## SIEMENS

SWITCH DISCONNECTOR FUSE 250A, FRAME SIZE 3, 3-POLE FOR LV HRC FUSE SIZE 0 AND 1 SIDE OPERATING LEFT BASIC UNIT WITHOUT HANDLE FLAT TERMINAL WITHOUT FUSES


## Model

| Product brand name | SENTRON |
| :---: | :---: |
| Product designation | Switching device |
| Design of the product | 3KF switch disconnector with fuses |
| Design of the operating mechanism | without |
| Design of handle | Without |
| Direction of actuation | From left |
| Type of the driving mechanism / motor drive | No |
| Number of poles | 3 |
| Size of disconnecting link | 1 and 0 |
| Size of switch disconnector | 3 |
| Size of fuse link | NH0, NH1 |
| Electrical endurance (switching cycles) <br> - at AC-23 A / at $440 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz}$ <br> - at AC-23 A / at $690 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz}$ <br> - at DC-23 A / at 440 V | $\begin{aligned} & 5000 \\ & 4000 \\ & 1000 \end{aligned}$ |
| I2t value <br> - with closed switch / for combination switch + fuse / at $500 \mathrm{~V} /$ maximum | $437000 \mathrm{~A}^{2} \cdot \mathrm{~s}$ |

- with closed switch / for combination switch + fuse / at 400 V / maximum
- with closed switch / at $690 \mathrm{~V} /$ for combination switch + gG fuse / maximum
- with closed switch / at $690 \mathrm{~V} /$ for combination switch + aM fuse / maximum
- of the fuse / at 500 V / maximum permissible
- of the gG fuse / at $690 \mathrm{~V} /$ maximum permissible
- of the aM fuse / at $690 \mathrm{~V} /$ maximum permissible
Mechanical service life (switching cycles) / typical Position / of the switch operating mechanism


## Fuse system

Overvoltage category
Operating voltage / with current paths in series

- with degree of pollution 2 / at DC / rated value / Note
- with degree of pollution 3 / at DC / rated value / Note

Insulation voltage / rated value
Surge voltage resistance / rated value
Overvoltage in percent / relative to the operating voltage / at AC / at $50 / 60 \mathrm{~Hz}$
$437000 \mathrm{~A}^{2} \cdot \mathrm{~s}$
$490100 \mathrm{~A}^{2} \cdot \mathrm{~s}$
$490100 \mathrm{~A}^{2} \cdot \mathrm{~S}$
$1500000 \mathrm{~A}^{2} \cdot \mathrm{~S}$
$940000 \mathrm{~A}^{2} \cdot \mathrm{~s}$
$1400000 \mathrm{~A}^{2} \cdot \mathrm{~s}$

10000
at the left end
LV HRC fuse
IV

440 / 3

440 / 3

1000 V
12 kV
10 \%

Protection class

## Protection class IP

IP00
Protection class IP

- with closed switch / with cover or cable lug

IP20 cover

- on the front

IP00

## Dissipation

## Power loss [W]

- with conventional rated thermal current / per pole
- with conventional rated thermal current / per

45 W device

- with conventional rated thermal current /

15 W without fuse / per pole

- with conventional rated thermal current /

45 W
without fuse / per device

- of the fuse / per fuse / maximum
25.5 W
- maximum
121.5 W
- at AC-21 A / at $400 \mathrm{~V} /$ maximum

250 A

- at AC-21 A / at $500 \mathrm{~V} /$ maximum
- at AC-21 A / at $690 \mathrm{~V} /$ maximum
- at AC-23 A / at $500 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value / maximum
- at AC-22 A / at $500 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value / maximum
- at AC-22 A / at $400 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value / maximum
- at AC-22 A / at $690 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value / maximum
- at AC-23 A / at $400 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value / maximum
- at AC-23 A / at $690 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value / maximum
- at DC-23 A / at $440 \mathrm{~V} /$ rated value / maximum
- at DC-23 A / at $220 \mathrm{~V} /$ rated value / maximum
- at DC-22 A / at $440 \mathrm{~V} /$ rated value / maximum
- at DC-22 A / at $220 \mathrm{~V} /$ rated value / maximum
- at DC-21 A / at $440 \mathrm{~V} /$ rated value / maximum
- at DC-21 A / at $220 \mathrm{~V} /$ maximum


## Continuous current

- rated value
- at $40^{\circ} \mathrm{C}$ / rated value
- at $45^{\circ} \mathrm{C} /$ rated value
- at $50^{\circ} \mathrm{C} /$ rated value
- at $55^{\circ} \mathrm{C} /$ rated value
- at $60^{\circ} \mathrm{C}$ / rated value
- at $65^{\circ} \mathrm{C} /$ rated value
- at $70^{\circ} \mathrm{C}$ / rated value

Continuous current / at DC / rated value
Let-through current / of the fuse / at 500 V / maximum permissible

Let-through current / of the gG fuse / at 690 V / maximum permissible

Let-through current / of the aM fuse / at 690 V / maximum permissible

## Let-through current / with closed switch

- at $690 \mathrm{~V} /$ for combination switch + aM fuse / maximum permissible
- at $690 \mathrm{~V} /$ for combination switch +gG fuse / maximum permissible
- for combination switch + fuse / at 400 V / maximum permissible

28700 A

| • for combination switch + fuse / at $500 \mathrm{~V} /$ <br> maximum permissible | 28700 A |
| :--- | :--- |
| Short-time current resistance (lcw) / at $690 \mathrm{~V} \mathrm{AC/} / 440$ <br> V DC / limited to $1 \mathrm{~s} /$ rated value | 8 kA |

## Main circuit

| Operating power / at AC-23 A |  |
| :--- | :--- |
| • at 400 V / at $50 / 60 \mathrm{~Hz}$ / rated value | 132 kW |
| - at 500 V / at $50 / 60 \mathrm{~Hz}$ / rated value | 160 kW |
| • at 690 V / at $50 / 60 \mathrm{~Hz}$ / rated value | 250 kW |
| Operating voltage |  |
| • at AC / at 50/60 Hz / rated value | 690 V |
| - at AC / rated value / maximum | 690 V |


| 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 |
| Suitability for use <br> - Main switch <br> - switch disconnector <br> - EMERGENCY OFF switch <br> - safety switch <br> - maintenance/repair switch | Yes <br> Yes <br> Yes <br> Yes <br> Yes |
| Product feature / interlock | No |
| Product component <br> - Voltage trigger <br> - undervoltage release <br> - undervoltage release with leading contact | No <br> No <br> No |
| Product feature / sealable | Yes |
| Product extension <br> - Auxiliary switch <br> - optional <br> — locking capability <br> - motor drive <br> - fuse monitoring | Yes <br> Yes <br> No <br> Yes |
| Product function <br> - fuse monitoring | No |

## Short circuit

## Short-circuit current making capacity (Icm) / for switch disconnector / at $690 \mathrm{~V} \mathrm{AC/440} \mathrm{~V} \mathrm{DC} \mathrm{/} \mathrm{without}$ fuse link / rated value / minimum <br> Conditional short-circuit current / with line-side fuse protection

- at $500 \mathrm{~V} /$ by gG fuse / rated value
- at $690 \mathrm{~V} /$ by gG fuse / rated value


## 13.6 kA

100 kA
100 kA

Connections

Arrangement of electrical connectors / for main current circuit

Tightening torque / with screw-type terminals

- minimum
- maximum
- Type of connectable conductor cross-sections / for copper busbar
- Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug
- Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46234
- Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235
Type of electrical connection
- for main current circuit

Top and bottom
$30 \mathrm{~N} \cdot \mathrm{~m}$
$44 \mathrm{~N} \cdot \mathrm{~m}$
1x ( $25 \times 3 \mathrm{~mm}$ )
$1 \mathrm{x}\left(6 \ldots 240 \mathrm{~mm}^{2}\right), 2 \mathrm{x}\left(6 \ldots 120 \mathrm{~mm}^{2}\right)$

1x ( $6 \ldots 240 \mathrm{~mm}^{2}$ ), 2x ( $6 \ldots 120 \mathrm{~mm}^{2}$ )

1x ( $6 \ldots 240 \mathrm{~mm}^{2}$ ), 2 x ( $6 \ldots 120 \mathrm{~mm}^{2}$ )
flat connector

## Mechanical Design

| Height | 207 mm |
| :--- | :--- |
| Width | 249.5 mm |
| Depth | 188.5 mm |
| Mounting position | any |
| Mounting type | floor mounting |
| Mounting type |  |
| • front mounting with 4-hole attachment |  |
| $\bullet$ • front mounting with central attachment | No |
| • rail mounting |  |
| Net weight | No |

## Environmental conditions

## Degree of pollution

3
Ambient temperature

- during operation / minimum
- during operation / maximum
- during storage / minimum
- during storage / maximum
$-25^{\circ} \mathrm{C}$
$70^{\circ} \mathrm{C}$
$-50^{\circ} \mathrm{C}$
$80^{\circ} \mathrm{C}$


## Certificates

| Equipment marking / acc. to DIN EN 61346-2 |
| :--- |
| General Product Approval |

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=3KF3325-4LF11
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3KF3325-4LF11
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax en.aspx?mlfb=3KF3325-4LF11

## CAx-Online-Generator

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


