



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 operating mechanism	selector switch
Design of handle	knob-operated mechanism, black
Type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
Type of device	fixed mounting
Type of switch	Molded-plastic enclosure for metric threaded joint
Size of switch disconnecter	1
Electrical endurance (switching cycles)	
<ul style="list-style-type: none"> at AC-23 A / at 690 V 	6 000
<ul style="list-style-type: none"> between converter and motor / when used as repair switch / at AC-20 A / at 690 V / at 0-550 Hz 	100 000

I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	2.5 kA ² .s
Let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	2.5 kA ² .s
Mechanical service life (switching cycles) / typical	100 000
Operating frequency / maximum	50 1/h

Voltage

Insulation voltage / rated value	690 V
Surge voltage resistance / rated value	6 kV
Operating current / at AC / rated value	16 A
Operating voltage	
<ul style="list-style-type: none"> • at AC / at 50/60 Hz / rated value 	690 V
<ul style="list-style-type: none"> • between converter and motor / at AC / at 0-550 Hz / rated value 	480 V

Protection class

Protection class IP	IP65
protection class IP / on the front	IP65

Dissipation

Power loss [W]	
<ul style="list-style-type: none"> • for rated value of the current / at AC / in hot operating state / per pole 	0.5 W
<ul style="list-style-type: none"> • per conductor / typical 	0.5 W

Current

Operating current	
<ul style="list-style-type: none"> • at AC-23 A / at 690 V / rated value • at AC-23 A / at 400 V / rated value • at AC-22 A / at 690 V / rated value • at AC-21 / at 690 V / rated value • at AC-21 A / at 240 V / rated value • at AC-21 A / at 440 V / rated value • at AC-22 A / at 240 V / rated value • at AC-22 A / at 440 V / rated value • at AC-23 A / at 240 V / rated value • at AC-23 A / at 440 V / rated value 	9 A 16 A 16 A 16 A 16 A 16 A 16 A 16 A 16 A 16 A
Operating current / of upstream fuse / rated value	20 A
let-through current / with closed switch	
<ul style="list-style-type: none"> • at 440 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum permissible 	3 kA 3 kA
Short-time withstand current (I _{cw})	
<ul style="list-style-type: none"> • limited to 1 s / rated value 	340 A

- at 690 V / limited to 1 s / rated value

340 A

Main circuit

Operating frequency	
<ul style="list-style-type: none"> • initial value • Full-scale value 	<p>50 Hz</p> <p>60 Hz</p>
Operating frequency / between converter and motor / when used as repair switch	
<ul style="list-style-type: none"> • initial value • Full-scale value 	<p>0 Hz</p> <p>550 Hz</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 / at 50/60 Hz / 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>4 kW</p> <p>7.5 kW</p> <p>7.5 kW</p> <p>7.5 kW</p> <p>3 kW</p> <p>5.5 kW</p> <p>5.5 kW</p>
Operating active power [W] / between converter and motor / when used as repair switch / at AC-20 A	
<ul style="list-style-type: none"> • at 400 V / at 0-550 Hz / rated value 	4 kW
Operating current / rated value	16 A
Continuous current / between converter and motor / when used as repair switch / at AC-20	
<ul style="list-style-type: none"> • at 230 V / rated value • at 400 V / rated value 	<p>10.4 A</p> <p>10.2 A</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	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	
<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>No</p> <p>Yes</p>

Appearance	
Color / of the actuating element	black
Product details	
<ul style="list-style-type: none"> Product function / can be locked into OFF position 	Yes
<ul style="list-style-type: none"> Product feature / 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	
<ul style="list-style-type: none"> motor drive 	No
<ul style="list-style-type: none"> Voltage trigger 	No
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
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	
<ul style="list-style-type: none"> maximum 	10
<ul style="list-style-type: none"> minimum 	18
Type of connectable conductor cross-sections / for copper conductor	
<ul style="list-style-type: none"> solid 	1x (1...6mm ²)
<ul style="list-style-type: none"> finely stranded / with core end processing 	1x (1...4mm ²)
<ul style="list-style-type: none"> stranded 	1x (1..6mm ²)
Type of connectable conductor cross-sections / for auxiliary contacts	
<ul style="list-style-type: none"> solid 	lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²)
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary contacts 	box terminal connection terminals

Requirements

Design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 20 A fuse gL/gG: 10 A

Mechanical Design

Height	164 mm
Width	100 mm
Depth	117 mm
Mounting type	Complete unit in enclosure with EMC shield plate
<ul style="list-style-type: none"> • Mounting type / front mounting with 4-hole attachment 	No
<ul style="list-style-type: none"> • Mounting type / front mounting with central attachment 	Yes
<ul style="list-style-type: none"> • mounting type / rail mounting 	No
net weight	403 g

Environmental conditions

Ambient temperature / during operation	
<ul style="list-style-type: none"> • minimum • maximum 	-25 °C 55 °C
Ambient temperature / during storage / minimum	-25 °C

Certificates

<ul style="list-style-type: none"> • reference code / acc. to DIN EN 61346-2 	S
<ul style="list-style-type: none"> • Reference code / acc. to DIN EN 81346-2 	SF

Declaration of Conformity Test Certificates



[Miscellaneous](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

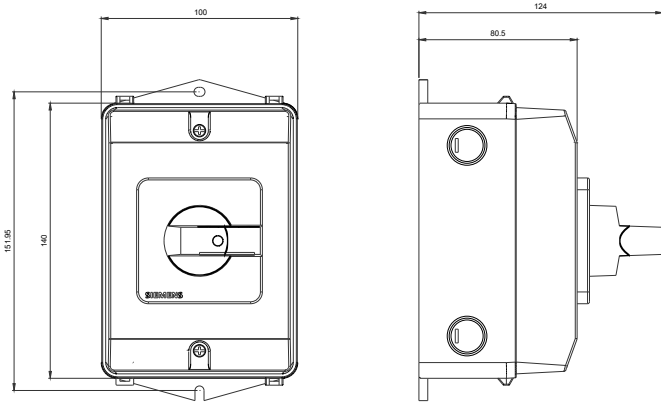
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2084-2GP21>

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

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

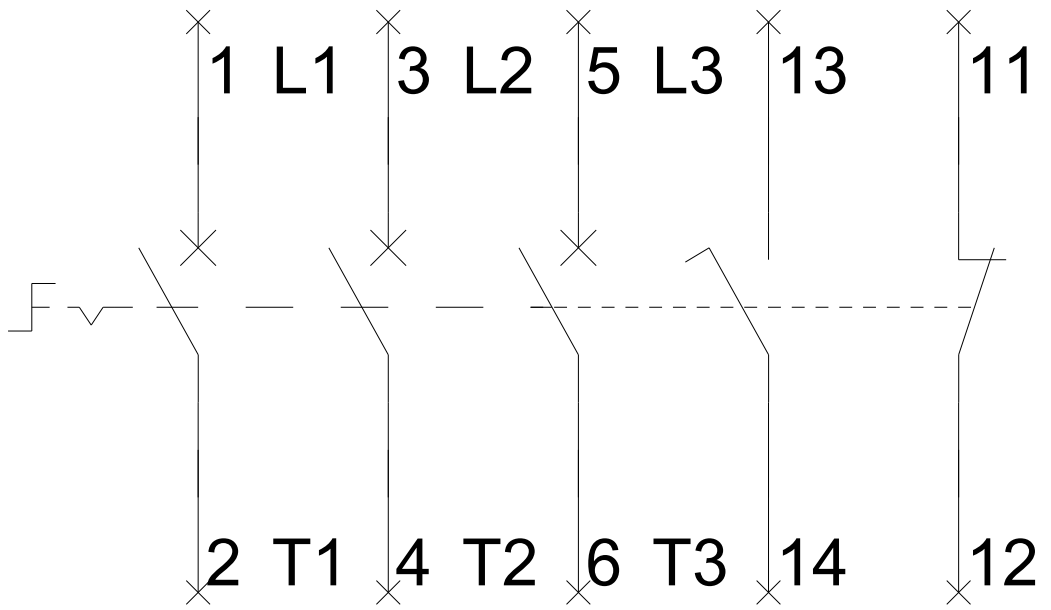
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

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



3LD2084-2GP21, 3LD2164-2GP21
3LD2084-2GP21

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