## SIEMENS

## Data sheet

## 3LD2154-0TK53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3- pole, lu: 25 A, operating power / at AC-23 A 400 V: 9.5 kW, front-mounted, rotary operating mechanism, Red / yellow, central mounting 22.5 mm of the handle

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         Front mounted           color of the actuating element         red           design of handle         rotary operating mechanism, red/yellow           type of the driving mechanism motor drive         No           Concort technical data	Model	
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         Shoth rotary knob           color of the actuating element         red           design of handle         rotary operating mechanism, red/yellow           type of the driving mechanism motor drive         No           Genoral technical data	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       red         design of handle       rotary operating mechanism, red/yellow         type of the driving mechanism motor drive       No         General technical data       number of poles         size of switch disconnector       2         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       insulation voltage rated value         operating requency rated value       690 V         operating requency rated value       690 V         operating voltage       64 kV         operating requency rated value       690 V         operating frequency rated value       60 Hz         operating frequency rated value       60 Hz	product designation	Switch disconnector
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           number of poles         3           size of switch disconnector         2           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            insulation voltage rated value         690 V           surge voltage resistance rated value         690 V           operating frequency rated value         690 V           operating voltage            e 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         1.1 W           op	design of the product	EMERGENCY-STOP switch
design of the actuating element       Fred         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	display version for switch position indicator manual operation	1 ON - 0 OFF
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       number of poles     3       size of switch disconnector     2       mechanical service life (operating cycles) typical     100 000       electrical endurance (operating cycles)     6 000       operating frequency maximum     60 1/h       degree of pollution     3       Voltage     insulation voltage rated value       insulation voltage rated value     690 V       operating frequency maximum     60 V       operating frequency maximum     60 V       operating frequency maximum     60 V       operating voltage resistance rated value     690 V       operating voltage     6 kV       operating frequency 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     1.1 W       poverating state p	type of switch	front mounted
design of handle     rotary operating mechanism, red/yellow       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 tachnical data	color of the actuating element	red
General technical data         number of poles       3         size of switch disconnector       2         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         insulation voltage resistance rated value       690 V         surge voltage resistance rated value       690 V         operating frequency maximum       60 kV         operating voltage       6 kV         operating trequency rated value       690 V         surge voltage resistance rated value       690 V         operating frequency rated value       1.3 R, 4X, 12	design of handle	rotary operating mechanism, red/yellow
number of poles         3           size of switch disconnector         2           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	type of the driving mechanism motor drive	No
size of switch disconnector     2       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     insulation voltage rated value       insulation voltage rated value     690 V       surge voltage resistance rated value     690 V       operating frequency maximum     50 Hz       operating frequency rated value     690 V       operation class IP     12       protection class IP     1965       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     IP65       Dissipation     1.1 W       operating state per pole     1.1 W	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       insulation voltage rated value     690 V       operating voltage     6 kV       operating requency maximum     690 V       surge voltage resistance rated value     690 V       operating voltage     690 V       • at AC rated value     690 V       operating frequency rated value     690 V       • at AC rated value     690 V       operating frequency rated value     690 V       • minimum     50 Hz       • minimum     50 Hz       • maximum     60 Hz       Protection class IP     IP65       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     IP65       Dissipation     1.1 W       power loss [W] for rated value of the current at AC in hot operating state per pole     1.1 W	number of poles	3
electrical endurance (operating cycles)       6 000         operating frequency maximum       50 1/h         degree of pollution       3         Voltage       690 V         insulation voltage rated value       690 V         operating yottage resistance rated value       690 V         operating voltage resistance rated value       690 V         operating voltage       690 V         • at AC rated value       690 V         operating requency rated value       690 V         operating frequency rated value       690 V         operation class IP       IP65         Dissipation       1.1 W         operationg state per pole       1.1 W	size of switch disconnector	2
• at AC-23 A at 990 V       6 000         operating frequency maximum       50 1/h         degree of pollution       3         Voltage       690 V         insulation voltage rated value       690 V         surge voltage resistance rated value       6 kV         operating voltage       6 90 V         • at AC rated value       690 V         operating frequency rated value       6 90 V         operating frequency rated value       1 , 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       1.1 W         porer loss [W] for rated value of the current at AC in hot operating state per pole	mechanical service life (operating cycles) typical	100 000
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       6 kV         operating frequency rated value       690 V         operating requency rated value       690 V         operating frequency rated value       1.1 X         protection class IP       1.1 W         protection class IP on the front       1.1 W         operating state per pole       1.1 W	electrical endurance (operating cycles)	
degree of pollution       3         Voltage       insulation voltage rated value       690 V         insulation voltage resistance rated value       6 kV         operating voltage       6 kV         operating voltage       690 V         operating voltage       690 V         operating voltage       690 V         operating frequency rated value       60 Hz         Protection class       Protection class IP         protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       power loss IW] for rated value of the current at AC in hot operating state per pole         Main circuit       operational current	• 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       690 V         • minimum       50 Hz         • maximum       60 Hz         Protection class       1         protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       1         power loss [W] for rated value of the current at AC in hot operating state per pole       1.1 W         operational current       0	operating frequency maximum	50 1/h
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       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       1.1 W         power loss [W] for rated value of the current at AC in hot operating state per pole       1.1 W         Main circuit       operational current	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       50 Hz         • maximum       60 Hz         Protection class       10 Hz         protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       1.1 W         power loss [W] for rated value of the current at AC in hot operating state per pole       1.1 W	Voltage	
operating voltage       690 V         • at AC rated value       690 V         operating frequency rated value       50 Hz         • minimum       50 Hz         • maximum       60 Hz         Protection class       100 Hz         protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       11 W         operating state per pole       1.1 W         operating state per pole       1.1 W	insulation voltage rated value	690 V
• at AC rated value       690 V         operating frequency rated value       50 Hz         • 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       IP65         Dissipation       I11 W         operating state per pole       1.1 W         operating state per pole       IP65	surge voltage resistance rated value	6 kV
operating frequency rated value     50 Hz       • 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     IP65       power loss [W] for rated value of the current at AC in hot operating state per pole     1.1 W       operating current     IP65	operating voltage	
• minimum50 Hz• maximum60 HzProtection classIP65protection class IPIP65degree of protection NEMA rating1, 3R, 4X, 12protection class IP on the frontIP65DissipationIP65power loss [W] for rated value of the current at AC in hot operating state per pole1.1 WMain circuitoperational current	<ul> <li>at AC rated value</li> </ul>	690 V
• maximum     60 Hz       Protection class     IP65       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     IP65       Dissipation     IP65       power loss [W] for rated value of the current at AC in hot operating state per pole     1.1 W       Main circuit     operational current	operating frequency rated value	
Protection class         protection class IP       IP65         degree of protection NEMA rating       1, 3R, 4X, 12         protection class IP on the front       IP65         Dissipation       IP65         power loss [W] for rated value of the current at AC in hot operating state per pole       1.1 W         Main circuit       operational current	• minimum	50 Hz
protection class IP     IP65       degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     IP65       Dissipation     IP65       power loss [W] for rated value of the current at AC in hot operating state per pole     1.1 W       Main circuit     operational current	• maximum	60 Hz
degree of protection NEMA rating     1, 3R, 4X, 12       protection class IP on the front     IP65       Dissipation	Protection class	
protection class IP on the front     IP65       Dissipation     IP65       power loss [W] for rated value of the current at AC in hot operating state per pole     1.1 W       Main circuit     operational current	protection class IP	IP65
Dissipation       power loss [W] for rated value of the current at AC in hot operating state per pole       Main circuit       operational current	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     1.1 W       Main circuit operational current     1.1 W	protection class IP on the front	IP65
operating state per pole           Main circuit           operational current	Dissipation	
operational current		1.1 W
	Main circuit	
• at AC-21 at 690 V rated value 25 A	operational current	
	• at AC-21 at 690 V rated value	25 A
• at AC-21 A at 240 V rated value 25 A	• at AC-21 A at 240 V rated value	25 A
• at AC-21 A at 400 V rated value 25 A	• at AC-21 A at 400 V rated value	25 A
• at AC-21 A at 440 V rated value 25 A	• at AC-21 A at 440 V rated value	25 A
at AC-23 A at 400 V rated value     20 A	• at AC-23 A at 400 V rated value	20 A

operating power	
operating power • at AC-23 A at 240 V rated value	5 kW
at AC-23 A at 400 V rated value	10 kW
at AC-23 A at 440 V rated value	9.5 kW
at AC-23 A at 690 V rated value	10 kW
• at AC-3 at 240 V rated value	4 kW
• at AC-3 at 400 V rated value	8 kW
• at AC-3 at 690 V rated value	7.5 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 disconnector	Yes
EMERGENCY OFF switch	Yes
<ul> <li>safety switch</li> </ul>	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	50 kA
let-through current with closed switch	
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	3.5 kA
• at 440 V for combination switch + gG fuse maximum	3.5 kA
<ul> <li>at 690 V for combination switch + gG fuse maximum permissible</li> </ul>	4 kA
I2t value with closed switch	
<ul> <li>at 240 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
<ul> <li>at 440 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
<ul> <li>at 690 V for combination switch + gG fuse maximum</li> </ul>	4 kA2.s
design of the fuse link	
for short-circuit protection of the main circuit required	fuse gL/gG: 25 A
<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	25 A
according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	25 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	10
active power [hp] at AC at 600 V according to UL 508/UL 60947- 4-1 rated value	15
short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	5 kA

continuous current of upstream fuse according to UL rated value	50 A
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid	
• maximum	8
• minimum	14
type of connectable conductor cross-sections for copper conductor	
• solid	1x (1,516mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	1x (1,510mm <sup>2</sup> )
stranded type of connectable conductor cross-sections for auxiliary	1x (1,516mm²)
contacts	$2 \times (0.75 - 2.5 \text{ mm}^2)$ 1 × 4 mm <sup>2</sup>
<ul> <li>solid</li> <li>finally stranded with core and processing</li> </ul>	2x (0.75 2.5 mm²), 1x 4 mm² 2x (0.75 1.5 mm²), 1x 2.5 mm²
<ul> <li>finely stranded with core end processing</li> <li>stranded</li> </ul>	2x (0.75 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>
type of electrical connection	2X (0.75 2.5 mm <sup>-</sup> ), 1X 4 mm <sup>-</sup>
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	84 mm
width	67 mm
depth	116.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
<ul> <li>4-hole front mounting</li> </ul>	No
<ul> <li>front mounting with central attachment</li> </ul>	Yes
<ul> <li>rail mounting</li> </ul>	No
net weight	208 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	
	Miscellaneous UL VDE
General Product Approval Declaration of Conformity	Test Certificates Marine / Shipping
	Special Test Certific- ate Register
Marine / Shipping other	Environment
Miscellaneous Confirmation	on Environmental Con- firmations
Further information	

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/catalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2154-0TK53

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2154-0TK53

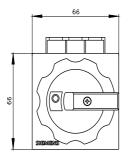
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2154-0TK53

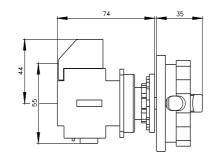
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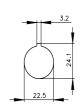
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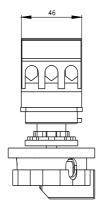
Tender specifications

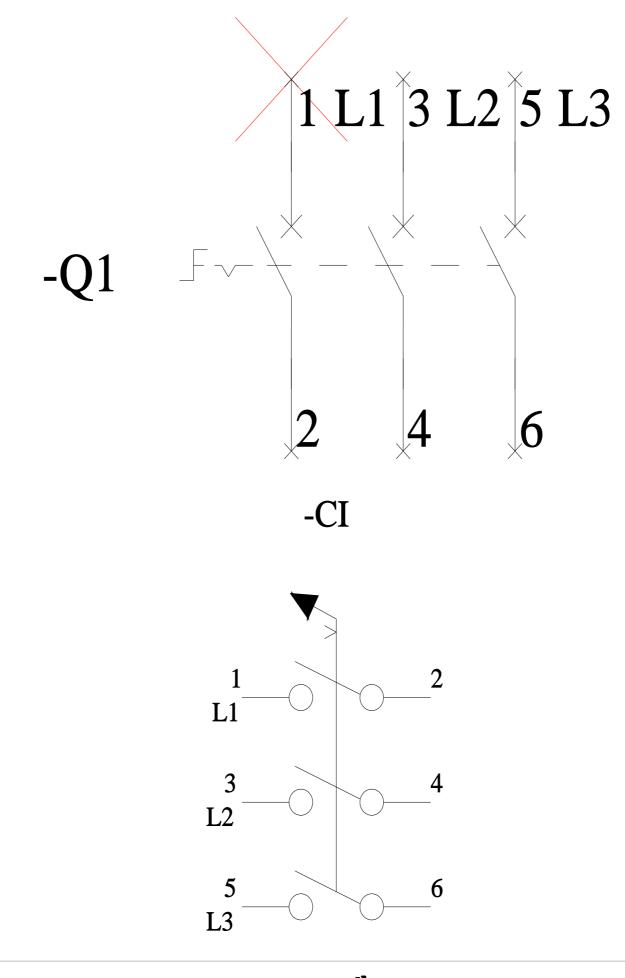
http://www.siemens.com/specifications











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