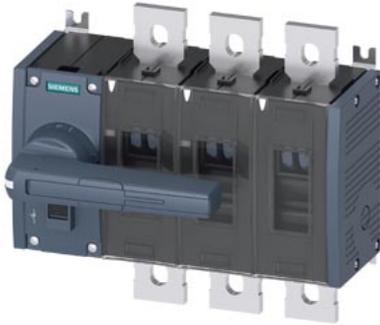


Switch disconnecter 500 A, Size 4, 3-pole Front operating mechanism left  
Complete unit with direct operating mechanism gray flat terminal



| Model   |                              |
|---|------------------------------|
| product brand name  | SENTRON                      |
| product designation   | 3KD switch disconnecter      |
| design of the product   | Switch                       |
| display version for switch position indicator manual operation                                | ON-OFF-TEST                  |
| design of the actuating element   | Long rotary knob             |
| type of the driving mechanism   | Front operating mechanism    |
| type of the driving mechanism motor drive   | No                           |
| General technical data  |                              |
| number of poles   | 3                            |
| type of device  | fixed mounting               |
| size of switch disconnecter   | 4                            |
| mechanical service life (operating cycles) typical  | 8 000                        |
| electrical endurance (operating cycles)   |                              |
| • at AC-23 A at 690 V   | 1 000                        |
| • at DC-23 A at 440 V   | 1 000                        |
| I <sup>2</sup> t value  |                              |
| • with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum               | 647 250 A <sup>2</sup> ·s    |
| • of the fuse at 500 V maximum permissible  | 5 400 005 A <sup>2</sup> ·s  |
| • of the gG fuse at 690 V maximum permissible   | 3 760 005 A <sup>2</sup> ·s  |
| • of the gG/aM SITOR fuse at 1000 V maximum permissible                                       | 520 000 A <sup>2</sup> ·s    |
| • of the molded case circuit breaker at 415 V maximum permissible                             | 16 000 000 A <sup>2</sup> ·s |
| position of the switch operating mechanism  | at the left end              |
| overvoltage in percent relative to the operating voltage at AC at 400, 500, 690 V at 50/60 Hz | 10 %                         |
| overvoltage category  | IV                           |
| degree of pollution   | 3                            |
| Voltage   |                              |
| <b>operating voltage with current paths in series</b>   |                              |
| • with degree of pollution 2 at DC rated value  | 440 V / 3                    |
| • with degree of pollution 3 at DC rated value  | 440 V / 3                    |
| <b>insulation voltage</b>   |                              |
| • rated value   | 1 000 V                      |
| surge voltage resistance rated value  | 12 kV                        |
| operational current at AC-22 A at 1000 V maximum  | 500 A                        |
| Protection class  |                              |
| protection class IP   | IP00                         |
| protection class IP   |                              |

- with closed switch with cover or cable lug cover IP20
- on the front IP00

#### Dissipation

|  |      |
|--|------|
| power loss [W]   |      |
| <ul style="list-style-type: none"> <li>• with conventional rated thermal current per pole</li> </ul>                     | 12 W |
| <ul style="list-style-type: none"> <li>• with conventional rated thermal current per device</li> </ul>                   | 36 W |
| <ul style="list-style-type: none"> <li>• for rated value of the current at AC in hot operating state per pole</li> </ul> | 12 W |

#### Main circuit

|   |        |
|---|--------|
| operating power   |        |
| <ul style="list-style-type: none"> <li>• at AC-23 A at 500 V rated value</li> </ul> | 355 kW |
| operational current rated value   | 500 A  |

#### Auxiliary circuit

|  |   |
|--|---|
| number of connected NC contacts for auxiliary contacts | 0 |
| number of connected NO contacts for auxiliary contacts | 0 |
| number of connected CO contacts for auxiliary contacts | 0 |
| number of CO contacts for auxiliary contacts           | 0 |
| number of NC contacts for auxiliary contacts           | 8 |
| number of NO contacts for auxiliary contacts           | 8 |

#### Suitability

|   |     |
|---|-----|
| 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 |

#### Product details

|   |     |
|---|-----|
| product component   |     |
| <ul style="list-style-type: none"> <li>• trip indicator</li> </ul>                            | No  |
| <ul style="list-style-type: none"> <li>• voltage trigger</li> </ul>                           | No  |
| <ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>                      | No  |
| <ul style="list-style-type: none"> <li>• undervoltage release with leading contact</li> </ul> | No  |
| product extension auxiliary switch  | Yes |
| <b>product extension optional</b>   |     |
| <ul style="list-style-type: none"> <li>• motor drive</li> </ul>                               | No  |
| <ul style="list-style-type: none"> <li>• voltage trigger</li> </ul>                           | No  |

#### Short circuit

|   |         |
|---|---------|
| short-time withstand current (I <sub>cw</sub> ) at 1000 V AC/440 V DC limited to 1 s rated value        | 30 kA   |
| short-circuit current making capacity (I <sub>cm</sub> ) for switch disconnecter                        |         |
| <ul style="list-style-type: none"> <li>• at 1000 V AC without fuse link rated value minimum</li> </ul>  | 80 kA   |
| <ul style="list-style-type: none"> <li>• at DC 440 V without fuse link rated value minimum</li> </ul>   | 42.6 kA |
| <ul style="list-style-type: none"> <li>• without fuse link rated value minimum</li> </ul>               | 80 kA   |
| conditional short-circuit current with line-side fuse protection  |         |
| <ul style="list-style-type: none"> <li>• at 415 V by molded case circuit breaker rated value</li> </ul> | 65 kA   |
| <ul style="list-style-type: none"> <li>• at 500 V by gG fuse rated value</li> </ul>                     | 100 kA  |
| <ul style="list-style-type: none"> <li>• at 690 V by gG fuse rated value</li> </ul>                     | 100 kA  |

#### Connections

|  |  |
|--|--|
| type of connectable conductor cross-sections for aluminum conductor                          |  |
| <ul style="list-style-type: none"> <li>• stranded with lug</li> </ul>                        | 1x (25 ... 240 mm <sup>2</sup> ), 2x (25 ... 240 mm <sup>2</sup> ) |
| type of connectable conductor cross-sections   |  |
| <ul style="list-style-type: none"> <li>• for copper busbar</li> </ul>                        | 1 x (40 x 10 mm <sup>2</sup> ), 2 x (40 x 5 mm <sup>2</sup> )      |
| type of connectable conductor cross-sections for copper conductor                            |  |
| <ul style="list-style-type: none"> <li>• stranded with lug according to DIN 46234</li> </ul> | 1x (25 ... 240 mm <sup>2</sup> ), 2x (25 ... 240 mm <sup>2</sup> ) |
| <ul style="list-style-type: none"> <li>• stranded with lug according to DIN 46235</li> </ul> | 1x (25 ... 240 mm <sup>2</sup> ), 2x (25 ... 240 mm <sup>2</sup> ) |
| type of electrical connection for main current circuit                                       | flat connector   |

#### Mechanical Design

|        |        |
|--------|--------|
| height | 235 mm |
| width  | 260 mm |

|  |              |
|--|--------------|
| depth                                    | 167 mm       |
| fastening method                         | screw fixing |
| fastening method                         |              |
| • 4-hole front mounting                  | No           |
| • front mounting with central attachment | No           |
| • rail mounting                          | No           |
| mounting position                        | any          |
| net weight                               | 7 520 g      |

### Environmental conditions

|                                      |        |
|--------------------------------------|--------|
| ambient temperature during operation |        |
| • minimum                            | -25 °C |
| • maximum                            | 70 °C  |
| ambient temperature during storage   |        |
| • minimum                            | -50 °C |
| • maximum                            | 80 °C  |

### Certificates

|   |   |
|---|---|
| reference code according to IEC 81346-2 | Q |
|---|---|

### Approvals Certificates

#### General Product Approval



[Confirmation](#)



[Miscellaneous](#)

|                          |                   |                   |       |
|--------------------------|-------------------|-------------------|-------|
| General Product Approval | Test Certificates | Marine / Shipping | other |
|--------------------------|-------------------|-------------------|-------|



[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

[Confirmation](#)

### Environment

[Environmental Conformations](#)

[Environmental Conformations](#)

### 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=3KD4432-0QE10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD4432-0QE10-0>

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

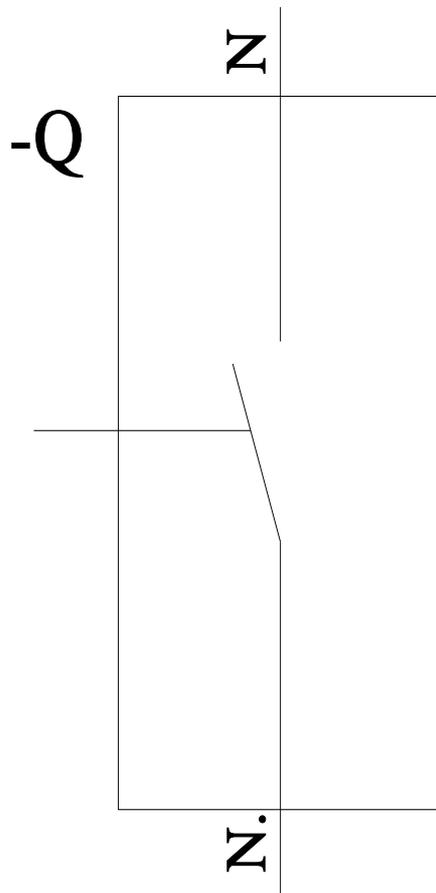
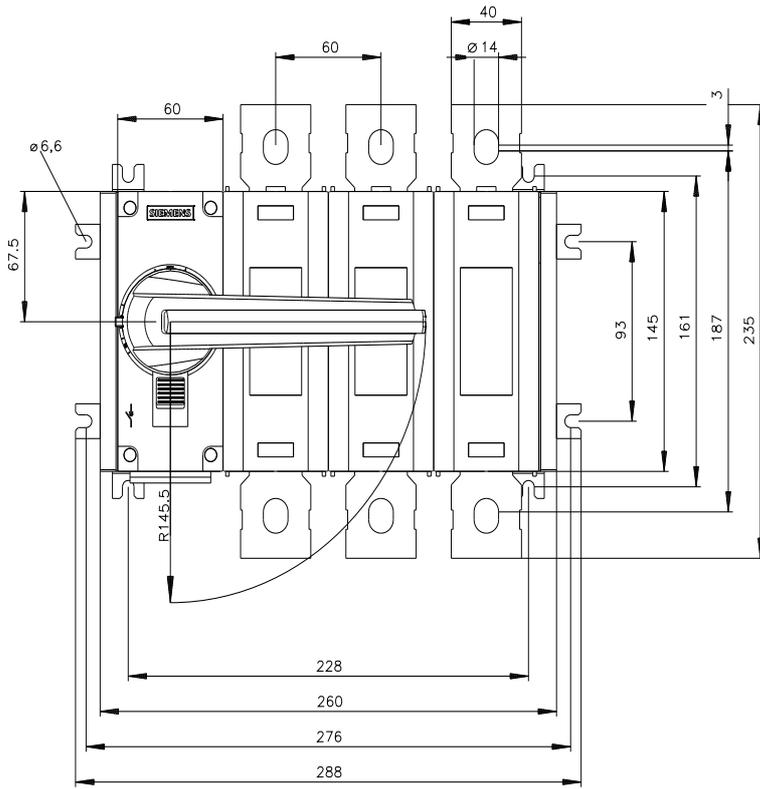
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3KD4432-0QE10-0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD4432-0QE10-0)

#### CAX-Online-Generator

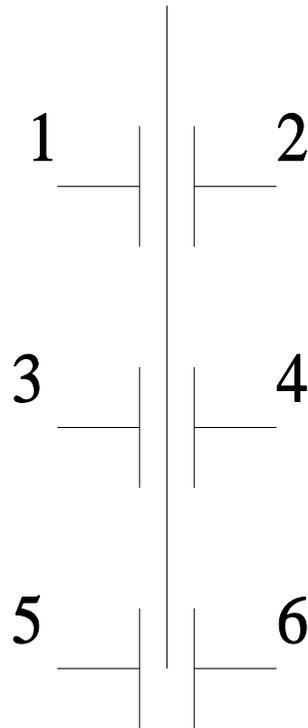
<http://www.siemens.com/cax>

#### Tender specifications

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



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last modified:

2/1/2024 

