SIEMENS

Data sheet 3LD2164-1TC51



SENTRON, Switch disconnector 3LD, main switch, 4-pole, 25 A, Operating power at AC- 23 A at 400 V: 9.5 kW, molded-plastic encapsulation for metric cable gland, rotary operating mechanism, black

Model	
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	Molded-plastic enclosure for metric threaded joint
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	4
number of poles note	PE
size of switch disconnector	2
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, 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	1.1 W
Main circuit	
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 400 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
operating power	207.
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-25 A at 050 V rated value at AC-3 at 240 V rated value	4 kW
at AC-3 at 400 V rated value	8 kW
at AC-3 at 400 V rated value at AC-3 at 690 V rated value	7.5 kW
Auxiliary circuit	7.5 KVV
number of CO contacts for auxiliary contacts	0
•	0
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	500 V
operating voltage of auxiliary contacts at AC maximum	10 A
continuous current of the auxiliary contact rated value	500 V
insulation voltage of the auxiliary switch rated value	500 V
Suitability	
suitability for use	Von
main switch weight disconnected	Yes
switch disconnector FMEDCENCY OFF switch	Yes
EMERGENCY OFF switch	No Var
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	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	3.5 kA
• at 440 V for combination switch + gG fuse maximum	3.5 kA
at 690 V for combination switch + gG fuse maximum permissible	4 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	4 kA2.s
• at 440 V for combination switch + gG fuse maximum	4 kA2.s
• at 690 V for combination switch + gG fuse maximum	4 kA2.s
design of the fuse link	
• for short-circuit protection of the main circuit required	fuse gL/gG: 25 A
for short-circuit protection of the auxiliary switch required	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	5 kA

508/UL 60947-4-1	
	FO A
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 (1,516mm²)
 finely stranded with core end processing 	1x (1,510mm²)
stranded	1x (1,516mm²)
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 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
Mechanical Design	
height	152 mm
width	100 mm
depth	117 mm
type of device	fixed mounting
fastening method	Complete unit in enclosure
fastening method	
 4-hole front mounting 	No
 front mounting with central attachment 	Yes
• rail mounting	No
net weight	468 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







Miscellaneous

<u>Miscellaneous</u>



other

Environment

Confirmation

Miscellaneous

Environmental Confirmations

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

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=3LD2164-1TC51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-1TC51

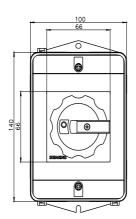
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2164-1TC51

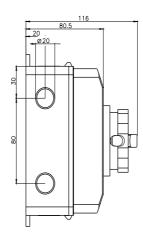
CAx-Online-Generator

http://www.siemens.com/cax

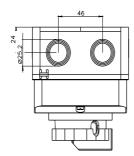
Tender specifications

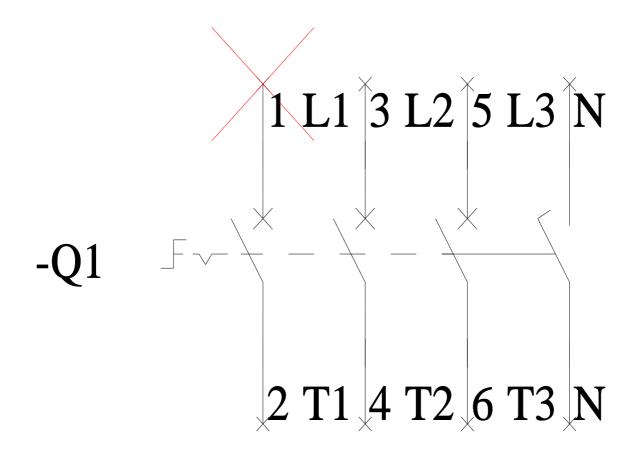
http://www.siemens.com/specifications



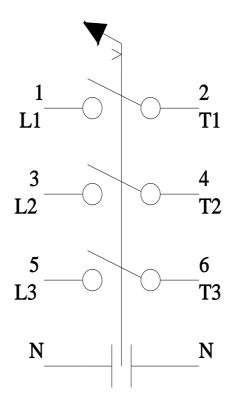








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