

SENTRON, Switch disconnecter 3LD, emergency switching-off switch, 4- pole, Iu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, floor mounting with door coupling, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle



| Model  |  |
|--|--|
| Product brand name   | SENTRON                                |
| Product designation  | 3LD Switch disconnecter                |
| Design of the product  | EMERGENCY-STOP 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, red/yellow |
| Type of the driving mechanism / motor drive                      | No                                     |

| General technical data   |                                   |
|--|-----------------------------------|
| Number of poles  | 4                                 |
| Type of device   | fixed mounting                    |
| Type of switch   | Floor mounting with door coupling |
| Size of switch disconnecter  | 1                                 |
| Electrical endurance (switching cycles)  | 6 000                             |
| <ul style="list-style-type: none"> <li>at AC-23 A / at 690 V</li> </ul>                |                                   |
| I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum | 2.5 kA2.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                | 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> | 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   |   |
| <ul style="list-style-type: none"> <li>• initial value</li> <li>• Full-scale value</li> </ul>   | <p>50 Hz</p> <p>60 Hz</p>   |
| Operating power   |   |
| <ul style="list-style-type: none"> <li>• at AC-23 A / at 240 V / rated value</li> <li>• at AC-23 A / at 400 V / at 50/60 Hz / rated value</li> <li>• at AC-23 A / at 400 V / rated value</li> <li>• at AC-23 A / at 440 V / rated value</li> <li>• at AC-23 A / at 690 V / rated value</li> <li>• at AC-3 / at 240 V / rated value</li> <li>• at AC-3 / at 400 V / rated value</li> <li>• at AC-3 / at 690 V / rated value</li> </ul> | <p>4 kW</p> <p>7.5 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 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  |  |
| <ul style="list-style-type: none"> <li>• Main switch</li> <li>• switch disconnecter</li> <li>• EMERGENCY OFF switch</li> <li>• safety switch</li> <li>• maintenance/repair switch</li> </ul> | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> |

### Appearance

|                                  |     |
|----------------------------------|-----|
| Color / of the actuating element | red |
|----------------------------------|-----|

### Product details

|  |                     |
|--|---------------------|
| <ul style="list-style-type: none"> <li>• Product function / can be locked into OFF position</li> </ul> | 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   |                     |
| <ul style="list-style-type: none"> <li>• motor drive</li> <li>• Voltage trigger</li> </ul>             | <p>No</p> <p>No</p> |

## 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                          | 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 | 3     |
| 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 <sup>2</sup> )   |
| • finely stranded / with core end processing                          | 1x (1...4mm <sup>2</sup> )   |
| • stranded  | 1x (1..6mm <sup>2</sup> )  |
| Type of connectable conductor cross-sections / for auxiliary contacts |  |
| • solid   | lateral auxiliary switch 2x (0,75 ... 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 ... 2,5mm <sup>2</sup> ) |
| • finely stranded / with core end processing                          | lateral auxiliary switch 2x (0,75 ... 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup>           |
| • stranded  | lateral auxiliary switch 2x (0,75 ... 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 ... 2,5mm <sup>2</sup> ) |
| 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
- for short-circuit protection of the auxiliary switch / required

fuse gL/gG: 20 A

fuse gL/gG: 10 A

## Mechanical Design

|               |  |
|---------------|--|
| Height        | 84 mm  |
| Width         | 67 mm  |
| Depth         | 429.5 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> <li>• front mounting with central attachment</li> <li>• rail mounting</li> </ul> |
| Net weight    | 423 g  |

## Environmental conditions

|  |  |
|--|--|
| Ambient temperature / during operation         | <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> |
| Ambient temperature / during storage / minimum |  |

-25 °C

55 °C

-25 °C

## Certificates

### Reference code

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

S

SF

## General Product Approval

## Declaration of Conformity



CCC



CSA



UL



VDE

[Miscellaneous](#)



EG-Konf.

### Test Certificates

[Special Test Certificate](#)

### Shipping Approval



LRS

### other

[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=3LD2013-1TL53>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2013-1TL53>

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

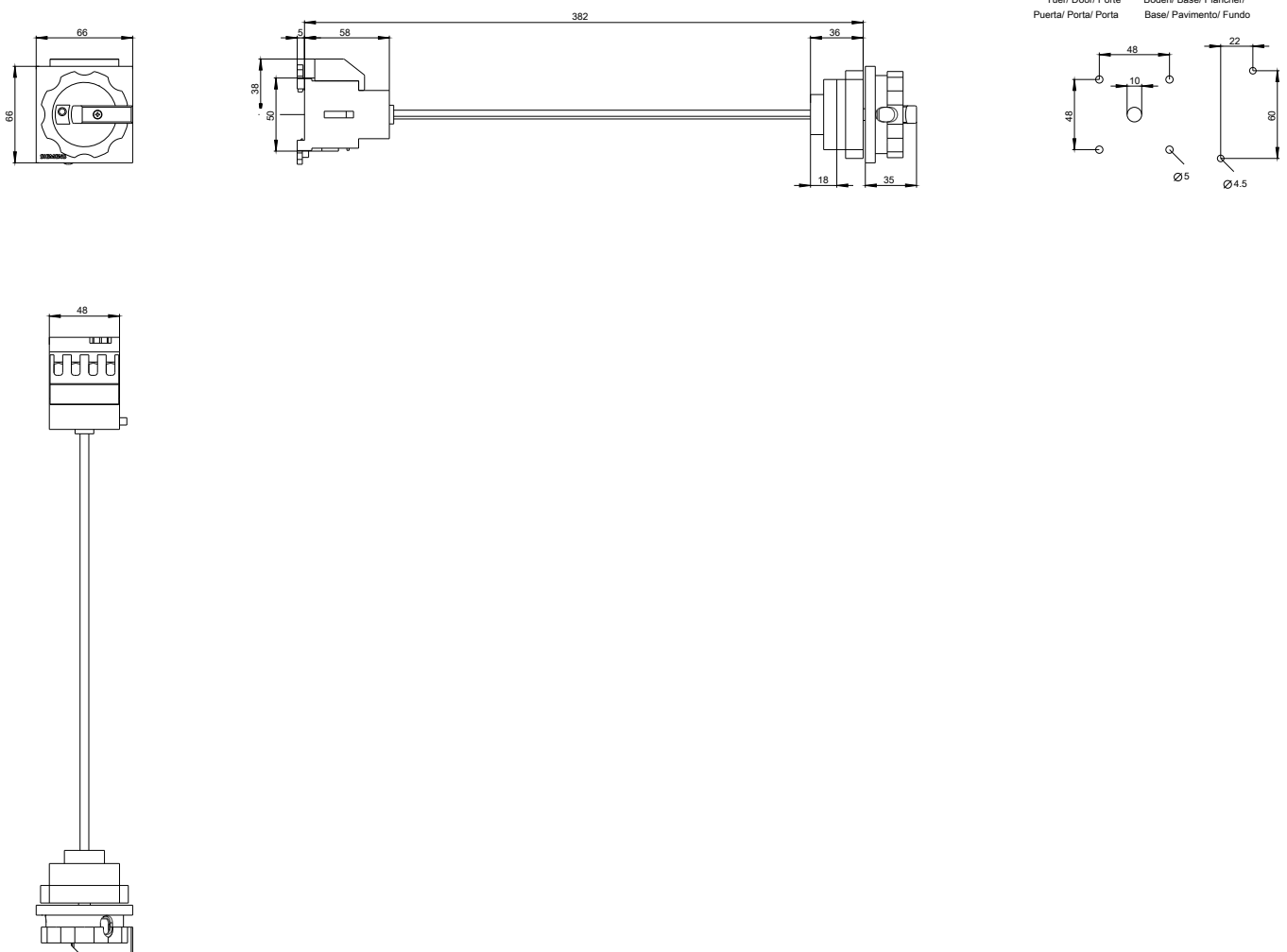
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2013-1TL53](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2013-1TL53)

### CAX-Online-Generator

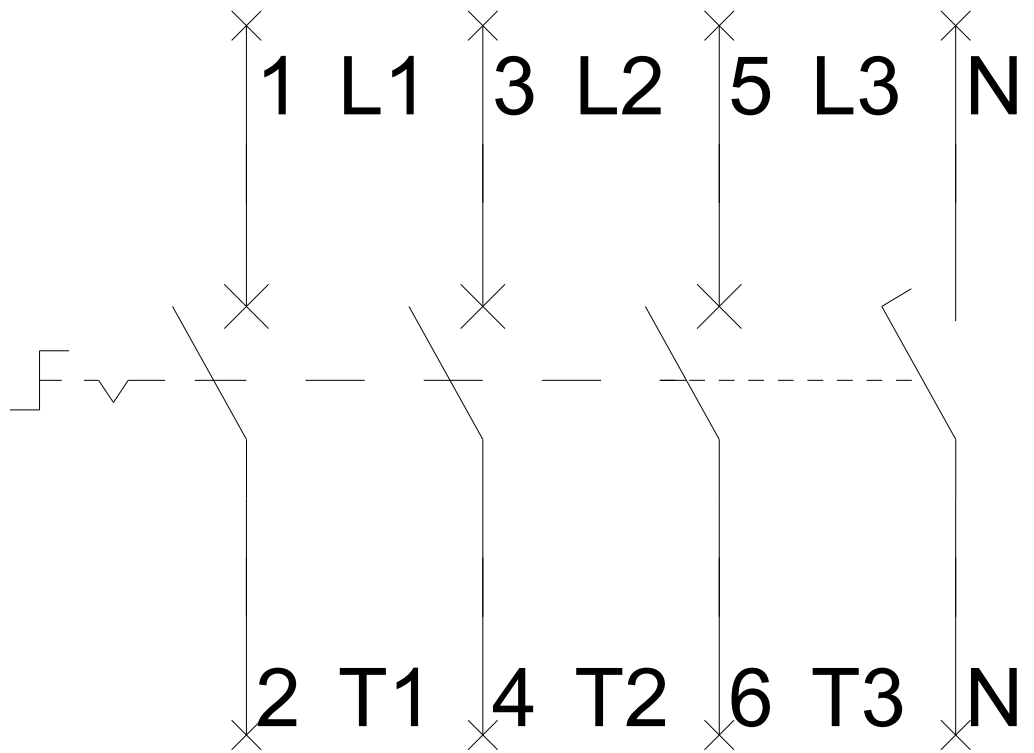
<http://www.siemens.com/cax>

### Tender specifications

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



**-Q1**



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