



SENTRON, Switch disconnecter 3LD, emergency switching-off switch, 3- pole,  $I_n=250$  A, operating power / at AC-23 A 400 V: 132 kW, floor mounting with door coupling, knob-operated mechanism, red/yellow, 4-hole mounting of the handle

| Model                                                                               |                                     |
|-------------------------------------------------------------------------------------|-------------------------------------|
| product brand name                                                                  | SENTRON                             |
| product designation                                                                 | Switch disconnecter                 |
| design of the product                                                               | EMERGENCY-STOP switch               |
| display version for switch position indicator manual operation                      | 1 ON - 0 OFF                        |
| type of switch                                                                      | Floor mounting with door coupling   |
| design of the actuating element                                                     | selector switch                     |
| color of the actuating element                                                      | red                                 |
| design of handle                                                                    | knob-operated mechanism, red/yellow |
| type of the driving mechanism motor drive                                           | No                                  |
| General technical data                                                              |                                     |
| number of poles                                                                     | 3                                   |
| size of switch disconnecter                                                         | 5                                   |
| mechanical service life (operating cycles) typical                                  | 100 000                             |
| electrical endurance (operating cycles)                                             |                                     |
| • at AC-23 A at 690 V                                                               | 6 000                               |
| operating frequency maximum                                                         | 50 1/h                              |
| degree of pollution                                                                 | 3                                   |
| Voltage                                                                             |                                     |
| insulation voltage rated value                                                      | 690 V                               |
| surge voltage resistance rated value                                                | 8 kV                                |
| operating voltage                                                                   |                                     |
| • at AC rated value                                                                 | 690 V                               |
| operating frequency rated value                                                     |                                     |
| • minimum                                                                           | 50 Hz                               |
| • maximum                                                                           | 60 Hz                               |
| 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 | 36 W                                |
| Main circuit                                                                        |                                     |
| operational current                                                                 |                                     |
| • 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 400 V rated value                                                   | 250 A                               |

|                                                                                                                   |                        |
|-------------------------------------------------------------------------------------------------------------------|------------------------|
| <ul style="list-style-type: none"> <li>• at AC-21 A at 440 V rated value</li> </ul>                               | 250 A                  |
| <ul style="list-style-type: none"> <li>• at AC-23 A at 400 V rated value</li> </ul>                               | 224 A                  |
| <b>operating power</b>                                                                                            |                        |
| <ul style="list-style-type: none"> <li>• at AC-23 A at 240 V rated value</li> </ul>                               | 75 kW                  |
| <ul style="list-style-type: none"> <li>• at AC-23 A at 400 V rated value</li> </ul>                               | 132 kW                 |
| <ul style="list-style-type: none"> <li>• at AC-23 A at 440 V rated value</li> </ul>                               | 132 kW                 |
| <ul style="list-style-type: none"> <li>• at AC-23 A at 690 V rated value</li> </ul>                               | 55 kW                  |
| <ul style="list-style-type: none"> <li>• at AC-3 at 240 V rated value</li> </ul>                                  | 55 kW                  |
| <ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> </ul>                                  | 110 kW                 |
| <ul style="list-style-type: none"> <li>• at AC-3 at 690 V rated value</li> </ul>                                  | 45 kW                  |
| <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 main switch                                                                                   | Yes                    |
| suitability for use switch disconnecter                                                                           | Yes                    |
| suitability for use EMERGENCY OFF switch                                                                          | Yes                    |
| suitability for use safety switch                                                                                 | Yes                    |
| suitability for use maintenance/repair switch                                                                     | Yes                    |
| <b>Product details</b>                                                                                            |                        |
| product feature can be locked into OFF position                                                                   | Yes                    |
| <b>Accessories</b>                                                                                                |                        |
| 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                     |
| number of connectable NC contacts for auxiliary contacts attachable maximum                                       | 3                      |
| number of connectable NO contacts for auxiliary contacts attachable maximum                                       | 5                      |
| number of connectable CO contacts for auxiliary contacts attachable maximum                                       | 0                      |
| number of bracket locks maximum                                                                                   | 3                      |
| hasp thickness of the bracket locks                                                                               | 4 ... 6 mm             |
| <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                  |
| let-through current with closed switch                                                                            |                        |
| <ul style="list-style-type: none"> <li>• at 240 V for combination switch + gG fuse maximum</li> </ul>             | 15 kA                  |
| <ul style="list-style-type: none"> <li>• at 440 V for combination switch + gG fuse maximum</li> </ul>             | 15 kA                  |
| <ul style="list-style-type: none"> <li>• at 690 V for combination switch + gG fuse maximum permissible</li> </ul> | 15 kA                  |
| I <sup>2</sup> t value with closed switch                                                                         |                        |
| <ul style="list-style-type: none"> <li>• at 240 V for combination switch + gG fuse maximum</li> </ul>             | 557 kA <sup>2</sup> ·s |
| <ul style="list-style-type: none"> <li>• at 440 V for combination switch + gG fuse maximum</li> </ul>             | 557 kA <sup>2</sup> ·s |
| <ul style="list-style-type: none"> <li>• at 690 V for combination switch + gG fuse maximum</li> </ul>             | 557 kA <sup>2</sup> ·s |
| 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: 250 A      |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul> | fuse gL/gG: 10 A       |
| operational current of upstream fuse rated value                                                                  | 250 A                  |
| <b>according UL</b>                                                                                               |                        |
| operational current at AC according to UL 508/UL 60947-4-1 rated value                                            | 250 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                                     | 100                    |

|                                                                               |       |
|-------------------------------------------------------------------------------|-------|
| active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value | 75    |
| short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1 | 10 kA |
| continuous current of upstream fuse according to UL rated value               | 200 A |
| type of fuse according to UL                                                  | RK5   |

#### Connections

|                                                                       |                                                                                                                                            |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| AWG number as coded connectable conductor cross section solid maximum | 1                                                                                                                                          |
| •                                                                     | 4/0                                                                                                                                        |
| type of connectable conductor cross-sections for copper conductor     |                                                                                                                                            |
| • solid                                                               | 1x (16 ... 185mm <sup>2</sup> )                                                                                                            |
| • finely stranded with core end processing                            | 1x (16 ... 150mm <sup>2</sup> )                                                                                                            |
| • stranded                                                            | 1x (16 ... 185mm <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                                                                                                                       |

#### Mechanical Design

|                                          |                                     |
|------------------------------------------|-------------------------------------|
| height                                   | 169 mm                              |
| width                                    | 112 mm                              |
| depth                                    | 94 mm                               |
| type of device                           | fixed mounting                      |
| fastening method                         | Built-in unit fixed-mounted version |
| fastening method                         |                                     |
| • 4-hole front mounting                  | Yes                                 |
| • front mounting with central attachment | No                                  |
| • rail mounting                          | No                                  |
| Net Weight                               | 2.769 kg                            |

#### Environmental conditions

|                                      |        |
|--------------------------------------|--------|
| ambient temperature during operation |        |
| • minimum                            | -25 °C |
| • maximum                            | 55 °C  |
| ambient temperature during storage   |        |
| • minimum                            | -25 °C |
| • maximum                            | 55 °C  |

#### Approvals Certificates

|             |                          |
|-------------|--------------------------|
| Environment | General Product Approval |
|-------------|--------------------------|

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[Confirmation](#)

|                          |       |
|--------------------------|-------|
| General Product Approval | other |
|--------------------------|-------|



[Confirmation](#)



## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2418-0TK13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2418-0TK13>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2418-0TK13](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2418-0TK13)

### CAX-Online-Generator

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

### Tender specifications

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

### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)





