

Switch disconnecter 1000 A, Size 5, 4-pole Front operating mechanism center  
Basic unit without handle flat terminal



| Model                                                                                         |                              |
|-----------------------------------------------------------------------------------------------|------------------------------|
| product brand name                                                                            | SENTRON                      |
| product designation                                                                           | 3KD switch disconnecter      |
| design of the product                                                                         | Switch                       |
| display version for switch position indicator door-coupling rotary operating mechanism        | ON-OFF                       |
| design of the actuating element                                                               | Without handle               |
| type of the driving mechanism                                                                 | Front operating mechanism    |
| type of the driving mechanism motor drive                                                     | No                           |
| General technical data                                                                        |                              |
| number of poles                                                                               | 4                            |
| type of device                                                                                | fixed mounting               |
| size of switch disconnecter                                                                   | 5                            |
| mechanical service life (operating cycles) typical                                            | 8 000                        |
| electrical endurance (operating cycles)                                                       |                              |
| • at DC-21 A at 1000 V                                                                        | 100                          |
| • at AC-23 A at 690 V                                                                         | 500                          |
| • at DC-23 A at 440 V                                                                         | 500                          |
| I <sup>2</sup> t value                                                                        |                              |
| • with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum               | 3 492 000 A <sup>2</sup> ·s  |
| • of the fuse at 500 V maximum permissible                                                    | 19 000 000 A <sup>2</sup> ·s |
| • of the gG/aM SITOR fuse at 1000 V maximum permissible                                       | 1 800 000 A <sup>2</sup> ·s  |
| position of the switch operating mechanism                                                    | after the second pole        |
| 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                                                                                       |                              |
| operating voltage with current paths in series                                                |                              |
| • with degree of pollution 2 at DC rated value                                                | 440 V / 3                    |
| • with degree of pollution 3 at DC rated value                                                | 440 V / 3                    |
| insulation voltage                                                                            |                              |
| • rated value                                                                                 | 1 000 V                      |
| surge voltage resistance rated value                                                          | 12 kV                        |
| operational current at AC-22 A at 1000 V maximum                                              | 1 000 A                      |
| Protection class                                                                              |                              |
| protection class IP                                                                           | IP00                         |
| protection class IP                                                                           |                              |
| • with closed switch with cover or cable lug cover                                            | IP20                         |

|                                                                                                  |                                                                     |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| • on the front                                                                                   | IP00                                                                |
| <b>Dissipation</b>                                                                               |                                                                     |
| power loss [W]                                                                                   |                                                                     |
| • with conventional rated thermal current per pole                                               | 20 W                                                                |
| • with conventional rated thermal current per device                                             | 80 W                                                                |
| • for rated value of the current at AC in hot operating state per pole                           | 20 W                                                                |
| <b>Main circuit</b>                                                                              |                                                                     |
| operating power                                                                                  |                                                                     |
| • at AC-23 A at 500 V rated value                                                                | 710 kW                                                              |
| operational current rated value                                                                  | 1 000 A                                                             |
| <b>Auxiliary circuit</b>                                                                         |                                                                     |
| 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                                                                   |
| <b>Suitability</b>                                                                               |                                                                     |
| suitability for use                                                                              |                                                                     |
| • main switch                                                                                    | Yes                                                                 |
| • switch disconnecter                                                                            | Yes                                                                 |
| • EMERGENCY OFF switch                                                                           | Yes                                                                 |
| • safety switch                                                                                  | Yes                                                                 |
| • maintenance/repair switch                                                                      | Yes                                                                 |
| <b>Product details</b>                                                                           |                                                                     |
| product component                                                                                |                                                                     |
| • trip indicator                                                                                 | No                                                                  |
| • voltage trigger                                                                                | No                                                                  |
| • undervoltage release                                                                           | No                                                                  |
| • undervoltage release with leading contact                                                      | No                                                                  |
| product extension auxiliary switch                                                               | Yes                                                                 |
| <b>product extension optional</b>                                                                |                                                                     |
| • motor drive                                                                                    | No                                                                  |
| • voltage trigger                                                                                | No                                                                  |
| <b>Short circuit</b>                                                                             |                                                                     |
| short-time withstand current (I <sub>cw</sub> ) at 1000 V AC/440 V DC limited to 1 s rated value | 55 kA                                                               |
| short-circuit current making capacity (I <sub>cm</sub> ) for switch disconnecter                 |                                                                     |
| • at 1000 V AC without fuse link rated value minimum                                             | 121 kA                                                              |
| • at DC 440 V without fuse link rated value minimum                                              | 80 kA                                                               |
| • without fuse link rated value minimum                                                          | 121 kA                                                              |
| conditional short-circuit current with line-side fuse protection                                 |                                                                     |
| • at 415 V by molded case circuit breaker rated value                                            | 65 kA                                                               |
| • at 500 V by gG fuse rated value                                                                | 100 kA                                                              |
| • at 690 V by gG fuse rated value                                                                | 100 kA                                                              |
| <b>Connections</b>                                                                               |                                                                     |
| type of connectable conductor cross-sections for aluminum conductor                              |                                                                     |
| • stranded with lug                                                                              | 1x (120 ... 300 mm <sup>2</sup> ), 2x (95 ... 300 mm <sup>2</sup> ) |
| type of connectable conductor cross-sections                                                     |                                                                     |
| • for copper busbar                                                                              | '2 x (60 x 10 mm <sup>2</sup> )                                     |
| type of connectable conductor cross-sections for copper conductor                                |                                                                     |
| • stranded with lug according to DIN 46234                                                       | 1x (120 ... 240 mm <sup>2</sup> ), 2x (95 ... 240 mm <sup>2</sup> ) |
| • stranded with lug according to DIN 46235                                                       | 1x (120 ... 240 mm <sup>2</sup> ), 2x (95 ... 240 mm <sup>2</sup> ) |
| type of electrical connection for main current circuit                                           | flat connector                                                      |
| <b>Mechanical Design</b>                                                                         |                                                                     |
| height                                                                                           | 310 mm                                                              |
| width                                                                                            | 472 mm                                                              |
| depth                                                                                            | 153 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                               | 21 300 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](#)



[Confirmation](#)

[Miscellaneous](#)

#### 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=3KD5040-0RE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD5040-0RE20-0>

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

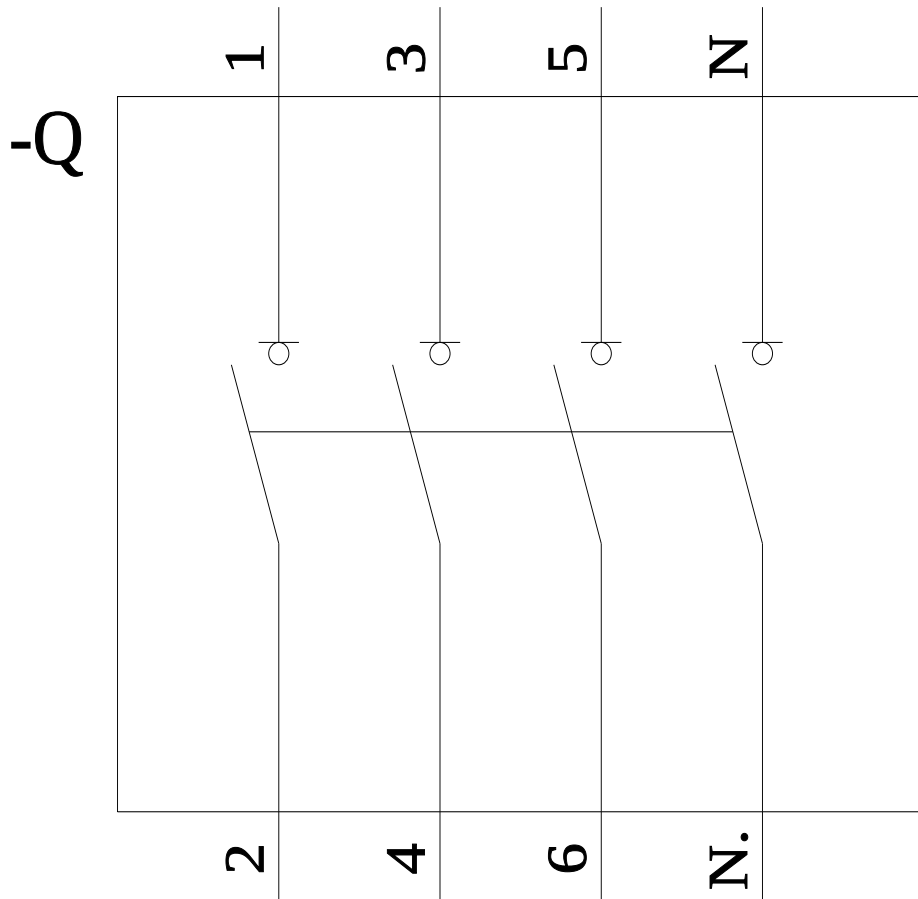
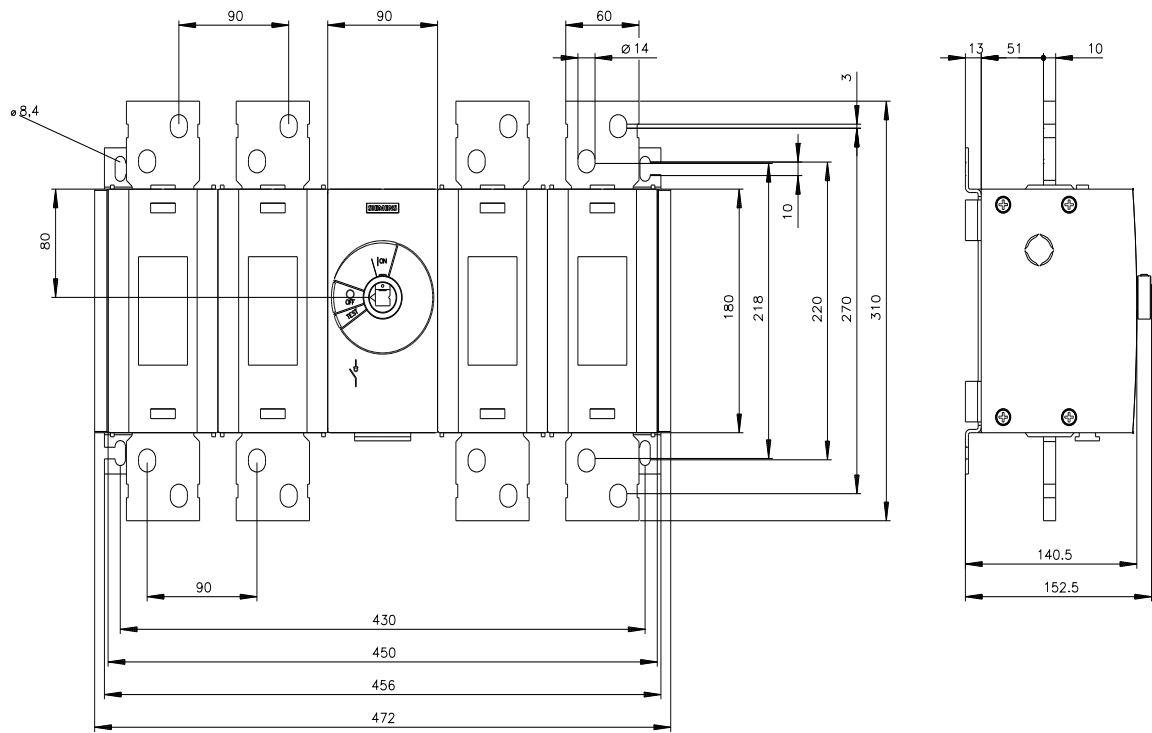
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3KD5040-0RE20-0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD5040-0RE20-0)

##### CAX-Online-Generator

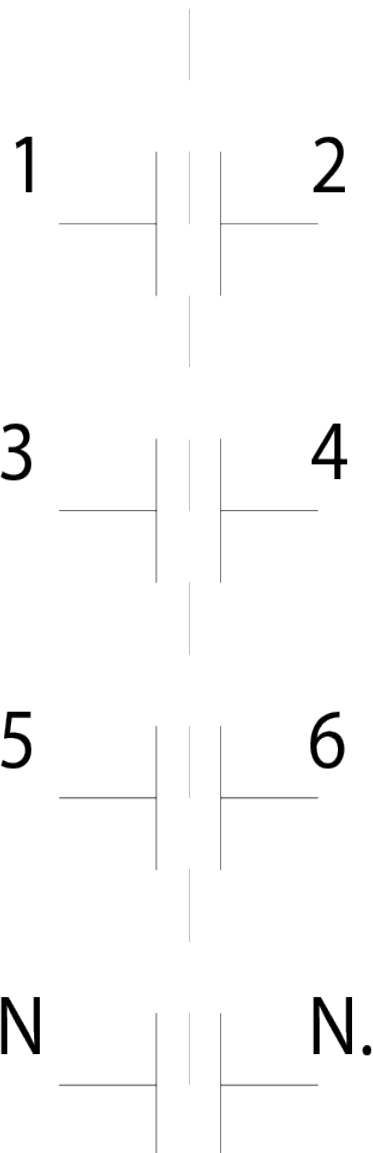
<http://www.siemens.com/cax>

##### Tender specifications

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



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