



SENTRON, Switch disconnecter 3LD, emergency switching-off switch, 4-pole, Iu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, front-mounted, knob-operated mechanism, Red / yellow, central mounting 22.5 mm 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 actuating element  | selector switch                     |
| design of handle   | knob-operated 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   | front mounted                       |
| 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                               |
| I <sub>2t</sub> value / with closed switch / at 690 V / for combination switch + gG fuse / maximum             | 3 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              |
| operating frequency / maximum  | 50 1/h                              |
| Voltage  |                                     |
| insulation voltage / rated value   | 690 V                               |
| surge voltage resistance / rated value   | 6 kV                                |
| 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]   |                                     |
| • for rated value of the current / at AC / in hot operating state / per pole                                   | 0.5 W                               |
| • per conductor / typical  | 1 W                                 |
| Current  |                                     |
| operational current  |                                     |
| • at 40 °C / rated value   | 16 A                                |
| • at 45 °C / rated value   | 16 A                                |
| • at 50 °C / rated value   | 16 A                                |
| • at 55 °C / rated value   | 16 A                                |

|   |        |
|---|--------|
| <ul style="list-style-type: none"> <li>• at AC / rated value</li> </ul>   | 16 A   |
| <ul style="list-style-type: none"> <li>• at AC-23 A / at 400 V / rated value</li> </ul>                               | 16 A   |
| <ul style="list-style-type: none"> <li>• at AC-21 / at 690 V / rated value</li> </ul>                                 | 16 A   |
| <ul style="list-style-type: none"> <li>• at AC-21 A / at 240 V / rated value</li> </ul>                               | 16 A   |
| <ul style="list-style-type: none"> <li>• at AC-21 A / at 440 V / rated value</li> </ul>                               | 16 A   |
| operational 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> </ul>             | 3 kA   |
| <ul style="list-style-type: none"> <li>• at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul> | 3 kA   |
| <b>Main circuit</b>   |        |
| operating power   |        |
| <ul style="list-style-type: none"> <li>• at AC-23 A / at 240 V / rated value</li> </ul>                               | 4 kW   |
| <ul style="list-style-type: none"> <li>• at AC-23 A / at 400 V / rated value</li> </ul>                               | 8 kW   |
| <ul style="list-style-type: none"> <li>• at AC-23 A / at 440 V / rated value</li> </ul>                               | 7.5 kW |
| <ul style="list-style-type: none"> <li>• at AC-23 A / at 690 V / rated value</li> </ul>                               | 8 kW   |
| <ul style="list-style-type: none"> <li>• at AC-3 / at 240 V / rated value</li> </ul>                                  | 3 kW   |
| <ul style="list-style-type: none"> <li>• at AC-3 / at 400 V / rated value</li> </ul>                                  | 6 kW   |
| <ul style="list-style-type: none"> <li>• at AC-3 / at 690 V / rated value</li> </ul>                                  | 5.5 kW |
| operational current / rated value   | 16 A   |
| <b>Auxiliary circuit</b>  |        |
| 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  |
| <b>Suitability</b>  |        |
| suitability for use   |        |
| <ul style="list-style-type: none"> <li>• main switch</li> </ul>   | Yes    |
| <ul style="list-style-type: none"> <li>• switch disconnecter</li> </ul>   | Yes    |
| <ul style="list-style-type: none"> <li>• EMERGENCY OFF switch</li> </ul>  | Yes    |
| <ul style="list-style-type: none"> <li>• safety switch</li> </ul>   | Yes    |
| <ul style="list-style-type: none"> <li>• maintenance/repair switch</li> </ul>   | Yes    |
| <b>Appearance</b>   |        |
| color / of the actuating element  | red    |
| <b>Product details</b>  |        |
| product feature   |        |
| <ul style="list-style-type: none"> <li>• can be locked into OFF position</li> </ul>                                   | 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  |        |
| <ul style="list-style-type: none"> <li>• motor drive</li> </ul>   | No     |
| <ul style="list-style-type: none"> <li>• voltage trigger</li> </ul>   | No     |
| <b>Short circuit</b>  |        |
| 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  |
| <b>according UL</b>   |        |
| operational current / at AC / according to UL 508/UL 60947-4-1 / rated value  | 16 A   |
| operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value                              | 600 V  |
| active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value                                 | 7.5    |
| active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value                                 | 10     |
| short-time withstand current (SCCR) / at 600 V / according to UL 508/UL 60947-4-1                                     | 5 kA   |

|   |  |
|---|--|
| continuous current / of upstream fuse / according to UL / rated value             | 50 A   |
| type of fuse / according to UL  | RK5  |
| <b>Number</b>   |  |
| 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  |
| <b>Connections</b>  |  |
| 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   | 2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>   |
| • finely stranded / with core end processing                                      | 2x (0.75 ... 1.5 mm <sup>2</sup> ), 1x 2.5 mm <sup>2</sup> |
| • stranded  | 2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup>   |
| type of electrical connection   |  |
| • for main current circuit  | box terminal   |
| • for auxiliary contacts  | connection terminals                                       |
| <b>Requirements</b>   |  |
| design of the fuse link   |  |
| • for short-circuit protection of the main circuit / required                     | fuse gL/gG: 20 A   |
| • for short-circuit protection of the auxiliary switch / required                 | fuse gL/gG: 10 A   |
| <b>Mechanical Design</b>  |  |
| height  | 66 mm  |
| width   | 49 mm  |
| depth   | 113.5 mm   |
| fastening method  | Built-in unit fixed-mounted version                        |
| fastening method  |  |
| • 4-hole front mounting   | No   |
| • front mounting with central attachment  | Yes  |
| • rail mounting   | No   |
| net weight  | 199 g  |
| <b>Environmental conditions</b>   |  |
| ambient temperature / during operation  |  |
| • minimum   | -25 °C   |
| • maximum   | 55 °C  |
| ambient temperature / during storage / minimum                                    | -25 °C   |
| <b>General Product Approval</b>   |  |



[Confirmation](#)



[Miscellaneous](#)

|                          |                           |                   |                   |       |
|--------------------------|---------------------------|-------------------|-------------------|-------|
| General Product Approval | Declaration of Conformity | Test Certificates | Marine / Shipping | other |
|--------------------------|---------------------------|-------------------|-------------------|-------|



[Special Test Certificate](#)



[Miscellaneous](#)

other

[Environmental Confirmations](#)

#### 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?mfb=3LD2050-1TL13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2050-1TL13>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3LD2050-1TL13](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3LD2050-1TL13)

**CAX-Online-Generator**

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

**Tender specifications**

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



