



SENTRON, Switch disconnecter 3LD, main switch, 3-pole, Iu: 125 A, Operating power / at AC-23 A at 400 V: 45 kW, installation in distribution boards, knob-operated mechanism, black, handle direct at the switch

### Model

|  |                                |
|--|--------------------------------|
| product brand name   | SENTRON                        |
| product designation  | 3LD Switch disconnecter        |
| design of the product  | Main switch                    |
| display version for switch position indicator manual operation | 1 ON - 0 OFF                   |
| type of switch   | DIN-rail mounting              |
| design of the actuating element                                | selector switch                |
| color of the actuating element                                 | black                          |
| design of handle   | knob-operated mechanism, black |
| type of the driving mechanism motor drive                      | No                             |

### General technical data

|  |         |
|--|---------|
| number of poles                                    | 3       |
| size of switch disconnecter                        | 4       |
| 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              | IP40 |
| protection class IP on the front | IP40 |

### Dissipation

|   |      |
|---|------|
| power loss [W] for rated value of the current at AC in hot operating state per pole | 12 W |
|---|------|

### Current

|                                 |       |
|---------------------------------|-------|
| operational current rated value | 125 A |
| operational current             |       |
| • at 40 °C rated value          | 125 A |
| • at 45 °C rated value          | 125 A |
| • at 50 °C rated value          | 125 A |
| • at 55 °C rated value          | 125 A |
| • at AC rated value             | 125 A |

|   |                        |
|---|------------------------|
| <b>Main circuit</b>   |                        |
| operational current   |                        |
| • at AC-21 at 690 V rated value   | 125 A                  |
| • at AC-21 A at 240 V rated value   | 125 A                  |
| • at AC-21 A at 400 V rated value   | 125 A                  |
| • at AC-21 A at 440 V rated value   | 125 A                  |
| • at AC-23 A at 400 V rated value   | 80 A                   |
| operating power   |                        |
| • at AC-23 A at 240 V rated value   | 22 kW                  |
| • at AC-23 A at 400 V rated value   | 45 kW                  |
| • at AC-23 A at 440 V rated value   | 45 kW                  |
| • at AC-23 A at 690 V rated value   | 37 kW                  |
| • at AC-3 at 240 V rated value  | 22 kW                  |
| • at AC-3 at 400 V rated value  | 37 kW                  |
| • at AC-3 at 690 V rated value  | 30 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                    |
| • switch disconnecter   | Yes                    |
| • EMERGENCY OFF switch  | No                     |
| • safety switch   | Yes                    |
| • maintenance/repair switch   | Yes                    |
| <b>Product details</b>  |                        |
| product feature can be locked into OFF position                             | Yes                    |
| <b>accessories</b>  |                        |
| product extension optional  |                        |
| • motor drive   | No                     |
| • voltage trigger   | No                     |
| number of connectable NC contacts for auxiliary contacts attachable maximum | 2                      |
| number of connectable NO contacts for auxiliary contacts attachable maximum | 4                      |
| number of connectable CO contacts for auxiliary contacts attachable maximum | 0                      |
| number of bracket locks maximum   | 2                      |
| hasp thickness of the bracket locks   | 4 ... 6 mm             |
| <b>Short circuit</b>  |                        |
| conditional short-circuit current with line-side fuse protection            |                        |
| • at 690 V by gG fuse rated value   | 20 kA                  |
| let-through current with closed switch                                      |                        |
| • at 240 V for combination switch + gG fuse maximum                         | 10 kA                  |
| • at 440 V for combination switch + gG fuse maximum                         | 10 kA                  |
| • at 690 V for combination switch + gG fuse maximum permissible             | 10 kA                  |
| I <sup>2</sup> t value with closed switch                                   |                        |
| • at 240 V for combination switch + gG fuse maximum                         | 104 kA <sup>2</sup> .s |
| • at 440 V for combination switch + gG fuse maximum                         | 104 kA <sup>2</sup> .s |
| • at 690 V for combination switch + gG fuse maximum                         | 104 kA <sup>2</sup> .s |
| design of the fuse link   |                        |
| • for short-circuit protection of the main circuit required                 | fuse gL/gG: 125 A      |
| • for short-circuit protection of the auxiliary switch required             | fuse gL/gG: 10 A       |
| operational current of upstream fuse rated value                            | 125 A                  |
| <b>according UL</b>   |                        |

|  |       |
|--|-------|
| operational current at AC according to UL 508/UL 60947-4-1 rated value           | 125 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    | 75    |
| active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value    | 100   |
| 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   |  |
| <ul style="list-style-type: none"> <li>• maximum</li> <li>• minimum</li> </ul>  | 1<br>12  |
| type of connectable conductor cross-sections for copper conductor   |  |
| <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul> | 1x (4...50mm <sup>2</sup> )<br>1x (4...35mm <sup>2</sup> )<br>1x (4...50mm <sup>2</sup> )  |
| type of connectable conductor cross-sections for auxiliary contacts   |  |
| <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul> | 2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup><br>2x (0.75 ... 1.5 mm <sup>2</sup> ), 1x 2.5 mm <sup>2</sup><br>2x (0.75 ... 2.5 mm <sup>2</sup> ), 1x 4 mm <sup>2</sup> |
| type of electrical connection   |  |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary contacts</li> </ul>                    | box terminal<br>connection terminals   |

#### Mechanical Design

|  |                                     |
|--|-------------------------------------|
| height   | 83 mm                               |
| width  | 71 mm                               |
| depth  | 97 mm                               |
| type of device   | fixed mounting                      |
| fastening method   | Built-in unit fixed-mounted version |
| fastening method   |                                     |
| <ul style="list-style-type: none"> <li>• 4-hole front mounting</li> <li>• front mounting with central attachment</li> <li>• rail mounting</li> </ul> | No<br>No<br>Yes                     |
| net weight   | 372 g                               |

#### Environmental conditions

|  |                 |
|--|-----------------|
| ambient temperature during operation   |                 |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | -25 °C<br>55 °C |
| ambient temperature during storage   |                 |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | -25 °C<br>55 °C |

#### General Product Approval



[Confirmation](#)



[Miscellaneous](#)

|                          |                           |                   |                   |       |
|--------------------------|---------------------------|-------------------|-------------------|-------|
| General Product Approval | Declaration of Conformity | Test Certificates | Marine / Shipping | other |
|--------------------------|---------------------------|-------------------|-------------------|-------|



[Special Test Certificate](#)



[Miscellaneous](#)

[Environmental Confirmations](#)

[Confirmation](#)

## 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=3LD2830-0TK11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2830-0TK11>

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

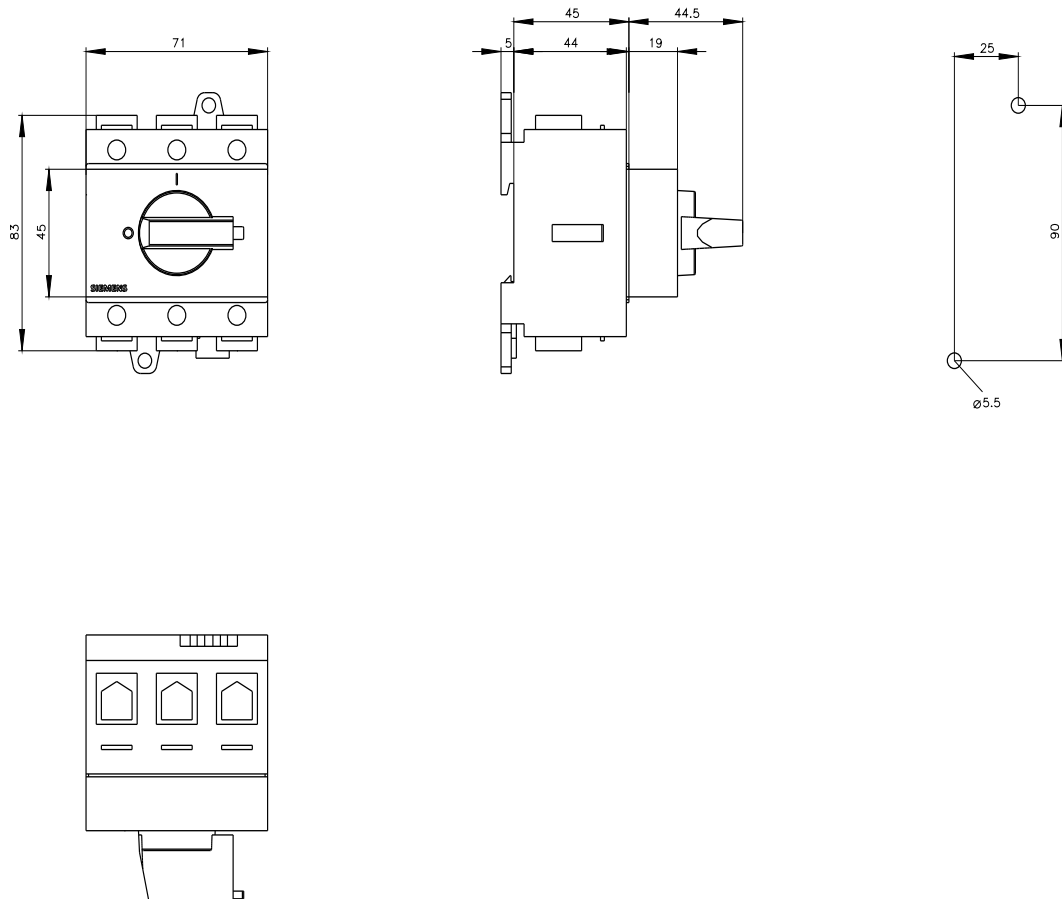
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2830-0TK11](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2830-0TK11)

### CAX-Online-Generator

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

### Tender specifications

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



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