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Data sheet 3LD2164-1TC53



SENTRON, Switch disconnector 3LD, emergency switching-off 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, red/yellow

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	EMERGENCY-OFF 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	red
design of handle	rotary operating mechanism, red/yellow
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	0.6 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

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● 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	
● 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
suitability for use switch disconnector	Yes
suitability for use EMERGENCY OFF switch	Yes
suitability for use 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 $kA^2 \cdot s$
● at 440 V for combination switch + gG fuse maximum	4 $kA^2 \cdot s$
● at 690 V for combination switch + gG fuse maximum	4 $kA^2 \cdot s$
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

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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
•	14
type of connectable conductor cross-sections for copper conductor	
• solid	1x (1,5...16mm²)
• finely stranded with core end processing	1x (1,5...10mm²)
• stranded	1x (1,5...16mm²)
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	435.5 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-25 °C
• maximum	55 °C

Approvals Certificates

Environment		General Product Approval			
Environmental Con-firmations	Environmental Con-firmations				

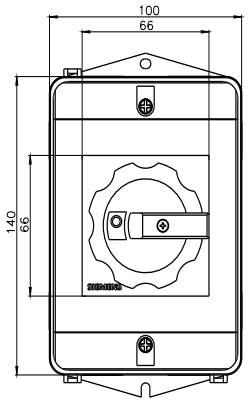
General Product Approval				Test Certificates
	Miscellaneous		Confirmation	Miscellaneous

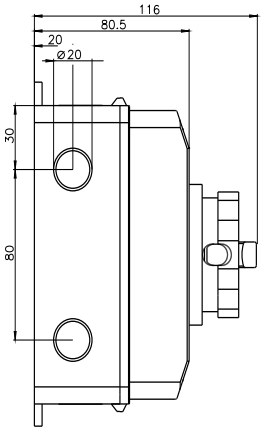
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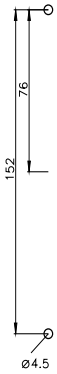
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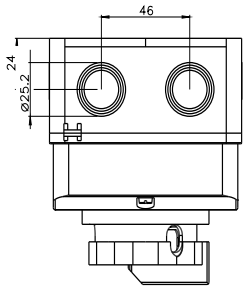
Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/lowvoltage/catalogs
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2164-1TC53
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-1TC53
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2164-1TC53
CAx-Online-Generator
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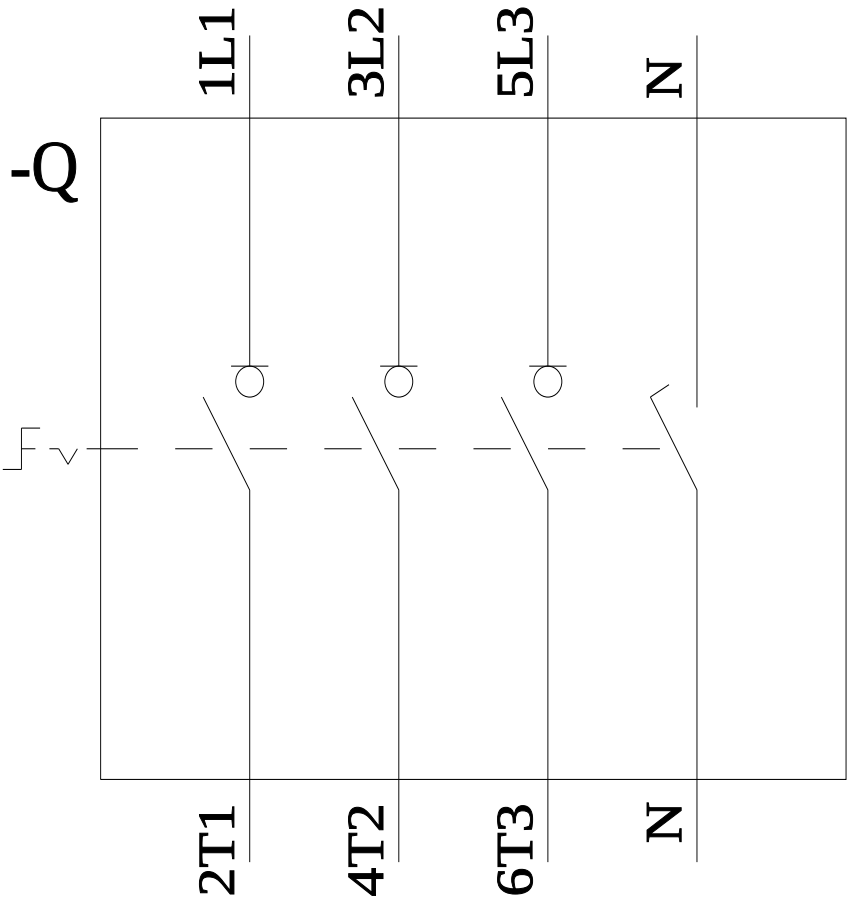


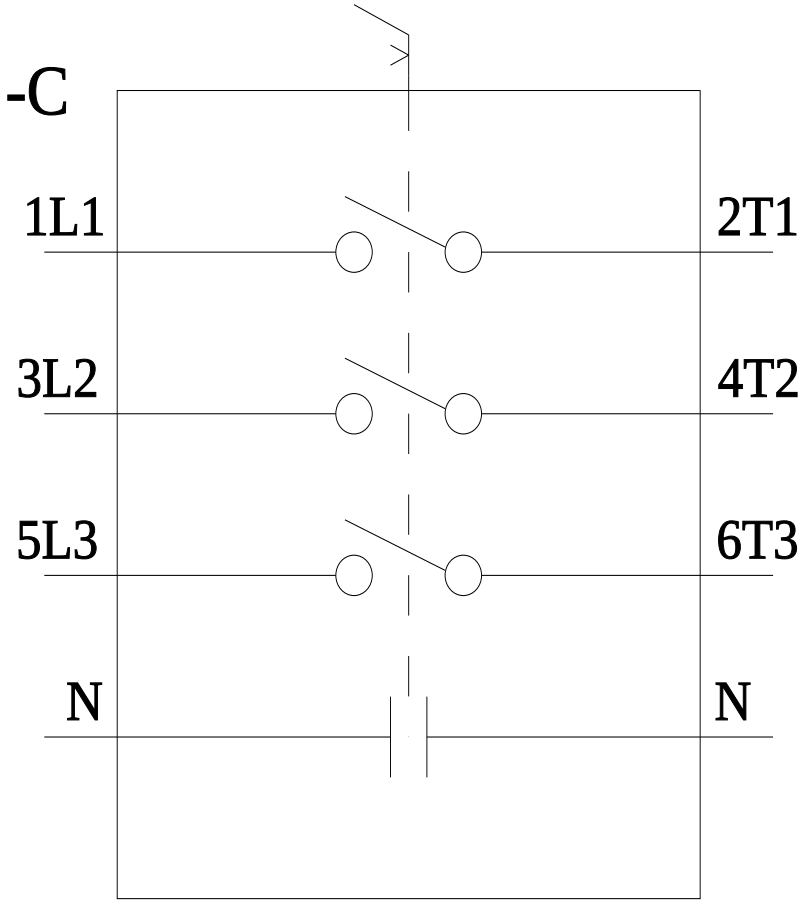






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