# **SIEMENS**

## Data sheet

## 3LD2405-0TK13

SENTRON, Switch disconnector 3LD, emergency switching-off

switch, 3- pole, lu=250 A, operating power / at AC-23 A 400 V: 132 kW, front-mounted, knob-operated mechanism, red/yellow, 4-hole mounting of the handle

Model Product brand name SENTRON Product designation 3LD Switch disconnector Design of the product **EMERGENCY-STOP** switch Display version / for switch position indicator manual 1 ON - 0 OFF operation Design of the operating mechanism selector switch Design of handle knob-operated mechanism, red/yellow Type of the driving mechanism / motor drive No Number of poles 3 Type of device fixed mounting Type of switch front mounted Size of switch disconnector 5 Electrical endurance (switching cycles) 6 0 0 0 • at AC-23 A / at 690 V I2t value / with closed switch / at 690 V / for 557 kA2.s combination switch + gG fuse / maximum

| Let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum | 557 kA2.s     |
|--|---------------|
| Mechanical service life (switching cycles) / typical   | 100 000       |
| Operating frequency / maximum  | 50 1/h        |
| ′oltage  |               |
| Insulation voltage / rated value   | 690 V         |
| Surge voltage resistance / rated value   | 8 kV          |
| Operating current / at AC / rated value  | 250 A         |
| Operating voltage  |               |
| • at AC / at 50/60 Hz / rated value  | 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]   |               |
| • for rated value of the current / at AC / in hot  | 36 W          |
| operating state / per pole   |               |
| • per conductor / typical  | 36 W          |
| Current  | _             |
| Operating current  |               |
| • at AC-23 A / at 690 V / rated value  | 58 A          |
| • at AC-23 A / at 400 V / rated value  | 224 A         |
| • at AC-22 A / at 690 V / rated value  | 230 A         |
| • at AC-21 / at 690 V / rated value  | 250 A         |
| • at AC-21 A / at 240 V / rated value  | 250 A         |
| • at AC-21 A / at 440 V / rated value  | 250 A         |
| • at AC-22 A / at 240 V / rated value  | 230 A         |
| • at AC-22 A / at 440 V / rated value  | 230 A         |
| • at AC-23 A / at 240 V / rated value  | 230 A         |
| • at AC-23 A / at 440 V / rated value  | 224 A         |
| Operating current / of upstream fuse / rated value   | 250 A         |
| Let-through current / with closed switch   |               |
| <ul> <li>at 440 V / for combination switch + gG fuse /<br/>maximum</li> </ul>                      | 15 kA         |
|  | 15 kA         |
| • at 690 V / for combination switch + gG fuse / maximum permissible                                |               |
| • at 690 V / for combination switch + gG fuse /  |               |
| <ul> <li>at 690 V / for combination switch + gG fuse /<br/>maximum permissible</li> </ul>          | 4 000 A       |

| Operating frequency  |        |
|--|--------|
| ● initial value  | 50 Hz  |
| <ul> <li>Full-scale value</li> </ul>                           | 60 Hz  |
| Operating power  |        |
| • at AC-23 A / at 240 V / rated value                          | 75 kW  |
| • at AC-23 A / at 400 V / at 50/60 Hz / rated value            | 132 kW |
| • at AC-23 A / at 400 V / rated value                          | 132 kW |
| • at AC-23 A / at 440 V / rated value                          | 132 kW |
| • at AC-23 A / at 690 V / rated value                          | 55 kW  |
| • at AC-3 / at 240 V / rated value                             | 55 kW  |
| • at AC-3 / at 400 V / rated value                             | 110 kW |
| • at AC-3 / at 690 V / rated value                             | 45 kW  |
| Operating current / rated value                                | 250 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 /<br>maximum | 500 V  |
| Continuous current / of the auxiliary contact / rated          | 10 A   |
| value  |        |
| Insulation voltage / of the auxiliary switch / rated           | 500 V  |
| value  |        |
|  |        |
| Suitability<br>Suitability for use                             |        |
| Main switch  | Yes    |
|  | Yes    |
| switch disconnector  |        |
| EMERGENCY OFF switch   | Yes    |
| <ul> <li>safety switch</li> </ul>                              | Yes    |
| <ul> <li>maintenance/repair switch</li> </ul>                  | Yes    |
| Appearance   |        |
| Color / of the actuating element                               | red    |
| Product details  |        |
| Product function / can be locked into OFF                      | Yes    |
| position   |        |
| Number of bracket locks / maximum                              | 3      |
| 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   |   |
| • at 690 V / by gG fuse / rated value  | 50 kA   |
| according UL   |   |
| Operating current / at AC / acc. to UL 508 / rated value                             | 250 A   |
| Operating voltage / at AC / at 50/60 Hz / acc. to UL<br>508 / rated value            | 600 V   |
| Active power [hp] / at AC / at 480 V / acc. to UL 508 / rated value                  | 100   |
| Active power [hp] / at AC / at 600 V / acc. to UL 508 / rated value                  | 75  |
| Short-time withstand current (SCCR) / at 600 V / acc. to UL 508                      | 10 kA   |
| Continuous current / of upstream fuse / according to UL / rated value                | 200 A   |
| Type of fuse / according to UL   | RK5   |
| Number of connectable NC contacts / for auxiliary<br>contacts / attachable / maximum | 3   |
| 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  |   |
| • minimum  | 1   |
| • maximum  | 4/0   |
| Type of connectable conductor cross-sections / for<br>copper conductor               |   |
| • solid  | 1x (16185mm²)   |
| <ul> <li>finely stranded / with core end processing</li> </ul>                       | 1x (16150mm²)   |
| • stranded   | 1x (16185mm²)   |
| Type of connectable conductor cross-sections / for auxiliary contacts                |   |
| • solid  | lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) |
| <ul> <li>finely stranded / with core end processing</li> </ul>                       | lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²      |
| • stranded   | lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²) |
| Type of electrical connection  |   |
| • for main current circuit   | box terminal  |

| <ul> <li>for auxiliary contacts</li> </ul>   | connection terminals  |
|--|---|
|  |   |
| Requirements   |   |
| Design of the fuse link  |   |
| <ul> <li>for short-circuit protection of the main circuit / required</li> </ul>              | fuse gL/gG: 250 A   |
| <ul> <li>for short-circuit protection of the auxiliary switch</li> <li>/ required</li> </ul> | fuse gL/gG: 10 A  |
| Mechanical Design  |   |
| Height   | 169 mm  |
| Width  | 112 mm  |
| Depth  | 94 mm   |
| Mounting type  | Built-in unit fixed-mounted version   |
| Mounting type  |   |
| <ul> <li>front mounting with 4-hole attachment</li> </ul>                                    | Yes   |
| <ul> <li>front mounting with central attachment</li> </ul>                                   | No  |
| ● rail mounting  | No  |
| Net weight   | 2 093 g   |
| Environmental conditions   |   |
| Ambient temperature / during operation   |   |
| • minimum  | -25 °C  |
| • maximum  | 55 °C   |
| Ambient temperature / during storage / minimum   | -25 °C  |
| Certificates   |   |
| Reference code   |   |
| • acc. to DIN EN 61346-2   | S   |
| • acc. to DIN EN 81346-2   | SF  |
| General Product Approval   | Declaration of Test Certificates<br>Conformity  |
|  | EG-Konf.     Type Test Certific-<br>ates/Test Report     Special Test Certific-<br>ficate |
| 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?mlfb=3LD2405-0TK13

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2405-0TK13

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2405-0TK13

#### CAx-Online-Generator

http://www.siemens.com/cax

#### **Tender specifications**

http://www.siemens.com/specifications













