## SIEMENS

SENTRON, transfer switching equipment 3 KC , manually operated, MTSE, size: 5, 4-pole, lu: 1250 A, Ue AC: 415 V , le at AC-33 B at $415 \mathrm{~V}: 800 \mathrm{~A}$, le at $\mathrm{AC}-23 \mathrm{~A}$ at $690 \mathrm{~V}: 800 \mathrm{~A}$, screw mounting, front operating mechanism, at the left end, without handle, busbar connection


| Model |  |
| :---: | :---: |
| product brand name | SENTRON |
| product designation | 3KC transfer switching equipment |
| design of the product | manually operated |
| display version / for switch position indicator doorcoupling rotary operating mechanism | I ON- O OFF-II ON |
| design of the actuating element | Without handle |
| design of handle | without |
| 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 disconnector | 5 |
| mechanical service life (switching cycles) / for function sequence O-I-O / typical | 6000 |
| 12 t value <br> - with closed switch / for combination switch + fuse / at $500 \mathrm{~V} /$ maximum | $25960000 \mathrm{~A}^{2} \cdot \mathrm{~s}$ |

- of the fuse / at $415 \mathrm{~V} /$ maximum permissible
- of the fuse / at $500 \mathrm{~V} /$ maximum permissible
- with closed switch / for combination switch + fuse / at $415 \mathrm{~V} /$ maximum

| position / of the switch operating mechanism |
| :--- |
| overvoltage category |
| degree of pollution |
| insulation voltage |
| - rated value |

## $34800005 \mathrm{~A}^{2} \cdot \mathrm{~s}$

$34800005 \mathrm{~A}^{2} \cdot \mathrm{~s}$
$25960000 \mathrm{~A}^{2} \cdot \mathrm{~s}$
at the left end
IV
3

1000 V

## Supply voltage

operational current / at AC / rated value
operating voltage

- at AC / at $50 / 60 \mathrm{~Hz}$ / rated value

Protection class
protection class IP
protection class IP

- with closed switch / with cover or cable lug cover
- on the front

IP00

## Dissipation

power loss [W]

- with conventional rated thermal current / per pole
- with conventional rated thermal current / per device
- for rated value of the current / at AC / in hot operating state / per pole
- operational current / at AC-23 A / at 690 V / rated value
- operational current / at AC-23 A / at 500 V / rated value
- operational current / at AC-22 A / at 690 V / rated value
- operational current / at AC-22 A / at 500 V / rated value
- operational current / at AC-21 / at $690 \mathrm{~V} /$ rated value
- operational current / at AC-21 / at $500 \mathrm{~V} /$ rated value
- operational current / at AC-21 A / at 415 V / rated value
- operational current / at AC-22 A / at 415 V / rated value

70 W

280 W

70 W

800 A

800 A

1250 A

1250 A

1250 A

1250 A

1250 A

1250 A

- operational current / at AC-23 A / at 415 V / rated value
- operational current / at $\mathrm{AC}-31 \mathrm{~B} /$ at 415 V / rated value
- operational current / at $\mathrm{AC}-32 \mathrm{~B} /$ at 415 V / rated value
- operational current / at $\mathrm{AC}-33 \mathrm{~B} /$ at 415 V / rated value
- operational current / at $\mathrm{AC}-33 \mathrm{iB} /$ at 415 V / rated value
- operational current / at AC-35 B / at 400 V / rated value 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
operational current / of upstream fuse / rated value
let-through current / of the fuse / at $500 \mathrm{~V} /$ maximum permissible
let-through current / with closed switch
- for combination switch + fuse / at $500 \mathrm{~V} /$ maximum permissible
800 A
1250 A
1250 A
800 A
1250 A
1250 A
1250 A
1250 A
1250 A
1250 A
1250 A
1250 A
1250 A
1250 A
1250 A
112656 A
103400 A


## Main circuit

operating power

- at AC-23 A / at $400 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value
- at $\mathrm{AC}-23 \mathrm{~A} /$ at $500 \mathrm{~V} /$ rated value
- at AC-23 A / at $690 \mathrm{~V} /$ at $50 / 60 \mathrm{~Hz} /$ rated value
operational current / rated value


## 400 kW

560 kW
800 kW
1250 A

## Auxiliary circuit

| number of connected NC contacts / for auxiliary <br> contacts | 0 |
| :--- | :--- | :--- |
| number of connected NO contacts / for auxiliary <br> contacts | 0 |
| number of connected CO contacts / for auxiliary <br> contacts | 0 |
| number of CO contacts / for auxiliary contacts | 0 |
| number of NC contacts / for auxiliary contacts | 16 |
| number of NO contacts / for auxiliary contacts | 16 |


| suitability for use |  |
| :--- | :--- |
| • main switch | Yes |
| • switch disconnector | Yes |
| • EMERGENCY OFF switch | Yes |
| - safety switch | Yes |
| - maintenance/repair switch | Yes |
| product feature / interlock | No |
| product extension / auxiliary switch | Yes |
| product extension / optional |  |
| - motor drive | No |
| $\bullet$ - voltage trigger | No |

## Short circuit

short-circuit current making capacity (Icm) / for switch disconnector

- at AC 415 V / without fuse link / acc. to IEC 60947-6-1 / rated value / minimum
- at AC $690 \mathrm{~V} /$ without fuse link / acc. to IEC 60947-3 / rated value / minimum
conditional short-circuit current / with line-side fuse protection
- at $415 \mathrm{~V} /$ by gG fuse / acc. to IEC 60947-6-1 / rated value
- at $415 \mathrm{~V} /$ by gG fuse / rated value
- at 500 V / by gG fuse / acc. to IEC 60947-3 / rated value

105 kA

105 kA

80 kA

80 kA
80 kA

## Connections

type of connectable conductor cross-sections / for aluminum conductor

- stranded / with lug
type of connectable conductor cross-sections
- with combination of Al conductor+switch
- for copper busbar
type of connectable conductor cross-sections / for copper conductor
- stranded / with lug / acc. to DIN 46234
- stranded / with lug / acc. to DIN 46235
type of electrical connection
- for main current circuit

1x (120 ... $300 \mathrm{~mm}^{2}$ ), 2x (95 ... $300 \mathrm{~mm}^{2}$ )

680 A / $2 \times 300 \mathrm{~mm}^{2}$
$2 \mathrm{x}\left(60 \times 10 \mathrm{~mm}^{2}\right)$

1x (120 ... $240 \mathrm{~mm}^{2}$ ), 2x ( $95 \ldots 240 \mathrm{~mm}^{2}$ )
1x (120 ... $240 \mathrm{~mm}^{2}$ ), 2x ( $95 \ldots 240 \mathrm{~mm}^{2}$ )
busbar connection

Mechanical Design

| height | 310 mm |
| :--- | :--- |
| width | 565 mm |
| depth | 311.5 mm |


| fastening method | screw fixing |  |
| :---: | :---: | :---: |
| fastening method <br> - 4-hole front mounting <br> - front mounting with central attachment <br> - rail mounting | No <br> No <br> No |  |
| net weight | 39100 g |  |
| Environmental conditions |  |  |
| ambient temperature / during operation <br> - minimum <br> - maximum | $\begin{aligned} & -25^{\circ} \mathrm{C} \\ & 70^{\circ} \mathrm{C} \end{aligned}$ |  |
| ambient temperature / during storage <br> - minimum <br> - maximum | $\begin{aligned} & -50^{\circ} \mathrm{C} \\ & 80^{\circ} \mathrm{C} \end{aligned}$ |  |
| Certificates |  |  |
| reference code <br> - acc. to DIN EN 61346-2 <br> - acc. to IEC 81346-2 | Q Q |  |
| General Product Approval | Declaration of Conformity | Shipping Approval |
| © <br> CCC <br> VDE | $C \epsilon$ <br> EG-Konf. | $\begin{aligned} & \begin{array}{l} \text { dloyd's } \\ \text { Register } \end{array} \\ & \text { LRs } \end{aligned}$ |

## 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=3KC0452-0RE00-0AA0
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3KC0452-0RE00-0AA0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KC0452-0RE00-0AA0

## CAx-Online-Generator

http://www.siemens.com/cax

## Tender specifications

http://www.siemens.com/specifications



