



SENTRON, Switch disconnecter 3LD, main switch, 3-pole, I<sub>u</sub>: 16 A, Operating power / at AC-23 A at 400 V: 7.5 kW, installation in distribution boards, knob-operated mechanism, black, handle direct at the switch

| 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                                                                  | 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                                                                                     | DIN-rail mounting              |
| Size of switch disconnecter                                                                        | 1                              |
| 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 | 2.5 kA <sup>2</sup> .s         |

|                                                                                                                |                        |
|----------------------------------------------------------------------------------------------------------------|------------------------|
| Let-through I <sub>2t</sub> value / with closed switch / at 440 V / for combination switch + gG fuse / maximum | 2.5 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                                                               | 16 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                | IP40 |
| Protection class IP / on the front | IP40 |

## 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> | 0.5 W<br>0.5 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> | 9 A<br>16 A<br>16 A<br>16 A<br>16 A<br>16 A<br>16 A<br>16 A<br>16 A<br>16 A |
| Operating current / of upstream fuse / rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 20 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 kA<br>3 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>                                                                                                                                                                                                                                                                                                                                            | 340 A<br>340 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               | 4 kW   |
| • at AC-23 A / at 400 V / at 50/60 Hz / rated value | 7.5 kW |
| • at AC-23 A / at 400 V / 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 current / rated value                     | 16 A   |

| Auxiliary circuit                                           |       |
|-------------------------------------------------------------|-------|
| Number of CO contacts / for auxiliary contacts              | 0     |
| Number of NC contacts / for auxiliary contacts              | 0     |
| Number of NO contacts / for auxiliary contacts              | 0     |
| 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                    | 2    |
| Hasp thickness / of the bracket locks / minimum      | 4 mm |
| Hasp thickness / of the bracket locks / maximum      | 6 mm |
| Product extension / optional                         |      |
| • motor drive                                        | No   |
| • Voltage trigger                                    | No   |

| Short circuit |  |
|---------------|--|
|---------------|--|

|                                                                                       |       |
|---------------------------------------------------------------------------------------|-------|
| Conditional short-circuit current / with line-side fuse protection                    |       |
| <ul style="list-style-type: none"> <li>at 690 V / by gG fuse / rated value</li> </ul> | 50 kA |

#### according UL

|                                                                                   |       |
|-----------------------------------------------------------------------------------|-------|
| Operating current / at AC / acc. to UL 508 / rated value                          | 16 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               | 7.5   |
| Active power [hp] / at AC / at 600 V / acc. to UL 508 / rated value               | 10    |
| 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 | 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"> <li>maximum</li> <li>minimum</li> </ul>                                                    | 10<br>18                                                                                                                                                                           |
| Type of connectable conductor cross-sections / for copper conductor                                                           |                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul> | 1x (1...6mm <sup>2</sup> )<br>1x (1...4mm <sup>2</sup> )<br>1x (1...6mm <sup>2</sup> )                                                                                             |
| Type of connectable conductor cross-sections / for auxiliary contacts                                                         |                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul> | 2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup><br>2x (0.75 ... 1.5 mm <sup>2</sup> ), 1x 2.5 mm <sup>2</sup><br>2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup> |
| Type of electrical connection                                                                                                 |                                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>for main current circuit</li> <li>for auxiliary contacts</li> </ul>                    | box terminal<br>connection terminals                                                                                                                                               |

#### Requirements

|                         |  |
|-------------------------|--|
| Design of the fuse link |  |
|-------------------------|--|

- 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                                                                                     | 45 mm                               |
| Width                                                                                      | 53 mm                               |
| Depth                                                                                      | 91 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> | No                                  |
| <ul style="list-style-type: none"> <li>• rail mounting</li> </ul>                          | Yes                                 |
| Net weight                                                                                 | 168 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 Conformations](#)

## 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=3LD2030-0TK11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2030-0TK11>

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

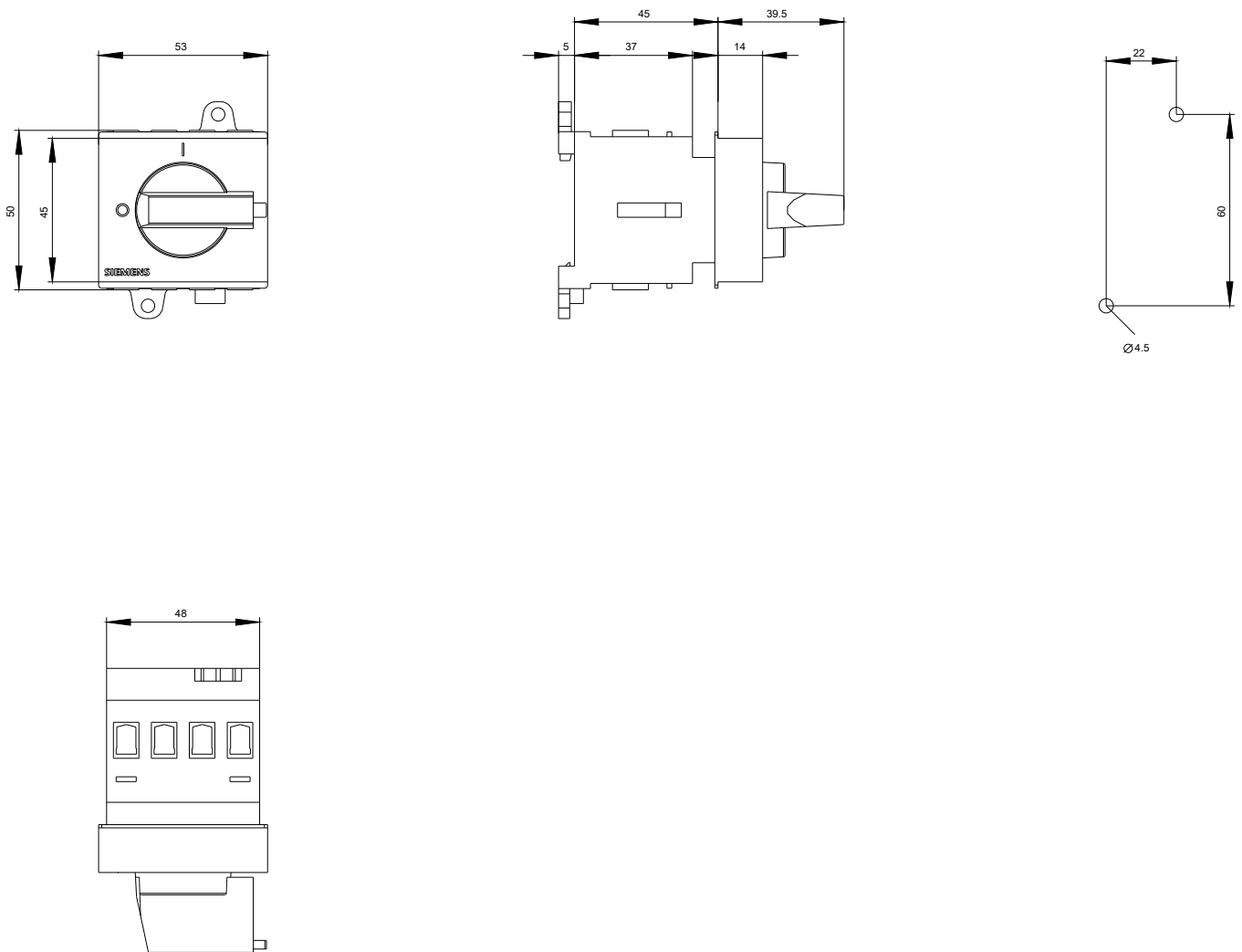
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2030-0TK11](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2030-0TK11)

**CAX-Online-Generator**

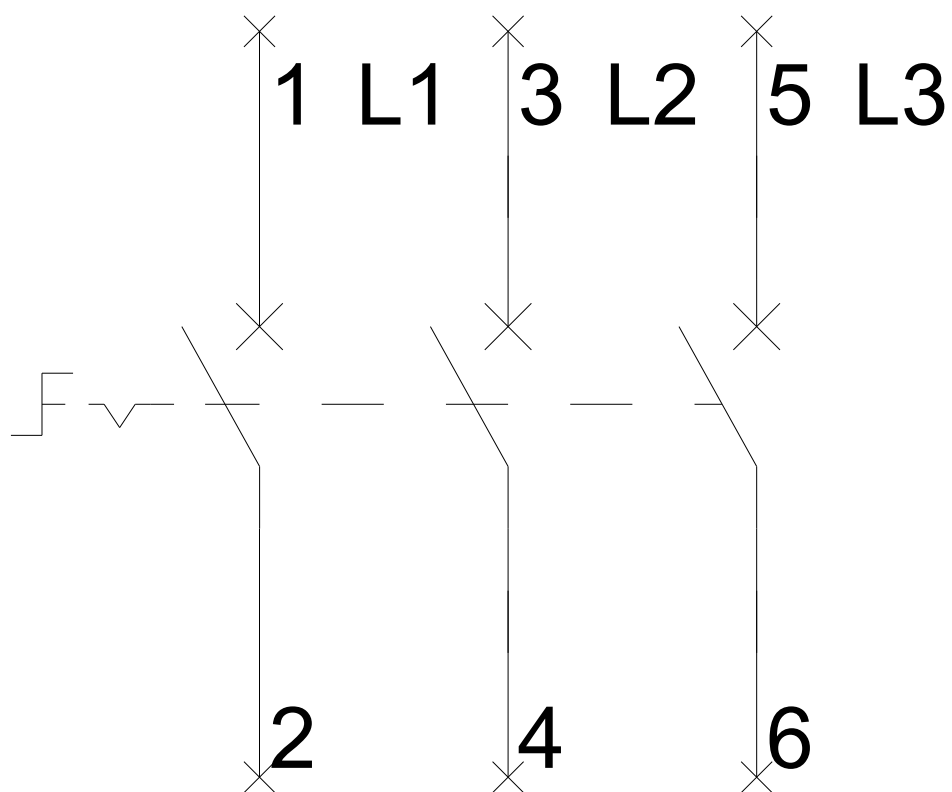
<http://www.siemens.com/cax>

**Tender specifications**

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



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