## **SIEMENS**

Data sheet 3KF2312-0MR11

SWITCH DISCONNECTOR FUSE 125A, FRAME SIZE 2, 3-POLE FOR LV HRC FUSE SIZE 000 AND 00 FRONT OPERATING CENTER BASIC UNIT WITHOUT HANDLE BACKSIDE 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 the front
Type of the driving mechanism / motor drive	No
Number of poles	3
Size of disconnecting link	00 and 000
Size of switch disconnector	2
Size of fuse link	NH000, NH00
Electrical endurance (switching cycles)	
● at AC-23 A / at 440 V / at 50/60 Hz	8 000
• at AC-23 A / at 690 V / at 50/60 Hz	5 000
• at DC-23 A / at 440 V	1 000
I2t value	
<ul> <li>with closed switch / for combination switch + fuse / at 500 V / maximum</li> </ul>	150 600 A <sup>2</sup> ·s

<ul> <li>with closed switch / for combination switch + fuse / at 400 V / maximum</li> </ul>	150 600 A²-s
<ul> <li>with closed switch / at 690 V / for combination switch + gG fuse / maximum</li> </ul>	89 640 A²·s
<ul> <li>with closed switch / at 690 V / for combination switch + aM fuse / maximum</li> </ul>	89 640 A²·s
• of the fuse / at 500 V / maximum permissible	223 000 A <sup>2</sup> ·s
<ul> <li>of the gG fuse / at 690 V / maximum permissible</li> </ul>	360 000 A²·s
<ul> <li>of the aM fuse / at 690 V / maximum permissible</li> </ul>	375 000 A²·s
Mechanical service life (switching cycles) / typical	12 000
Position / of the switch operating mechanism	after the first 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 / Note</li></ul>	440 / 3
<ul><li>with degree of pollution 3 / at DC / rated value / 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	IP00
Protection class IP	
<ul> <li>with closed switch / with cover or cable lug cover</li> </ul>	IP20
• on the front	IP20
Dissipation	
Power loss [W]	
•	
<ul> <li>with conventional rated thermal current / per pole</li> </ul>	4.2 W
	4.2 W 12.6 W
pole  with conventional rated thermal current / per	
<ul> <li>with conventional rated thermal current / per device</li> <li>with conventional rated thermal current /</li> </ul>	12.6 W
pole  • with conventional rated thermal current / per device  • with conventional rated thermal current / without fuse / per pole  • with conventional rated thermal current /	12.6 W 4.2 W
<ul> <li>with conventional rated thermal current / per device</li> <li>with conventional rated thermal current / without fuse / per pole</li> <li>with conventional rated thermal current / without fuse / per device</li> </ul>	12.6 W 4.2 W 12.6 W

• at AC-21 A / at 400 V / maximum	125 A
• at AC-21 A / at 500 V / maximum	125 A
• at AC-21 A / at 690 V / maximum	125 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	125 A
• at DC-23 A / at 440 V / rated value / maximum	125 A
• at DC-23 A / at 220 V / rated value / maximum	125 A
• at DC-22 A / at 440 V / rated value / maximum	125 A
• at DC-22 A / at 220 V / rated value / maximum	125 A
• at DC-21 A / at 440 V / rated value / maximum	125 A
• at DC-21 A / at 220 V / maximum	125 A
Continuous current	
• rated value	125 A
• at 40 °C / rated value	125 A
• at 45 °C / rated value	125 A
• at 50 °C / rated value	125 A
• at 55 °C / rated value	125 A
• at 60 °C / rated value	125 A
• at 65 °C / rated value	125 A
• at 70 °C / rated value	125 A
Continuous current / at DC / rated value	125 A
Let-through current / of the fuse / at 500 V / maximum permissible	18 000 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	25 500 A
Let-through current / of the aM fuse / at 690 V / maximum permissible	28 100 A
Let-through current / with closed switch	
• at 690 V / for combination switch + aM fuse /	16 870 A
maximum permissible	
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	16 870 A
• for combination switch + fuse / at 400 V / maximum permissible	18 200 A

<ul> <li>for combination switch + fuse / at 500 V / maximum permissible</li> </ul>	18 200 A
Short-time current resistance (lcw) / at 690 V AC/440	5 kA
V DC / limited to 1 s / rated value	
Main circuit	
Operating power / at AC-23 A	
• at 400 V / at 50/60 Hz / rated value	55 kW
• at 500 V / at 50/60 Hz / rated value	75 kW
• at 690 V / at 50/60 Hz / rated value	110 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	
Main switch	Yes
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	Yes
safety switch	Yes
<ul><li>maintenance/repair switch</li></ul>	Yes
Product feature / interlock	No
Product component	
<ul> <li>Voltage trigger</li> </ul>	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
<ul><li>optional</li></ul>	
— locking capability	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	7.65 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	Rear
current circuit	
Tightening torque / with screw-type terminals	
• minimum	15 N·m
• maximum	22 N·m
<ul> <li>Type of connectable conductor cross-sections / for copper busbar</li> </ul>	1x (15x3 mm)
<ul> <li>Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug</li> </ul>	1x (2.5 70 mm²), 2x (2.5 50 mm²)
<ul> <li>Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46234</li> </ul>	1x (2.5 95 mm²), 2x (2.5 50 mm²)
<ul> <li>Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235</li> </ul>	1x (25 70 mm²), 2x (25 50 mm²)
Type of electrical connection	
• for main current circuit	flat connector

Mechanical Design	
Height	111.3 mm
Width	190.7 mm
Depth	178 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	2 200 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

**General Product Approval** 

other



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=3KF2312-0MR11

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

https://support.industry.siemens.com/cs/ww/en/ps/3KF2312-0MR11

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KF2312-0MR11

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







