



SENTRON, Switch disconnecter 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 disconnecter
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	3
number of poles / note	N
size of switch disconnecter	2
mechanical service life (switching cycles) / typical electrical endurance (switching cycles)	100 000
• 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
Current	
operational current / rated value	25 A
operational current	
• at 40 °C / rated value	25 A

<ul style="list-style-type: none"> • at 45 °C / rated value • at 50 °C / rated value • at 55 °C / rated value • at AC / rated value 	<p>25 A</p> <p>25 A</p> <p>25 A</p> <p>25 A</p>
Main circuit	
operational current	
<ul style="list-style-type: none"> • at AC-21 / at 690 V / rated value • at AC-21 A / at 240 V / rated value • at AC-21 A / at 400 V / rated value • at AC-21 A / at 440 V / rated value • at AC-23 A / at 400 V / rated value 	<p>25 A</p> <p>25 A</p> <p>25 A</p> <p>25 A</p> <p>20 A</p>
operating power	
<ul style="list-style-type: none"> • at AC-23 A / at 240 V / rated value • at AC-23 A / at 400 V / rated value • at AC-23 A / at 440 V / rated value • at AC-23 A / at 690 V / rated value • at AC-3 / at 240 V / rated value • at AC-3 / at 400 V / rated value • at AC-3 / at 690 V / rated value 	<p>5 kW</p> <p>10 kW</p> <p>9.5 kW</p> <p>10 kW</p> <p>4 kW</p> <p>8 kW</p> <p>7.5 kW</p>
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	
<ul style="list-style-type: none"> • main switch • switch disconnecter • EMERGENCY OFF switch • safety switch • maintenance/repair switch 	<p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p>
Product details	
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
<ul style="list-style-type: none"> • motor drive • voltage trigger 	<p>No</p> <p>No</p>
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	
<ul style="list-style-type: none"> • at 690 V / by gG fuse / rated value 	50 kA
let-through current / with closed switch	
<ul style="list-style-type: none"> • at 240 V / for combination switch + gG fuse / maximum • at 440 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum permissible 	<p>3.5 kA</p> <p>3.5 kA</p> <p>4 kA</p>
I _{2t} value / with closed switch / at 240 V / for combination switch + gG fuse / maximum	4 kA ² .s
I _{2t} value / with closed switch / at 440 V / for combination	4 kA ² .s

switch + gG fuse / maximum	
I _{2t} value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA ² .s
design of the fuse link	
<ul style="list-style-type: none"> for short-circuit protection of the main circuit / required 	fuse gL/gG: 25 A
<ul style="list-style-type: none"> 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 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	
<ul style="list-style-type: none"> maximum minimum 	8 14
type of connectable conductor cross-sections / for copper conductor	
<ul style="list-style-type: none"> solid finely stranded / with core end processing stranded 	1x (1,5...16mm ²) 1x (1,5...10mm ²) 1x (1,5...16mm ²)
type of connectable conductor cross-sections / for auxiliary contacts	
<ul style="list-style-type: none"> solid finely stranded / with core end processing stranded 	lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²) lateral auxiliary switch 2x (0,75 ... 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ² lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²)
type of electrical connection	
<ul style="list-style-type: none"> for main current circuit for auxiliary contacts 	box terminal 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	
<ul style="list-style-type: none"> 4-hole front mounting front mounting with central attachment rail mounting 	No Yes No
net weight	475 g
Environmental conditions	
ambient temperature / during operation	
<ul style="list-style-type: none"> minimum maximum 	-25 °C 55 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> minimum maximum 	-25 °C 55 °C
General Product Approval	



[Confirmation](#)



[Miscellaneous](#)

General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping
--------------------------	---------------------------	-------------------	-------------------



EG-Konf.



[Miscellaneous](#)

[Miscellaneous](#)



LRS

other

[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=3LD2164-1GP51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-1GP51>

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

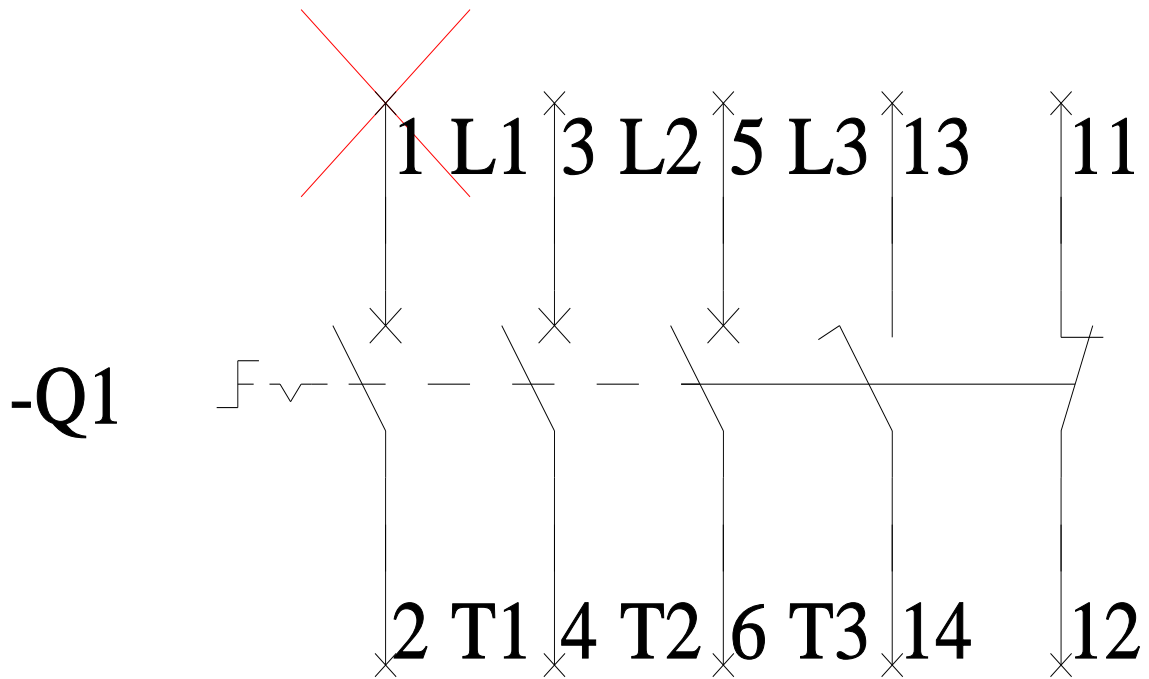
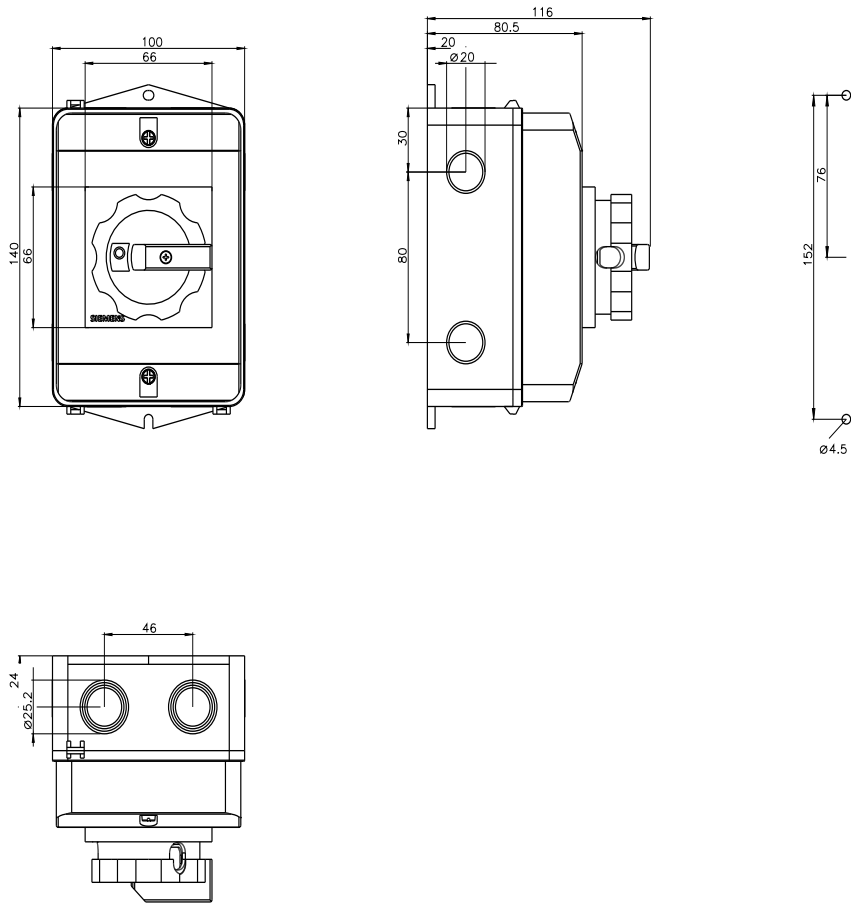
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2164-1GP51

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



-CI

