## SIEMENS



SENTRON, Switch disconnector 3LD, main switch, 4-pole, lu: 25 A, Operating power / at AC-23 A at $400 \mathrm{~V}: 9.5 \mathrm{~kW}$, floor mounting with door coupling, rotary operating mechanism, black, central mounting 22.5 mm of the handle

| Model |  |
| :---: | :---: |
| Product brand name | SENTRON |
| Product designation | 3LD Switch disconnector |
| Design of the product | Main switch |
| Display version / for switch position indicator manual operation | 1 ON-0 OFF |
| Design of the operating mechanism | Short rotary knob |
| Design of handle | rotary operating mechanism, black |
| Type of the driving mechanism / motor drive | No |
| General technical data |  |
| Number of poles | 4 |
| Type of device | fixed mounting |
| Type of switch | Floor mounting with door coupling |
| Size of switch disconnector | 2 |
| Electrical endurance (switching cycles) / at AC-23 A / at 690 V | 6000 |
| I2t value / with closed switch / at $690 \mathrm{~V} /$ for combination switch + gG fuse / maximum | 4 kA2.s |


| Let-through I2t value / with closed switch / at 440 V / for combination switch +gG fuse / maximum | $4 \mathrm{kA} 2 . \mathrm{s}$ |
| :---: | :---: |
| Mechanical service life (switching cycles) / typical | 100000 |
| Operating frequency / maximum | 50 1/h |
| Voltage |  |
| Insulation voltage / rated value | 690 V |
| Surge voltage resistance / rated value | 6 kV |
| Current / at AC / rated value | 25 A |
| Operating voltage <br> - at AC / at $50 / 60 \mathrm{~Hz}$ / rated value | 690 V |
| Protection class |  |
| Protection class IP | IP65 |
| Protection class IP / on the front | IP65 |
| Dissipation |  |
| Power loss [W] <br> - for rated value of the current / at AC / in hot operating state / per pole <br> - per conductor / typical | $\begin{aligned} & 1.1 \mathrm{~W} \\ & 1.1 \mathrm{~W} \end{aligned}$ |
| Current |  |
| Operating current <br> - at AC-23 A / at $690 \mathrm{~V} /$ rated value <br> - at AC-23 A / at $400 \mathrm{~V} /$ rated value <br> - at AC-22 A / at $690 \mathrm{~V} /$ rated value <br> - at $\mathrm{AC}-21$ / at $690 \mathrm{~V} /$ rated value <br> - at AC-21 A / at $240 \mathrm{~V} /$ rated value <br> - at AC-21 A / at $440 \mathrm{~V} /$ rated value <br> - at AC-22 A / at $240 \mathrm{~V} /$ rated value <br> - at AC-22 A / at $440 \mathrm{~V} /$ rated value <br> - at AC-23 A / at $240 \mathrm{~V} /$ rated value <br> - at AC-23 A / at $440 \mathrm{~V} /$ rated value | 11 A <br> 20 A <br> 25 A <br> 25 A <br> 25 A <br> 25 A <br> 25 A <br> 25 A <br> 20 A <br> 20 A |
| Continuous current <br> - rated value <br> - at $40^{\circ} \mathrm{C}$ / rated value <br> - at $45^{\circ} \mathrm{C}$ / rated value <br> - at $50^{\circ} \mathrm{C}$ / rated value <br> - at $55^{\circ} \mathrm{C}$ / rated value | $\begin{aligned} & 25 \mathrm{~A} \\ & 25 \mathrm{~A} \\ & 25 \mathrm{~A} \\ & 25 \mathrm{~A} \\ & 25 \mathrm{~A} \end{aligned}$ |
| Operating current / of upstream fuse / rated value | 25 A |
| Let-through current / with closed switch <br> - at $440 \mathrm{~V} /$ for combination switch +gG fuse / maximum | 3.5 kA |

- at $690 \mathrm{~V} /$ for combination switch + gG fuse / maximum permissible
Short-time withstand current (Icw)
- limited to $1 \mathrm{~s} /$ rated value
- at $690 \mathrm{~V} /$ limited to $1 \mathrm{~s} /$ rated value


## 3.5 kA

640 A
640 A

Main circuit

| Operating frequency |  |
| :---: | :---: |
| - initial value | 50 Hz |
| - Full-scale value | 60 Hz |
| Operating power |  |
| - at AC-23 A / at $240 \mathrm{~V} /$ rated value | 5 kW |
| - at AC-23 A / at $400 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value | 9.5 kW |
| - at $\mathrm{AC}-23 \mathrm{~A} /$ at $400 \mathrm{~V} /$ rated value | 9.5 kW |
| - at $\mathrm{AC}-23 \mathrm{~A} /$ at $440 \mathrm{~V} /$ rated value | 9.5 kW |
| - at $\mathrm{AC}-23 \mathrm{~A} /$ at $690 \mathrm{~V} /$ rated value | 9.5 kW |
| - at AC-3 / at $240 \mathrm{~V} /$ rated value | 4 kW |
| - at AC-3 / at $400 \mathrm{~V} /$ rated value | 7.5 kW |
| - at AC-3 / at $690 \mathrm{~V} /$ rated value | 7.5 kW |
| Operating current / rated value | 25 A |

## Auxiliary circuit

| 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 / <br> maximum | 500 V |
| Continuous current / of the auxiliary contact / rated <br> value | 10 A |
| Insulation voltage / of the auxiliary switch / rated <br> value | 500 V |


| Suitability |  |
| :--- | :--- |
| Suitability for use |  |
| - Main switch | Yes |
| - switch disconnector | Yes |
| - EMERGENCY OFF switch | No |
| - safety switch | Yes |
| - maintenance/repair switch | Yes |

## Appearance

Color / of the actuating element black

## Product details

| Product function / can be locked into OFF position | Yes |
| :--- | :--- |
| Number of bracket locks / maximum | 3 |


| Hasp thickness / of the bracket locks / minimum | 4 mm |
| :---: | :---: |
| Hasp thickness / of the bracket locks / maximum | 8 mm |
| Short circuit |  |
| Conditional short-circuit current / with line-side fuse protection <br> - at $690 \mathrm{~V} /$ by gG fuse / rated value | 50 kA |
| 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 |
| Connections |  |
| AWG number / as coded connectable conductor cross section / solid <br> - maximum <br> - minimum | $\begin{aligned} & 8 \\ & 14 \end{aligned}$ |
| Type of electrical connection <br> - for main current circuit <br> - for auxiliary contacts | box terminal connection terminals |
| Requirements |  |
| Design of the fuse link <br> - for short-circuit protection of the main circuit / required <br> - for short-circuit protection of the auxiliary switch / required | fuse gL/gG: 25 A <br> fuse $\mathrm{gL} / \mathrm{gG}: 10 \mathrm{~A}$ |
| Mechanical Design |  |
| Height | 83 mm |
| Width | 67 mm |
| Depth | 451.5 mm |
| Mounting type | Built-in unit fixed-mounted version |
| Mounting type <br> - front mounting with 4-hole attachment <br> - front mounting with central attachment <br> - rail mounting | No <br> Yes <br> Yes |
| Net weight | 445 g |
| Environmental conditions |  |
| Ambient temperature / during operation <br> - minimum <br> - maximum | $\begin{aligned} & -25^{\circ} \mathrm{C} \\ & 55^{\circ} \mathrm{C} \end{aligned}$ |
| Ambient temperature / during storage / minimum | $-25^{\circ} \mathrm{C}$ |

## Certificates

Reference code

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2


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SF
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| General Product Approval | Test Certific- <br> ates |  |  |
| :--- | :--- | :--- | :--- |
| (CCC |  | Miscellaneous | $\frac{\text { Special Test Certi- }}{\text { ficate }}$ |



## Further information

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=3LD2144-1TL51
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3LD2144-1TL51
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2144-1TL51

## CAx-Online-Generator

http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications




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