## **SIEMENS**

Data sheet 3LD2814-0TK53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3-pole, lu: 125 A, operating power / at AC-23 A 400 V: 45 kW, floor mounting with door coupling, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle

Model		
product brand name	SENTRON	
product designation	3LD Switch disconnector	
design of the product	EMERGENCY-STOP switch	
display version / for switch position indicator manual operation	1 ON - 0 OFF	
design of the actuating element	Short rotary knob	
design of handle	rotary operating mechanism, red/yellow	
type of the driving mechanism / motor drive	No	
General technical data		
number of poles	3	
type of device	fixed mounting	
type of switch	Floor mounting with door coupling	
size of switch disconnector	4	
mechanical service life (switching cycles) / typical	100 000	
electrical endurance (switching cycles)		
• at AC-23 A / at 690 V	6 000	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	104 kA2.s	
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	104 kA2.s	
operating frequency / maximum	50 1/h	
Voltage		
insulation voltage / rated value	690 V	
surge voltage resistance / rated value	6 kV	
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]		
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> </ul>	12 W	
<ul> <li>per conductor / typical</li> </ul>	12 W	
Current		
operational current		
• at 40 °C / rated value	125 A	
• at 45 °C / rated value	125 A	
<ul> <li>at 50 °C / rated value</li> </ul>	125 A	
• at 55 °C / rated value	125 A	

-t A C /tdl	405.4
at AC / rated value	125 A
<ul> <li>at AC-23 A / at 400 V / rated value</li> </ul>	80 A
<ul> <li>at AC-21 / at 690 V / rated value</li> </ul>	125 A
at AC-21 A / at 240 V / rated value	125 A
at AC-21 A / at 440 V / rated value	125 A
operational current / of upstream fuse / rated value	125 A
let-through current / with closed switch	4014
<ul> <li>at 440 V / for combination switch + gG fuse / maximum</li> </ul>	10 kA
• at 690 V / for combination switch + gG fuse /	10 kA
maximum permissible	TO IV
Main circuit	
operating power	
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 400 V / rated value	30 kW
operational current / rated value	125 A
Auxiliary circuit	
	0
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	
number of NO contacts / for auxiliary contacts	0
operating voltage / of auxiliary contacts / at AC / maximum	500 V 10 A
continuous current / of the auxiliary contact / rated value insulation voltage / of the auxiliary switch / rated value	500 V
	300 V
Suitability	
suitability for use	V
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	Yes
<ul><li>EMERGENCY OFF switch</li><li>safety switch</li></ul>	Yes Yes
<ul><li>EMERGENCY OFF switch</li><li>safety switch</li><li>maintenance/repair switch</li></ul>	Yes
<ul><li>EMERGENCY OFF switch</li><li>safety switch</li></ul>	Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element	Yes Yes
<ul> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> </ul> Appearance	Yes Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element	Yes Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details	Yes Yes Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details product feature	Yes Yes Yes red
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details  product feature     can be locked into OFF position	Yes Yes Yes red Yes
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details  product feature     can be locked into OFF position number of bracket locks / maximum	Yes Yes Yes Yes  red  Yes 3
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum	Yes Yes Yes Yes  red  Yes 3 4 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details  product feature     can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum hasp thickness / of the bracket locks / maximum	Yes Yes Yes Yes  red  Yes 3 4 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details  product feature     can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum hasp thickness / of the bracket locks / maximum product extension / optional	Yes Yes Yes red  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance color / of the actuating element  Product details product feature     can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / maximum product extension / optional     motor drive	Yes Yes Yes Yes  red  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum  product extension / optional     motor drive     voltage trigger  Short circuit conditional short-circuit current / with line-side fuse	Yes Yes Yes Yes  red  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum  product extension / optional     motor drive     voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection	Yes Yes Yes red  Yes 3 4 mm 8 mm  No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional          motor drive          voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection          at 690 V / by gG fuse / rated value	Yes Yes Yes Yes  red  Yes 3 4 mm 8 mm
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional          motor drive          voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection          at 690 V / by gG fuse / rated value  according UL	Yes Yes Yes red  Yes 3 4 mm 8 mm  No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional          motor drive          voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection          at 690 V / by gG fuse / rated value	Yes Yes Yes red  Yes 3 4 mm 8 mm  No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional          motor drive          voltage trigger  Short circuit     conditional short-circuit current / with line-side fuse protection          at 690 V / by gG fuse / rated value  according UL     operational current / at AC / according to UL 508/UL	Yes Yes Yes red  Yes 3 4 mm 8 mm  No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature     can be locked into OFF position     number of bracket locks / maximum     hasp thickness / of the bracket locks / minimum     hasp thickness / of the bracket locks / maximum     product extension / optional     motor drive     voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection     at 690 V / by gG fuse / 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	Yes Yes Yes red  Yes 3 4 mm 8 mm  No No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance     color / of the actuating element  Product details  product feature	Yes Yes Yes  red  Yes 3 4 mm 8 mm  No No No
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Appearance  color / of the actuating element  Product details  product feature     can be locked into OFF position  number of bracket locks / maximum  hasp thickness / of the bracket locks / minimum  hasp thickness / of the bracket locks / maximum  product extension / optional     motor drive     voltage trigger  Short circuit  conditional short-circuit current / with line-side fuse protection     at 690 V / by gG fuse / rated value  according UL  operational current / at AC / according to UL 508/UL 60947-4-1 / rated value  active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value  active power [hp] / at AC / at 600 V / according to UL	Yes Yes Yes  red  Yes 3 4 mm 8 mm  No No No  20 kA  125 A  600 V  75

continuous current / of upstream fuse / according to UL / rated value	200 A
type of fuse / according to UL	RK5
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	3
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	5
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
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 $\dots$ 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 $\dots$ 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
Requirements	
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 125 A
<ul> <li>for short-circuit protection of the auxiliary switch / required</li> </ul>	fuse gL/gG: 10 A
Mechanical Design	
height	106 mm
width	90 mm
depth	470.5 mm
fastening method	Built-in unit fixed-mounted version
fastening method	
4-hole front mounting	Yes
<ul> <li>front mounting with central attachment</li> </ul>	No
• rail mounting	Yes
net weight	758 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	









Miscellaneous



Declaration of Conformity Test Certificates Marine / Shipping other



## Special Test Certificate





**Miscellaneous** 

other

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=3LD2814-0TK53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2814-0TK53

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2814-0TK53

**CAx-Online-Generator** 

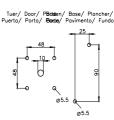
http://www.siemens.com/cax

**Tender specifications** 

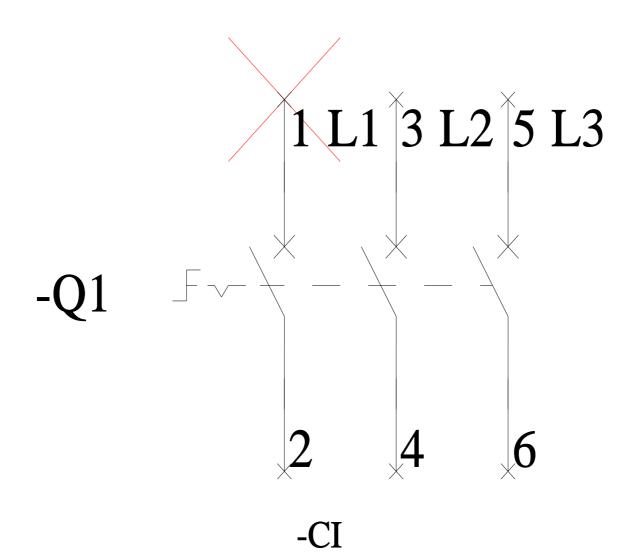
http://www.siemens.com/specifications

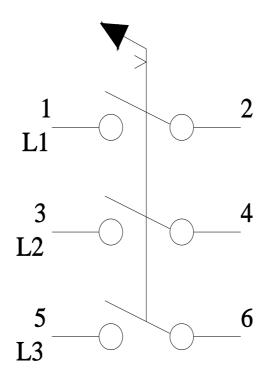












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