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Data sheet 3LD2164-2TD51-0AE2



SENTRON, Switch disconnector 3LD, main switch, 3-pole, Iu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for metric screw connection, 1 NC, 1 NO, rotary operating mechanism, black

Model	
product brand name	SENTRON
product designation	3LD Switch disconnector
design of the product	Main 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, black
type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
number of poles / note	PE + N
type of device	fixed mounting
type of switch	Molded-plastic enclosure for metric threaded joint
size of switch disconnector	2
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	4 kA2.s
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 kA2.s
operating frequency / maximum	50 1/h
Voltage	
insulation voltage / rated value	690 V
surge voltage resistance / rated value	6 kV
operational current / at AC / rated value	25 A
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
● per conductor / typical	1.1 W
Current	
operational current	

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● at AC-23 A / at 400 V / rated value	20 A
● 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 440 V / rated value	25 A
operational current / of upstream fuse / rated value	25 A
let-through current / with closed switch	
● at 440 V / for combination switch + gG fuse / maximum	3.5 kA
● at 690 V / for combination switch + gG fuse / maximum permissible	3.5 kA
Main circuit	
operating power	
● at AC-23 A / at 240 V / rated value	5 kW
● at AC-23 A / at 400 V / rated value	9.5 kW
● at AC-23 A / at 440 V / rated value	9.5 kW
● at AC-23 A / at 690 V / rated value	9.5 kW
● at AC-3 / at 240 V / rated value	4 kW
● at AC-3 / at 400 V / rated value	7.5 kW
● at AC-3 / at 690 V / rated value	7.5 kW
operational current / rated value	25 A
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	1
number of NO contacts / for auxiliary contacts	1
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	No
● safety switch	Yes
● maintenance/repair switch	Yes
Appearance	
color / of the actuating element	black
Product details	
● product function / can be locked into OFF position	Yes
number of bracket locks / maximum	3
hasp thickness / of the bracket locks / minimum	4 mm
hasp thickness / of the bracket locks / maximum	8 mm
product extension / optional	
● motor drive	No
● voltage trigger	No
Short circuit	
conditional short-circuit current / with line-side fuse protection	
● at 690 V / by gG fuse / rated value	50 kA
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

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continuous current / of upstream fuse / according to UL / rated value	50 A
type of fuse / according to UL	RK5
Number	
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
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 (1,5...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
Requirements	
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
Mechanical Design	
height	164 mm
width	100 mm
depth	118 mm
fastening method	Complete unit in enclosure
fastening method	
● 4-hole front mounting	No
● front mounting with central attachment	Yes
● rail mounting	No
net weight	502 g
Environmental conditions	
ambient temperature / during operation	
● minimum	-25 °C
● maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
Certificates	
reference code	
● acc. to DIN EN 61346-2	S
● acc. to IEC 81346-2	SF

General Product Approval	**Declaration of Conformity**

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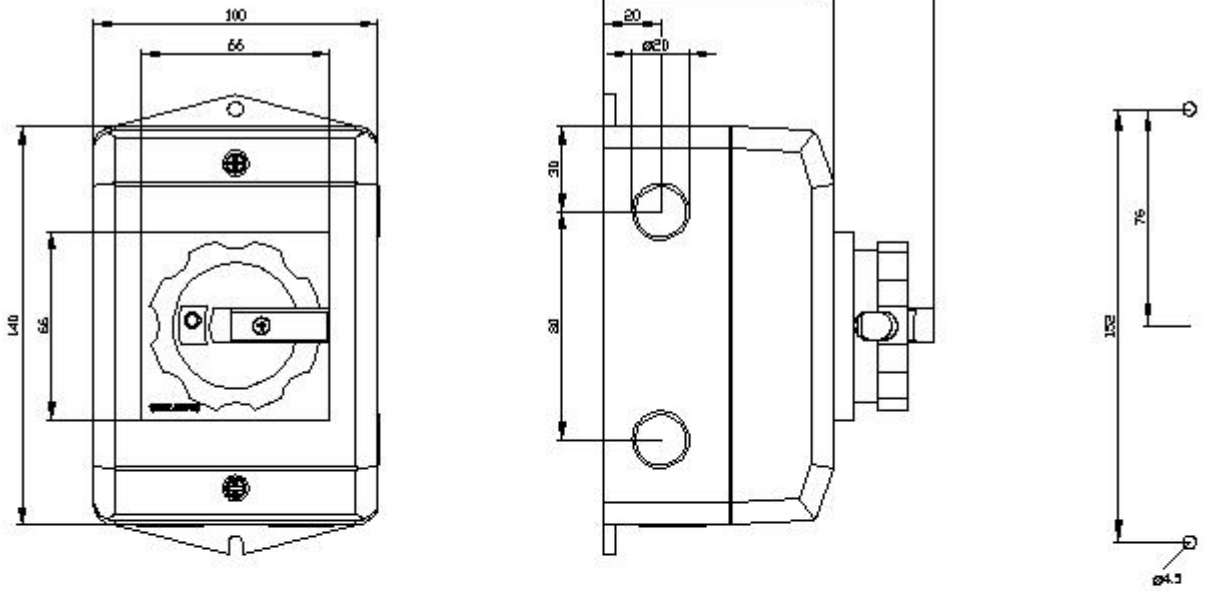
Miscellaneous

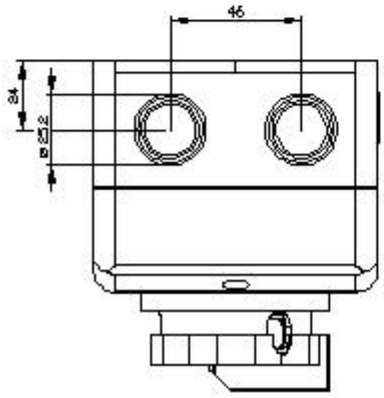
Test Certificates		Marine / Shipping	other
Miscellaneous	Miscellaneous		Environmental Confirmations

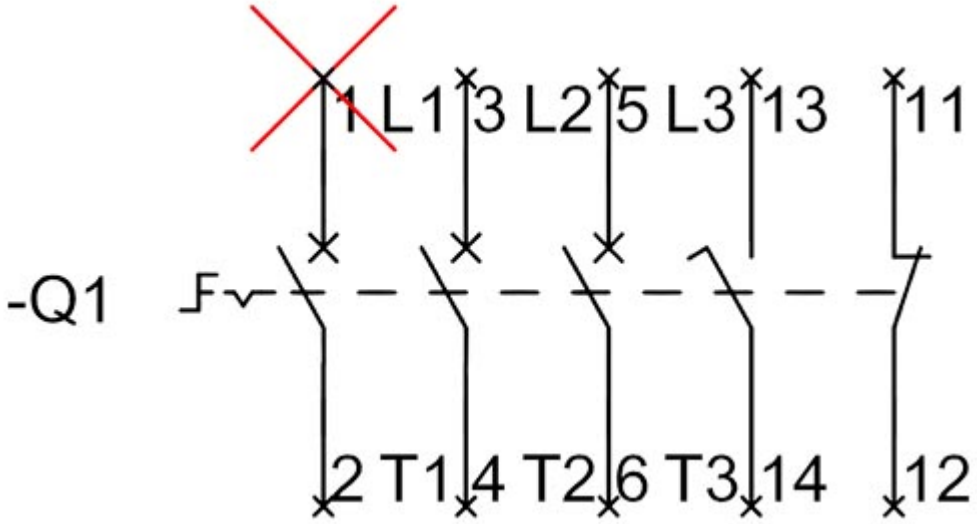
Further information

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=3LD2164-2TD51-0AE2
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-2TD51-0AE2
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2164-2TD51-0AE2
Tender specifications
http://www.siemens.com/specifications

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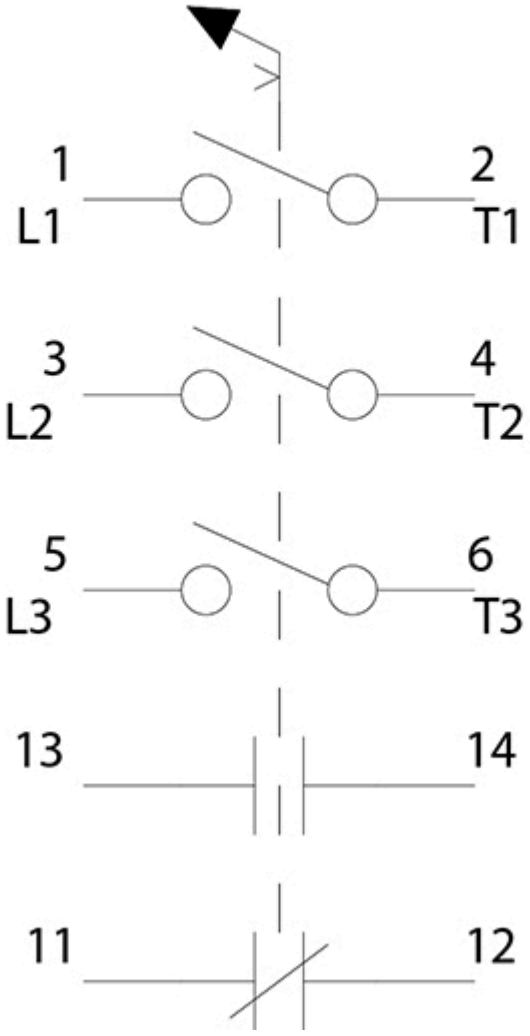






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