



SENTRON, Switch disconnecter 3LD, main switch, 3-pole, Iu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, front-mounted, 1 NC, 1 NO, rotary operating mechanism, black, Central mounting 22.5 mm of the handle

| 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                      |
| Design of the operating mechanism                                                                  | 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                                 |
| Type of device                                                                                     | fixed mounting                    |
| Type of switch                                                                                     | front mounted                     |
| Size of switch disconnecter                                                                        | 2                                 |
| Electrical endurance (switching cycles)                                                            |                                   |
| • at AC-23 A / at 690 V                                                                            | 6 000                             |
| I <sub>2t</sub> value / with closed switch / at 690 V / for combination switch + gG fuse / maximum | 4 kA <sup>2</sup> .s              |

|                                                                                                                |                      |
|----------------------------------------------------------------------------------------------------------------|----------------------|
| Let-through I <sub>2t</sub> value / with closed switch / at 440 V / for combination switch + gG fuse / maximum | 4 kA <sup>2</sup> .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                                                               | 25 A  |
| Operating voltage <ul style="list-style-type: none"> <li>at AC / at 50/60 Hz / rated value</li> </ul> | 690 V |

## Protection class

|                                    |               |
|------------------------------------|---------------|
| Protection class IP                | IP65          |
| Degree of protection NEMA rating   | 1, 3R, 4X, 12 |
| Protection class IP / on the front | IP65          |

## Dissipation

|                                                                                                                                                                              |                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Power loss [W] <ul style="list-style-type: none"> <li>for rated value of the current / at AC / in hot operating state / per pole</li> <li>per conductor / typical</li> </ul> | 1.1 W<br>1.1 W |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|

## Current

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Operating current <ul style="list-style-type: none"> <li>at AC-23 A / at 690 V / rated value</li> <li>at AC-23 A / at 400 V / rated value</li> <li>at AC-22 A / at 690 V / rated value</li> <li>at AC-21 / at 690 V / rated value</li> <li>at AC-21 A / at 240 V / rated value</li> <li>at AC-21 A / at 440 V / rated value</li> <li>at AC-22 A / at 240 V / rated value</li> <li>at AC-22 A / at 440 V / rated value</li> <li>at AC-23 A / at 240 V / rated value</li> <li>at AC-23 A / at 440 V / rated value</li> </ul> | 11 A<br>20 A<br>25 A<br>25 A<br>25 A<br>25 A<br>25 A<br>25 A<br>20 A<br>20 A |
| Operating current / of upstream fuse / rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 25 A                                                                         |
| Let-through current / with closed switch <ul style="list-style-type: none"> <li>at 440 V / for combination switch + gG fuse / maximum</li> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>                                                                                                                                                                                                                                                                                                | 3.5 kA<br>3.5 kA                                                             |
| Short-time withstand current (I <sub>cw</sub> ) <ul style="list-style-type: none"> <li>limited to 1 s / rated value</li> <li>at 690 V / limited to 1 s / rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                            | 640 A<br>640 A                                                               |

## Main circuit

|                                                     |        |
|-----------------------------------------------------|--------|
| Operating frequency                                 |        |
| • initial value                                     | 50 Hz  |
| • Full-scale value                                  | 60 Hz  |
| Operating power                                     |        |
| • at AC-23 A / at 240 V / rated value               | 5 kW   |
| • at AC-23 A / at 400 V / at 50/60 Hz / rated value | 9.5 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 |
| Operating 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 disconnecter       | 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

Operating current / at AC / acc. to UL 508 / rated value

25 A

Operating voltage / at AC / at 50/60 Hz / acc. to UL 508 / rated value

600 V

Active power [hp] / at AC / at 480 V / acc. to UL 508 / rated value

10

Active power [hp] / at AC / at 600 V / acc. to UL 508 / rated value

15

Short-time withstand current (SCCR) / at 600 V / acc. to UL 508

5 kA

Continuous current / of upstream fuse / according to UL / rated value

50 A

Type of fuse / according to UL

RK5

Number of connectable NC contacts / for auxiliary contacts / attachable / maximum

1

Number of connectable NO contacts / for auxiliary contacts / attachable / maximum

1

Number of connectable CO contacts / for auxiliary contacts / attachable / maximum

0

## Connections

AWG number / as coded connectable conductor cross section / solid

- maximum
- minimum

8

14

Type of connectable conductor cross-sections / for copper conductor

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

1x (1,5...16mm<sup>2</sup>)

1x (1,5...10mm<sup>2</sup>)

1x (1,5...16mm<sup>2</sup>)

Type of connectable conductor cross-sections / for auxiliary contacts

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

2x (0.75 ... 2.5 mm<sup>2</sup>), 1x 4 mm<sup>2</sup>

2x (0.75 ... 1.5 mm<sup>2</sup>), 1x 2.5 mm<sup>2</sup>

2x (0.75 ... 2.5 mm<sup>2</sup>), 1x 4 mm<sup>2</sup>

Type of electrical connection

- for main current circuit
- for auxiliary contacts

box terminal

connection terminals

## Requirements

|                                                                                                                     |                  |
|---------------------------------------------------------------------------------------------------------------------|------------------|
| Design of the fuse link                                                                                             |                  |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit / required</li> </ul>     | fuse gL/gG: 25 A |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch / required</li> </ul> | fuse gL/gG: 10 A |

| Mechanical Design                                                                          |                                     |
|--------------------------------------------------------------------------------------------|-------------------------------------|
| Height                                                                                     | 84 mm                               |
| Width                                                                                      | 67 mm                               |
| Depth                                                                                      | 116.5 mm                            |
| Mounting type                                                                              | Built-in unit fixed-mounted version |
| Mounting type                                                                              |                                     |
| <ul style="list-style-type: none"> <li>• front mounting with 4-hole attachment</li> </ul>  | No                                  |
| <ul style="list-style-type: none"> <li>• front mounting with central attachment</li> </ul> | Yes                                 |
| <ul style="list-style-type: none"> <li>• rail mounting</li> </ul>                          | No                                  |
| Net weight                                                                                 | 251 g                               |

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

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

| General Product Approval | Declaration of Conformity |
|--------------------------|---------------------------|
|--------------------------|---------------------------|



[Miscellaneous](#)



| Test Certificates | Shipping Approval | other |
|-------------------|-------------------|-------|
|-------------------|-------------------|-------|

[Special Test Certificate](#)



[Environmental Confirmations](#)

| Further information                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Information- and Downloadcenter (Catalogs, Brochures,...)</b><br><a href="http://www.siemens.com/lowvoltage/catalogs">http://www.siemens.com/lowvoltage/catalogs</a> |

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2154-1TP51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2154-1TP51>

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

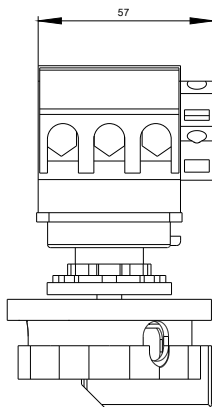
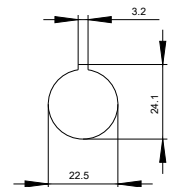
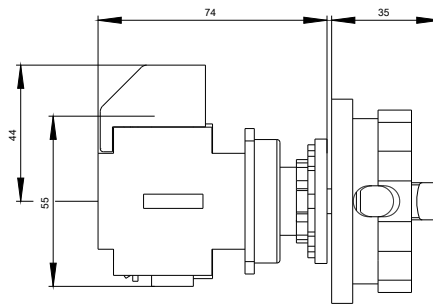
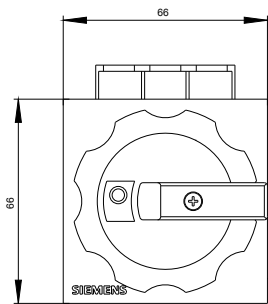
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**CAX-Online-Generator**

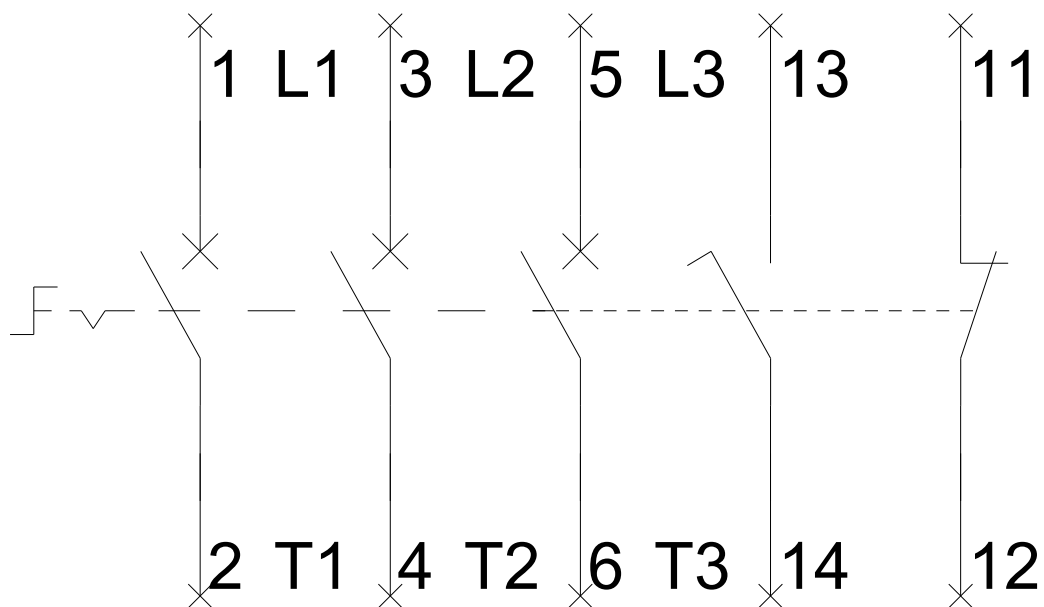
<http://www.siemens.com/cax>

**Tender specifications**

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



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