



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
mechanical service life (switching cycles)	
• typical	100 000
electrical endurance (switching cycles)	
• 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
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 • between converter and motor / at AC / at 0-550 Hz / rated value 	690 V 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 • per conductor / typical 	0.5 W 0.5 W
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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})	

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

340 A

340 A

Main circuit

operating frequency	
• initial value	50 Hz
• full-scale value	60 Hz
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 400 V / at 50/60 Hz / rated value	7.5 kW
• at AC-23 A / at 440 V / rated value	7.5 kW
• at AC-23 A / at 690 V / rated value	7.5 kW
• at AC-3 / at 240 V / rated value	3 kW
• at AC-3 / at 400 V / rated value	5.5 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
operating 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 disconnector	Yes
• EMERGENCY OFF switch	No
• safety switch	No

- maintenance/repair switch

Yes

Appearance

color / of the actuating element

black

Product details

- product function / can be locked into OFF position
- product feature / can be locked in ON position

Yes

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
- voltage trigger

No

No

Short circuit

conditional short-circuit current / with line-side fuse protection

- 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

- maximum
- minimum

10

18

type of connectable conductor cross-sections / for copper conductor

- solid
- finely stranded / with core end processing
- stranded

1x (1...6mm²)

1x (1...4mm²)

1x (1..6mm²)

type of connectable conductor cross-sections / for auxiliary contacts

- solid
- finely stranded / with core end processing

lateral auxiliary switch 2x (0,75 ... 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 ... 2,5mm²)

lateral auxiliary switch 2x (0,75 ... 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²

<ul style="list-style-type: none"> • stranded 	lateral auxiliary switch 2x (0,75 ... 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 ... 2,5mm²)
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 	fuse gL/gG: 20 A
<ul style="list-style-type: none"> • 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
mounting type	Complete unit in enclosure with EMC shield plate
mounting type	
<ul style="list-style-type: none"> • front mounting with 4-hole attachment 	No
<ul style="list-style-type: none"> • front mounting with central attachment 	Yes
<ul style="list-style-type: none"> • rail mounting 	No
net weight	403 g

Environmental conditions

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

Certificates

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

General Product Approval	Declaration of Conformity	Test Certificates
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[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, ...)

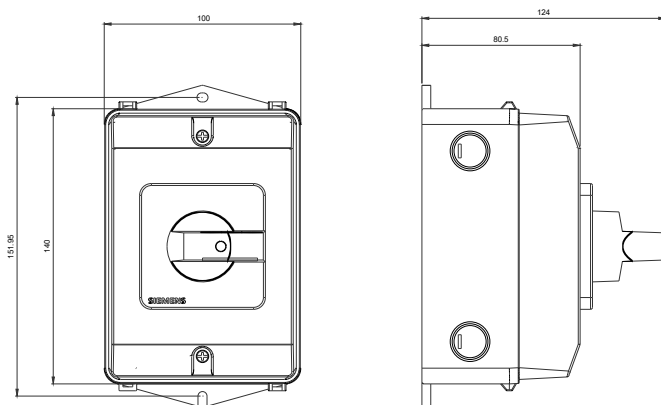
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2084-2GP21

CAX-Online-Generator

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

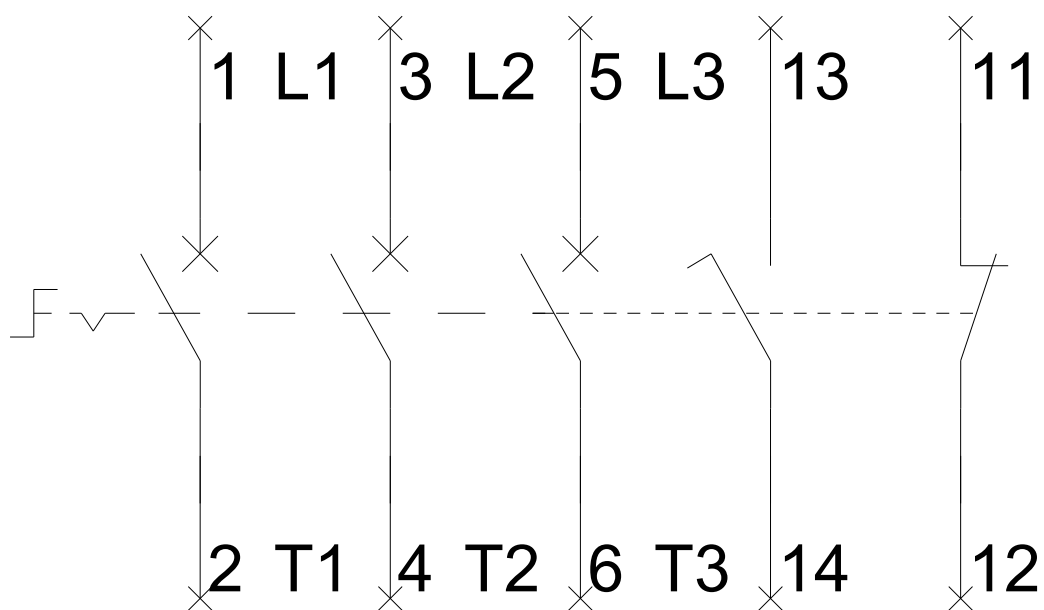
Tender specifications

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



3LD2084-2GP21, 3LD2184-2GP21

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