## SIEMENS

Data sheet

## 3KF1403-0MB11

SWITCH DISCONNECTOR FUSE 32A, FRAME SIZE 1, 4-POLE FOR LV HRC FUSE SIZE 000 FRONT OPERATING CENTER BASIC UNIT WITHOUT HANDLE BOX 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 the front                     |  |  |
| Type of the driving mechanism / motor drive   | No                                 |  |  |
| Number of poles   | 4                                  |  |  |
| Size of disconnecting link  | 00 and 000                         |  |  |
| Size of switch disconnector   | 1                                  |  |  |
| Size of fuse link   | NH000, NH00                        |  |  |
| Electrical endurance (switching cycles)   |                                    |  |  |
| • at AC-23 A / at 440 V / at 50/60 Hz   | 10 000                             |  |  |
| • at AC-23 A / at 690 V / at 50/60 Hz   | 6 000                              |  |  |
| • at DC-23 A / at 440 V   | 1 500                              |  |  |
| l2t value   |                                    |  |  |
| <ul> <li>with closed switch / for combination switch +<br/>fuse / at 500 V / maximum</li> </ul> | 33 200 A²·s                        |  |  |

| <ul> <li>with closed switch / for combination switch +<br/>fuse / at 400 V / maximum</li> </ul>    | 33 200 A²·s              |  |  |
|--|--------------------------|--|--|
| <ul> <li>with closed switch / at 690 V / for combination<br/>switch + gG fuse / maximum</li> </ul> | 40 700 A²·s              |  |  |
| <ul> <li>with closed switch / at 690 V / for combination<br/>switch + aM fuse / maximum</li> </ul> | 40 700 A <sup>2</sup> ·s |  |  |
| • of the fuse / at 500 V / maximum permissible   | 34 000 A <sup>2</sup> ·s |  |  |
| ● of the gG fuse / at 690 V / maximum<br>permissible   | 55 000 A²·s              |  |  |
| ● of the aM fuse / at 690 V / maximum<br>permissible   | 55 000 A²·s              |  |  |
| Mechanical service life (switching cycles) / typical   | 15 000                   |  |  |
| Position / of the switch operating mechanism   | after the second pole    |  |  |
| Fuse system  | LV HRC fuse              |  |  |
| Overvoltage category   | IV                       |  |  |
| Operating voltage / with current paths in series   |                          |  |  |
| <ul> <li>with degree of pollution 2 / at DC / rated value /<br/>Note</li> </ul>                    | 440 / 3                  |  |  |
| <ul> <li>with degree of pollution 3 / at DC / rated value /<br/>Note</li> </ul>                    | 440 / 3                  |  |  |
| Insulation voltage / rated value   | 1 000 V                  |  |  |
| Surge voltage resistance / rated value   | 12 kV                    |  |  |
| Overvoltage in percent / relative to the operating voltage / at AC / at 50/60 Hz                   | 10 %                     |  |  |
| Protection class   |                          |  |  |
| Protection class IP  | IP20                     |  |  |
| Protection class IP  |                          |  |  |
| <ul> <li>with closed switch / with cover or cable lug<br/>cover</li> </ul>                         | IP20                     |  |  |
| • on the front   | IP20                     |  |  |
| Dissipation  |                          |  |  |
| Power loss [W]   |                          |  |  |
| <ul> <li>with conventional rated thermal current / per<br/>pole</li> </ul>                         | 0.4 W                    |  |  |
| <ul> <li>with conventional rated thermal current / per<br/>device</li> </ul>                       | 1.2 W                    |  |  |
| <ul> <li>with conventional rated thermal current /<br/>without fuse / per pole</li> </ul>          | 0.4 W                    |  |  |
| <ul> <li>with conventional rated thermal current /<br/>without fuse / per device</li> </ul>        | 1.2 W                    |  |  |
| • of the fuse / per fuse / maximum   | 6.5 W                    |  |  |
| ● maximum  | 20.7 W                   |  |  |
| Operating current  |                          |  |  |
|  |                          |  |  |

| • at AC-21 A / at 400 V / maximum   | 32 A     |
|---|----------|
| • at AC-21 A / at 500 V / maximum   | 32 A     |
| • at AC-21 A / at 690 V / maximum   | 32 A     |
| • at AC-23 A / at 500 V / at 50/60 Hz / rated value                                       | 32 A     |
| / maximum   |          |
| • at AC-22 A / at 500 V / at 50/60 Hz / rated value                                       | 32 A     |
| / maximum   |          |
| • at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum                             | 32 A     |
| • at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum                             | 32 A     |
| ● at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum                             | 32 A     |
| • at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum                             | 32 A     |
| • at DC-23 A / at 440 V / rated value / maximum   | 32 A     |
| • at DC-23 A / at 220 V / rated value / maximum   | 32 A     |
| • at DC-22 A / at 440 V / rated value / maximum   | 32 A     |
| • at DC-22 A / at 220 V / rated value / maximum   | 32 A     |
| • at DC-21 A / at 440 V / rated value / maximum   | 32 A     |
| • at DC-21 A / at 220 V / maximum   | 32 A     |
| Continuous current  |          |
| • rated value   | 32 A     |
| • at 40 °C / rated value  | 32 A     |
| • at 45 °C / rated value  | 32 A     |
| • at 50 °C / rated value  | 32 A     |
| • at 55 °C / rated value  | 32 A     |
| • at 60 °C / rated value  | 32 A     |
| • at 65 °C / rated value  | 32 A     |
| • at 70 °C / rated value  | 32 A     |
| Continuous current / at DC / rated value  | 32 A     |
| Let-through current / of the fuse / at 500 V /  | 11 800 A |
| maximum permissible   |          |
| Let-through current / of the gG fuse / at 690 V /   | 11 500 A |
| maximum permissible   |          |
| Let-through current / of the aM fuse / at 690 V /   | 11 500 A |
| maximum permissible   |          |
| Let-through current / with closed switch  |          |
| <ul> <li>at 690 V / for combination switch + aM fuse /<br/>maximum permissible</li> </ul> | 11 200 A |
| <ul> <li>at 690 V / for combination switch + gG fuse /<br/>maximum permissible</li> </ul> | 11 200 A |
| <ul> <li>for combination switch + fuse / at 400 V /<br/>maximum permissible</li> </ul>    | 10 400 A |
|   |          |

| <ul> <li>for combination switch + fuse / at 500 V /<br/>maximum permissible</li> </ul>       | 10 400 A |  |  |
|--|----------|--|--|
| Short-time current resistance (Icw) / at 690 V AC/440<br>V DC / limited to 1 s / rated value | 2.5 kA   |  |  |
| Main circuit   |          |  |  |
| Operating power / at AC-23 A   |          |  |  |
| • at 400 V / at 50/60 Hz / rated value   | 15 kW    |  |  |
| • at 500 V / at 50/60 Hz / rated value   | 18.5 kW  |  |  |
| • at 690 V / at 50/60 Hz / rated value   | 30 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<br>contacts                                  | 0        |  |  |
| Number of connected NO contacts / for auxiliary<br>contacts                                  | 0        |  |  |
| Number of connected CO contacts / for auxiliary contacts                                     | 0        |  |  |
| Suitability for use  |          |  |  |
| Main switch  | Yes      |  |  |
| switch disconnector  | Yes      |  |  |
| EMERGENCY OFF switch   | Yes      |  |  |
| <ul> <li>safety switch</li> </ul>  | Yes      |  |  |
| <ul> <li>maintenance/repair switch</li> </ul>  | Yes      |  |  |
| Product feature / interlock  | No       |  |  |
| Product component  |          |  |  |
| Voltage trigger  | No       |  |  |
| <ul> <li>undervoltage release</li> </ul>   | No       |  |  |
| <ul> <li>undervoltage release with leading contact</li> </ul>                                | No       |  |  |
| Product feature / sealable   | Yes      |  |  |
| Product extension  |          |  |  |
| Auxiliary switch   | Yes      |  |  |
| • optional   |          |  |  |
| — locking capability   | Yes      |  |  |
| — motor drive  | No       |  |  |
| — fuse monitoring  | Yes      |  |  |
| Product function   |          |  |  |
| <ul> <li>fuse monitoring</li> </ul>  | No       |  |  |
| Short circuit  |          |  |  |

| Short-circuit current making capacity (Icm) / for<br>switch disconnector / at 690 V AC/440 V DC / without<br>fuse link / rated value / minimum  | 3.55 kA   |  |  |
|---|---|--|--|
| Conditional short-circuit current / with line-side fuse<br>protection   |   |  |  |
| <ul> <li>at 500 V / by gG fuse / rated value</li> </ul>   | 100 kA  |  |  |
| ● at 690 V / by gG fuse / rated value   | 100 kA  |  |  |
| Connections   |   |  |  |
| Arrangement of electrical connectors / for main current circuit   | Top and bottom  |  |  |
| Tightening torque / with screw-type terminals   |   |  |  |
| • minimum   | 5 N·m   |  |  |
| • maximum   | 6.5 N·m   |  |  |
| <ul> <li>Type of connectable conductor cross-sections /<br/>for copper conductor / solid</li> </ul>   | 1x (1 16 mm²)   |  |  |
| • Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing  | 1x (6 25 mm²)   |  |  |
| <ul> <li>Type of connectable conductor cross-sections /<br/>with flexible busbar</li> </ul>   | 2x (0,8x9 mm)   |  |  |
| <ul> <li>Type of connectable conductor cross-sections /<br/>for copper conductor / stranded</li> </ul>  | 1x (6 25 mm²)   |  |  |
| Type of electrical connection   |   |  |  |
| • for main current circuit  | Box terminal  |  |  |
| Mechanical Design   |   |  |  |
| Height  | 122 mm  |  |  |
| Width   | 181 mm  |  |  |
|   | 130.5 mm  |  |  |
| Depth   | 130.5 mm  |  |  |
|   | 130.5 mm<br>any   |  |  |
| Depth   |   |  |  |
| Depth<br>Mounting position  | any<br>Floor mounting and snap-on mounting on 35 mm standard  |  |  |
| Depth<br>Mounting position<br>Mounting type   | any<br>Floor mounting and snap-on mounting on 35 mm standard  |  |  |
| Depth<br>Mounting position<br>Mounting type<br>Mounting type  | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail   |  |  |
| Depth<br>Mounting position<br>Mounting type<br>• front mounting with 4-hole attachment  | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail   |  |  |
| Depth<br>Mounting position<br>Mounting type<br>• front mounting with 4-hole attachment<br>• front mounting with central attachment  | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No   |  |  |
| Depth<br>Mounting position<br>Mounting type<br>Mounting type<br>• front mounting with 4-hole attachment<br>• front mounting with central attachment<br>• rail mounting  | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No<br>Yes                                    |  |  |
| Depth<br>Mounting position<br>Mounting type<br>• front mounting with 4-hole attachment<br>• front mounting with central attachment<br>• rail mounting<br>Net weight   | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No<br>Yes                                    |  |  |
| Depth<br>Mounting position<br>Mounting type<br>Mounting type<br>• front mounting with 4-hole attachment<br>• front mounting with central attachment<br>• rail mounting<br>Net weight<br>Environmental conditions  | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No<br>Yes<br>1 650 g                         |  |  |
| Depth         Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution  | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No<br>Yes<br>1 650 g                         |  |  |
| Depth         Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution         Ambient temperature  | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No<br>Yes<br>1 650 g                         |  |  |
| Depth         Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution         Ambient temperature         • during operation / minimum   | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No<br>Yes<br>1 650 g<br>3<br>-25 °C          |  |  |
| Depth         Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution         Ambient temperature         • during operation / minimum         • during operation / maximum | any<br>Floor mounting and snap-on mounting on 35 mm standard<br>mounting rail<br>No<br>No<br>Yes<br>1 650 g<br>3<br>-25 °C<br>70 °C |  |  |

| Certificates        |                        |   |               |  |
|---------------------|------------------------|---|---------------|--|
| Equipment marking / | acc. to DIN EN 61346-2 | Q |               |  |
| General Product     | Approval               |   | other         |  |
| $(\mathbf{m})$      | DE                     |   | Miscellaneous |  |
|                     |                        |   |               |  |

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=3KF1403-0MB11

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3KF1403-0MB11

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KF1403-0MB11

CAx-Online-Generator http://www.siemens.com/cax

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







