



SENTRON switch disconnecter 3LD in molded-plastic enclosure , repair and maintenance switch with EMC plate, 3-pole lu: 16A, AC23A 400V at 50/60Hz: 7,5kW, used with frequency converter: AC20 400V at 0-550Hz: 4kW, 1NO + 1NC 20-150ms leading, molded-plastic encapsulation for metric cable gland, knob-operated mechanism, black, lockable in 0- and I-position, incl. cable shield clamps

Model	
product brand name	SENTRON
product designation	3LD Switch disconnecter
design of the product	Switch
display version / for switch position indicator manual operation	1 ON - 0 OFF
design of the actuating element	selector switch
design of handle	knob-operated mechanism, black
type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
number of poles / note	PE isolated from cable shield
type of device	fixed mounting
type of switch	Molded-plastic enclosure for metric threaded joint
size of switch disconnecter	1
mechanical service life (switching cycles) / typical	100 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
• between converter and motor / when used as repair switch / at AC-20 A / at 690 V / at 0-550 Hz	100 000
I _{2t} value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	3 kA ² .s
let-through I _{2t} value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	2.5 kA ² .s
operating frequency / maximum	50 1/h
Voltage	
insulation voltage / rated value	690 V
surge voltage resistance / rated value	6 kV
operating voltage	
• between converter and motor / at AC / at 0-550 Hz / rated value	480 V
Protection class	
protection class IP	IP65
degree of protection NEMA rating	1, 3R, 4X
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	0.5 W
• per conductor / typical	1 W

Current	
operational current	
• at 40 °C / rated value	12.8 A
• at AC / rated value	16 A
• at AC-23 A / at 400 V / rated value	16 A
• at AC-21 / at 690 V / rated value	16 A
• at AC-21 A / at 240 V / rated value	16 A
• at AC-21 A / at 440 V / rated value	16 A
operational current / of upstream fuse / rated value	20 A
let-through current / with closed switch	
• at 440 V / for combination switch + gG fuse / maximum	3 kA
• at 690 V / for combination switch + gG fuse / maximum permissible	3 kA
Main circuit	
operating frequency / between converter and motor / when used as repair switch	
• initial value	0 Hz
• full-scale value	550 Hz
operating power	
• at AC-23 A / at 240 V / rated value	4 kW
• at AC-23 A / at 440 V / rated value	7.5 kW
• at AC-23 A / at 690 V / rated value	8 kW
• at AC-3 / at 240 V / rated value	3 kW
• at AC-3 / at 400 V / rated value	6 kW
• at AC-3 / at 690 V / rated value	5.5 kW
operating active power [W] / between converter and motor / when used as repair switch / at AC-20 A	
• at 400 V / at 0-550 Hz / rated value	4 kW
operational current / rated value	16 A
continuous current / between converter and motor / when used as repair switch / at AC-20	
• at 230 V / rated value	10.4 A
• at 400 V / rated value	10.2 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	600 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 disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	No
• maintenance/repair switch	Yes
Appearance	
color / of the actuating element	black
Product details	
product feature	
• can be locked into OFF position	Yes
• can be locked in ON position	Yes
number of bracket locks / maximum	3
hasp thickness / of the bracket locks / minimum	4.5 mm
hasp thickness / of the bracket locks / maximum	8.5 mm
special product feature	inclusive EMC shield plate
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	16 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	7.5
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	10
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
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	4
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
AWG number / as coded connectable conductor cross section / solid	
• maximum	10
• minimum	18
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1...6mm ²)
• finely stranded / with core end processing	1x (1...4mm ²)
• stranded	1x (1..6mm ²)
type of connectable conductor cross-sections / for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²)
• finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 ... 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ²
• stranded	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	
• 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: 20 A
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
Mechanical Design	
height	164 mm
width	100 mm
depth	117 mm
fastening method	Complete unit in enclosure with EMC shield plate
fastening method	
• 4-hole front mounting	No
• front mounting with central attachment	Yes
• rail mounting	No
net weight	403 g

Environmental conditions

ambient temperature / during operation	-25 °C 55 °C
• minimum • maximum	
ambient temperature / during storage / minimum	-25 °C

General Product Approval

Declaration of Conformity

Test Certificates

[Confirmation](#)



[UK Declaration of Conformity](#)



[Miscellaneous](#)

other

[Environmental Confirmations](#)

[Miscellaneous](#)

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=3LD2084-2GP21>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2084-2GP21>

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

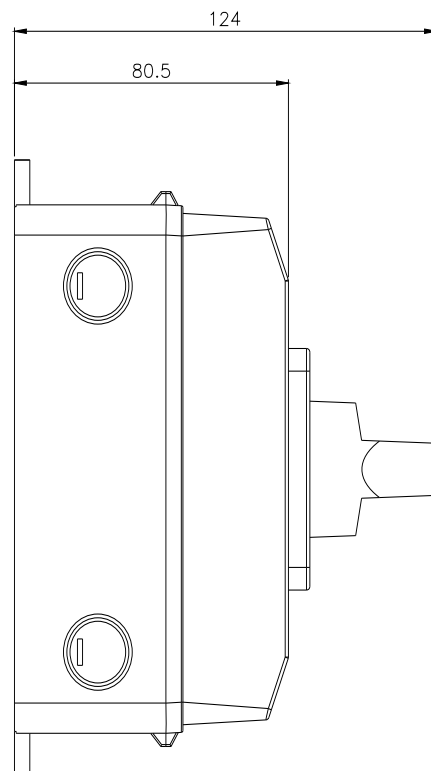
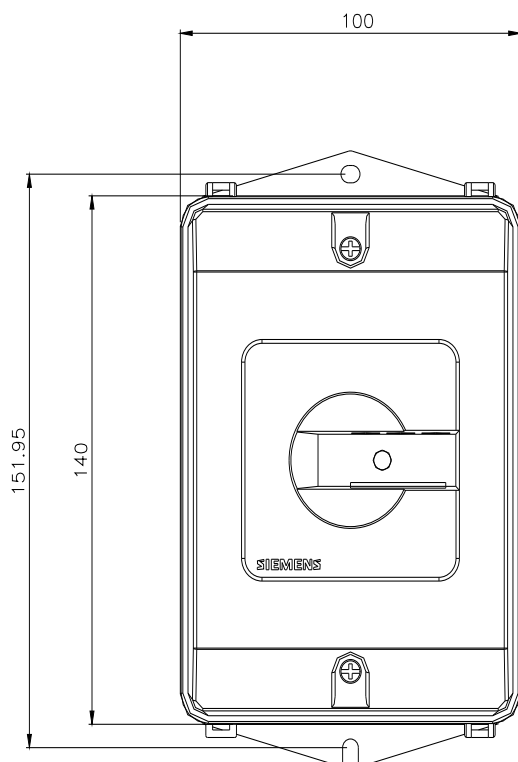
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2084-2GP21

CAX-Online-Generator

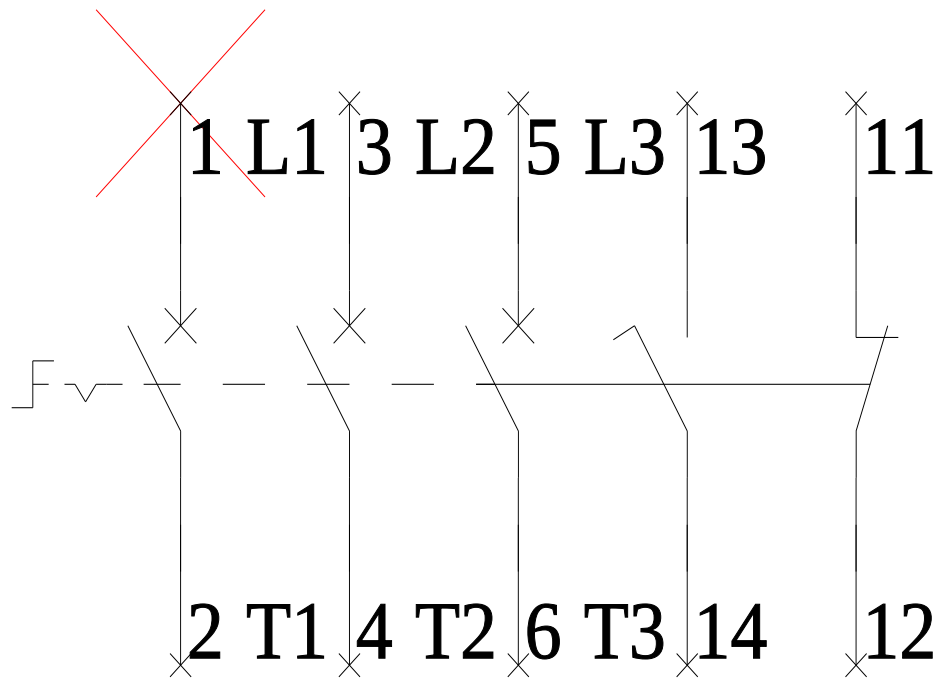
<http://www.siemens.com/cax>

Tender specifications

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



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