



SENTRON, Switch disconnecter 3LD, main switch, 3-pole, Iu: 16 A, Operating power / at AC-23 A at 400 V: 7.5 kW, molded-plastic encapsulation for metric screw connection, 1 NC, 1 NO, rotary operating mechanism, black

| Model                                                                               |                                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------|
| product brand name                                                                  | SENTRON                                            |
| product designation                                                                 | Switch disconnecter                                |
| design of the product                                                               | Main switch                                        |
| display version for switch position indicator manual operation                      | 1 ON - 0 OFF                                       |
| type of switch                                                                      | Molded-plastic enclosure for metric threaded joint |
| design of the actuating element                                                     | Short rotary knob                                  |
| color of the actuating element                                                      | black                                              |
| design of handle                                                                    | rotary operating mechanism, black                  |
| type of the driving mechanism motor drive                                           | No                                                 |
| General technical data                                                              |                                                    |
| number of poles                                                                     | 3                                                  |
| number of poles note                                                                | N                                                  |
| size of switch disconnecter                                                         | 1                                                  |
| 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                                                | 6 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, 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                                              |
| Main circuit                                                                        |                                                    |
| operational current                                                                 |                                                    |
| • at AC-21 at 690 V rated value                                                     | 16 A                                               |
| • at AC-21 A at 240 V rated value                                                   | 16 A                                               |
| • at AC-21 A at 400 V rated value                                                   | 16 A                                               |
| • at AC-21 A at 440 V rated value                                                   | 16 A                                               |

|                                                                                                                   |                        |
|-------------------------------------------------------------------------------------------------------------------|------------------------|
| <ul style="list-style-type: none"> <li>• at AC-23 A at 400 V rated value</li> </ul>                               | 16 A                   |
| 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                 |
| <b>Auxiliary circuit</b>                                                                                          |                        |
| number of CO contacts for auxiliary contacts                                                                      | 0                      |
| number of NC contacts for auxiliary contacts                                                                      | 1                      |
| number of NO contacts for auxiliary contacts                                                                      | 1                      |
| operating voltage of auxiliary contacts at AC maximum                                                             | 500 V                  |
| continuous current of the auxiliary contact rated value                                                           | 10 A                   |
| <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>                                          | No                     |
| <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>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                                       | 2                      |
| number of connectable NO contacts for auxiliary contacts attachable maximum                                       | 3                      |
| number of connectable CO contacts for auxiliary contacts attachable maximum                                       | 0                      |
| number of bracket locks maximum                                                                                   | 3                      |
| hasp thickness of the bracket locks                                                                               | 4 ... 8 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>             | 3 kA                   |
| <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                   |
| 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>             | 2.5 kA <sup>2</sup> .s |
| <ul style="list-style-type: none"> <li>• at 440 V for combination switch + gG fuse maximum</li> </ul>             | 2.5 kA <sup>2</sup> .s |
| <ul style="list-style-type: none"> <li>• at 690 V for combination switch + gG fuse maximum</li> </ul>             | 3 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: 20 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                                                                  | 20 A                   |
| <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  |

#### Connections

|                                                                       |                                                                                                                                            |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| AWG number as coded connectable conductor cross section solid maximum |                                                                                                                                            |
| •                                                                     | 10                                                                                                                                         |
| •                                                                     | 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                                                                                                                       |

#### Mechanical Design

|                                          |                            |
|------------------------------------------|----------------------------|
| height                                   | 152 mm                     |
| width                                    | 100 mm                     |
| depth                                    | 117 mm                     |
| type of device                           | fixed mounting             |
| fastening method                         | Complete unit in enclosure |
| fastening method                         |                            |
| • 4-hole front mounting                  | No                         |
| • front mounting with central attachment | Yes                        |
| • rail mounting                          | No                         |
| net weight                               | 455 g                      |

#### Environmental conditions

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

#### Approvals Certificates

##### General Product Approval



[Confirmation](#)



##### General Product Approval

##### Test Certificates

##### Marine / Shipping

##### other



[Miscellaneous](#)



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##### other

##### Environment

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firmations](#)

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## Further information

### Information on the packaging

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

### 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=3LD2064-1GP51>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2064-1GP51>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2064-1GP51](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2064-1GP51)

### CAX-Online-Generator

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

### Tender specifications

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





