## **SIEMENS**

Data sheet 3KF4340-4RF11

SWITCH DISCONNECTOR FUSE 400A, FRAME SIZE 4, 3-POLE FOR LV HRC FUSE SIZE 1 AND 2 SIDE OPERATING RIGHT 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 right                         |
| Type of the driving mechanism / motor drive                               | No                                 |
| Number of poles   | 3                                  |
| Size of disconnecting link  | 2 and 1                            |
| Size of switch disconnector   | 4                                  |
| Size of fuse link   | NH1, NH2                           |
| Electrical endurance (switching cycles)                                   |                                    |
| • at AC-23 A / at 440 V / at 50/60 Hz                                     | 3 000                              |
| • at AC-23 A / at 690 V / at 50/60 Hz                                     | 2 000                              |
| • at DC-23 A / at 440 V   | 1 000                              |
| I2t value   |                                    |
| • with closed switch / for combination switch + fuse / at 500 V / maximum | 1 205 000 A <sup>2</sup> ·s        |

| <ul> <li>with closed switch / for combination switch +<br/>fuse / at 400 V / maximum</li> </ul>  | 1 205 000 A <sup>2</sup> ·s          |
|--|--------------------------------------|
| <ul> <li>with closed switch / at 690 V / for combination<br/>switch + gG fuse / maximum</li> </ul>   | 1 300 000 A²·s                       |
| <ul> <li>with closed switch / at 690 V / for combination<br/>switch + aM fuse / maximum</li> </ul>   | 1 300 000 A²·s                       |
| • of the fuse / at 500 V / maximum permissible   | 2 150 000 A <sup>2</sup> ·s          |
| <ul> <li>of the gG fuse / at 690 V / maximum<br/>permissible</li> </ul>  | 2 600 000 A²-s                       |
| <ul> <li>of the aM fuse / at 690 V / maximum<br/>permissible</li> </ul>  | 2 600 000 A <sup>2</sup> ·s          |
| Mechanical service life (switching cycles) / typical   | 8 000                                |
| Position / of the switch operating mechanism   | at the right end                     |
| 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   |                                      |
| Drotoction close ID  | IP00                                 |
| Protection class IP  | " 00                                 |
| Protection class IP Protection class IP  | 33                                   |
|  | IP20                                 |
| Protection class IP  • with closed switch / with cover or cable lug  |                                      |
| Protection class IP  • with closed switch / with cover or cable lug cover  • on the front  | IP20                                 |
| Protection class IP  • with closed switch / with cover or cable lug cover  | IP20                                 |
| Protection class IP  • with closed switch / with cover or cable lug cover  • on the front  Dissipation   | IP20                                 |
| Protection class IP  with closed switch / with cover or cable lug cover  on the front  Dissipation  Power loss [W]  with conventional rated thermal current / per  | IP20<br>IP00                         |
| Protection class IP  with closed switch / with cover or cable lug cover  on the front  Dissipation  Power loss [W]  with conventional rated thermal current / per pole  with conventional rated thermal current / per  | IP20<br>IP00                         |
| Protection class IP  • with closed switch / with cover or cable lug cover • on the front  Dissipation  Power loss [W]  • with conventional rated thermal current / per pole • with conventional rated thermal current / per device • with conventional rated thermal current /   | IP20 IP00  26 W 78 W                 |
| Protection class IP  • with closed switch / with cover or cable lug cover • on the front  Dissipation  Power loss [W]  • with conventional rated thermal current / per pole • with conventional rated thermal current / per device • with conventional rated thermal current / without fuse / per pole • with conventional rated thermal current /                   | IP20<br>IP00<br>26 W<br>78 W<br>26 W |
| Protection class IP  with closed switch / with cover or cable lug cover  on the front  Dissipation  Power loss [W]  with conventional rated thermal current / per pole  with conventional rated thermal current / per device  with conventional rated thermal current / without fuse / per pole  with conventional rated thermal current / without fuse / per device | IP20 IP00  26 W  78 W  26 W  78 W    |

| <ul> <li>at AC-21 A / at 400 V / maximum</li> </ul>                                       | 400 A    |
|---|----------|
| • at AC-21 A / at 500 V / maximum   | 400 A    |
| • at AC-21 A / at 690 V / maximum   | 400 A    |
| • at AC-23 A / at 500 V / at 50/60 Hz / rated value                                       | 400 A    |
| / maximum   |          |
| • at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum                             | 400 A    |
| • at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum                             | 400 A    |
| • at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum                             | 400 A    |
| • at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum                             | 400 A    |
| • at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum                             | 400 A    |
| • at DC-23 A / at 440 V / rated value / maximum   | 400 A    |
| • at DC-23 A / at 220 V / rated value / maximum   | 400 A    |
| • at DC-22 A / at 440 V / rated value / maximum   | 400 A    |
| • at DC-22 A / at 220 V / rated value / maximum   | 400 A    |
| • at DC-21 A / at 440 V / rated value / maximum   | 400 A    |
| • at DC-21 A / at 220 V / maximum   | 400 A    |
| Continuous current  |          |
| • rated value   | 400 A    |
| • at 40 °C / rated value  | 400 A    |
| • at 45 °C / rated value  | 350 A    |
| ● at 50 °C / rated value  | 315 A    |
| ● at 55 °C / rated value  | 315 A    |
| • at 60 °C / rated value  | 315 A    |
| ● at 65 °C / rated value  | 280 A    |
| • at 70 °C / rated value  | 280 A    |
| Continuous current / at DC / rated value  | 400 A    |
| Let-through current / of the fuse / at 500 V / maximum permissible                        | 37 100 A |
| Let-through current / of the gG fuse / at 690 V /   | 47 000 A |
| maximum permissible   | 47 000 A |
| Let-through current / of the aM fuse / at 690 V / maximum permissible                     | 47 000 A |
| Let-through current / with closed switch  |          |
| at 690 V / for combination switch + aM fuse / maximum permissible                         | 41 140 A |
| <ul> <li>at 690 V / for combination switch + gG fuse /<br/>maximum permissible</li> </ul> | 41 140 A |
| <ul> <li>for combination switch + fuse / at 400 V /<br/>maximum permissible</li> </ul>    | 39 400 A |

| <ul> <li>for combination switch + fuse / at 500 V /<br/>maximum permissible</li> </ul> | 39 400 A |
|--|----------|
| Short-time current resistance (Icw) / at 690 V AC/440                                  | 12 kA    |
| V DC / limited to 1 s / rated value  |          |
| Main circuit   |          |
| Operating power / at AC-23 A   |          |
| <ul> <li>at 400 V / at 50/60 Hz / rated value</li> </ul>                               | 220 kW   |
| <ul> <li>at 500 V / at 50/60 Hz / rated value</li> </ul>                               | 280 kW   |
| <ul> <li>at 690 V / at 50/60 Hz / rated value</li> </ul>                               | 400 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  | 0        |
| contacts   |          |
| Number of connected NO contacts / for auxiliary  | 0        |
| contacts   |          |
| Number of connected CO contacts / for auxiliary  | 0        |
| contacts   |          |
| Suitability for use  | Yes      |
| Main switch  |          |
| • switch disconnector  | Yes      |
| EMERGENCY OFF switch   | Yes      |
| safety switch  | Yes      |
| maintenance/repair switch  | Yes      |
| Product feature / interlock  | No       |
| Product component  |          |
| Voltage trigger  | No       |
| undervoltage release   | No       |
| undervoltage release with leading contact  | No       |
| Product feature / sealable   | Yes      |
| Product extension  |          |
| <ul> <li>Auxiliary switch</li> </ul>   | Yes      |
| • optional   |          |
| <ul><li>— locking capability</li></ul>   | Yes      |
| — motor drive  | No       |
| — fuse monitoring  | Yes      |
| Product function   |          |
| • fuse monitoring  | No       |

Short circuit

| Short-circuit current making capacity (Icm) / for switch disconnector / at 690 V AC/440 V DC / without fuse link / rated value / minimum | 24 kA  |
|--|--------|
| Conditional short-circuit current / with line-side fuse protection   |        |
| • at 500 V / by gG fuse / rated value  | 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   | 30 N⋅m                           |
| • maximum   | 44 N·m                           |
| <ul> <li>Type of connectable conductor cross-sections /<br/>for copper busbar</li> </ul>  | 1x (30x10 mm)                    |
| <ul> <li>Type of connectable conductor cross-sections /<br/>for aluminum conductor / stranded / with lug</li> </ul>                       | 1x (6 240 mm²), 2x (6 150 mm²)   |
| <ul> <li>Type of connectable conductor cross-sections /<br/>for copper conductor / stranded / with lug / acc. to<br/>DIN 46234</li> </ul> | 1x (6 240 mm²), 2x (6 150 mm²)   |
| <ul> <li>Type of connectable conductor cross-sections /<br/>for copper conductor / stranded / with lug / acc. to<br/>DIN 46235</li> </ul> | 1x (16 185 mm²), 2x (16 150 mm²) |
| Type of electrical connection   |                                  |
| for main current circuit  | flat connector                   |

| Mechanical Design  |                |
|--|----------------|
| Height   | 215 mm         |
| Width  | 304.5 mm       |
| Depth  | 206.5 mm       |
| Mounting position  | any            |
| Mounting type  | floor mounting |
| Mounting type  |                |
| <ul> <li>front mounting with 4-hole attachment</li> </ul>  | No             |
| <ul> <li>front mounting with central attachment</li> </ul> | No             |
| • rail mounting  | No             |
| Net weight   | 6 200 g        |

| Environmental conditions                     |        |
|--|--------|
| Degree of pollution                          | 3      |
| Ambient temperature                          |        |
| <ul><li>during operation / minimum</li></ul> | -25 °C |
| <ul><li>during operation / maximum</li></ul> | 70 °C  |
| <ul> <li>during storage / minimum</li> </ul> | -50 °C |
| <ul><li>during storage / maximum</li></ul>   | 80 °C  |

## Certificates

Equipment marking / acc. to DIN EN 61346-2

Q

other

## **General Product Approval**





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=3KF4340-4RF11

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

https://support.industry.siemens.com/cs/ww/en/ps/3KF4340-4RF11

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KF4340-4RF11

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







