -25 °C ● minimum -25 °C	4-hole front mounting	Yes
net weight Environmental conditions ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum -25 °C	 front mounting with central attachment 	No
ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum -25 °C	rail mounting	No
ambient temperature during operation	net weight	497 g
 minimum -25 °C maximum 55 °C ambient temperature during storage minimum -25 °C 	Environmental conditions	
● maximum 55 °C ambient temperature during storage ● minimum -25 °C	ambient temperature during operation	
ambient temperature during storage ● minimum -25 °C	• minimum	-25 °C
• minimum -25 °C	• maximum	55 °C
	ambient temperature during storage	
• maximum 55 °C	• minimum	-25 °C
	• maximum	55 °C
Approvals Certificates	Approvals Certificates	

General Product Approval







Confirmation





General Product Approval

Marine / Shipping

other

Miscellaneous







<u>Miscellaneous</u>

Confirmation

Environment

Environmental Confirmations

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=3LD2704-0TK53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2704-0TK53

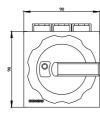
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2704-0TK53

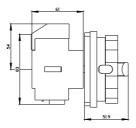
CAx-Online-Generator

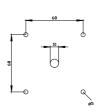
http://www.siemens.com/cax

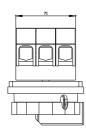
Tender specifications

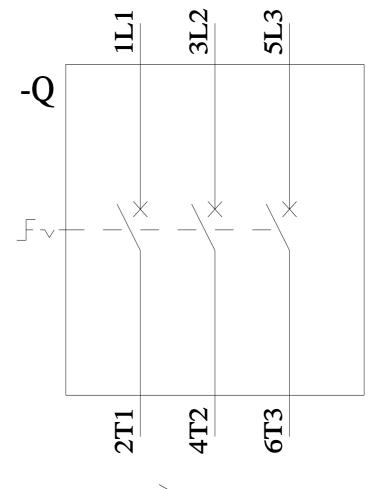
http://www.siemens.com/specifications

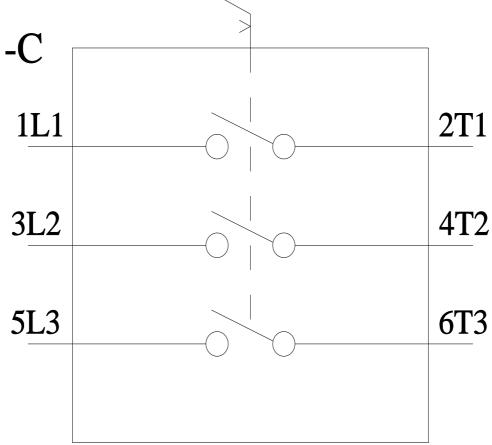












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