## **SIEMENS**

Data sheet 3KF2312-4RF11

Switch disconnector with fuse 125 A, Size 2, 3-pole for LV HRC fuse Sz. 000 and 00 Side operating mechanism right Basic unit without handle flat terminal



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	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	8 000
• at AC-23 A / at 690 V	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 A²·s

• with closed switch / for combination switch +	
fuse / at 400 V / maximum	150 600 A <sup>2</sup> ·s
<ul> <li>with closed switch / at 690 V / for combination switch + gG fuse / maximum</li> </ul>	89 640 A <sup>2</sup> ·s
• of the fuse / at 500 V / maximum permissible	223 000 A²·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>	565 000 A²·s
Mechanical service life (switching cycles) / typical	12 000
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</li> </ul>	440 / 3
• with degree of pollution 3 / at DC / rated value	440 / 3
Insulation voltage / rated value	1 000 V
Surge voltage resistance / rated value	12 kV
Supply voltage	
Operating current / at AC / rated value	125 A
Operating voltage	12071
at AC / rated value / maximum	690 V
at AC / rated value / maximum     at AC / at 50/60 Hz / rated value	690 V
	090 V
- at 710 / at 50/00 Fiz / rated value	
Protection class	
	IP00
Protection class	IP00 IP20
Protection class IP  • Protection class IP / with closed switch / with	
Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover  protection class IP / on the front	IP20
Protection class  Protection class IP  • Protection class IP / with closed switch / with cover or cable lug cover	IP20
Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover  protection class IP / on the front  Dissipation	IP20
Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover  protection class IP / on the front  Dissipation  Power loss [W]  with conventional rated thermal current / per	IP20 IP00
Protection class IP  Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover  protection class IP / on the front  Dissipation  Power loss [W]  with conventional rated thermal current / per pole  with conventional rated thermal current / per	IP20 IP00  4.2 W
Protection class IP  Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover  protection class IP / 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  4.2 W  12.6 W
Protection class IP  Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover  protection class IP / 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 pole  with conventional rated thermal current /	IP20 IP00  4.2 W  12.6 W  4.2 W
Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover protection class IP / 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 for rated value of the current / at AC / in hot	IP20 IP00  4.2 W  12.6 W  12.6 W
Protection class IP  Protection class IP / with closed switch / with cover or cable lug cover  protection class IP / 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  for rated value of the current / at AC / in hot operating state / per pole	IP20 IP00  4.2 W  12.6 W  12.6 W  12.6 W

• at AC-21 A / at 500 V / rated value	125 A
• at AC-21 A / at 690 V / rated value	125 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value	125 A
/ maximum	
<ul><li>at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum</li></ul>	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 / Note	125 A
• at DC-23 A / at 220 V / rated value / Note	125 A
• at DC-22 A / at 440 V / rated value / Note	125 A
• at DC-22 A / at 220 V / rated value / Note	125 A
• at DC-21 A / at 440 V / rated value / Note	125 A
• at DC-21 A / at 220 V / rated value	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
Operating 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	33 200 A
let-through current / with closed switch	
<ul> <li>at 690 V / for combination switch + aM fuse / maximum permissible</li> </ul>	27 300 A
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	16 870 A
<ul> <li>for combination switch + fuse / at 400 V / maximum permissible</li> </ul>	18 200 A

<ul> <li>for combination switch + fuse / at 500 V / maximum permissible</li> </ul>	18 200 A
Short-time withstand current (lcw) / at 690 V AC/440 V DC / limited to 1 s / rated value	5 kA
Main circuit	
Operating power / at AC-23 A	
• at 400 V / at 50/60 Hz / rated value	55 kW
• at 500 V / rated value	75 kW
• at 690 V / at 50/60 Hz / rated value	110 kW
Operating current / rated value	125 A
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 contacts	0
Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	6
Number of NO contacts / for auxiliary contacts	6
Suitability for use	
Main switch	Yes
<ul> <li>switch disconnector</li> </ul>	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	Yes
• safety switch	Yes
• maintenance/repair switch	Yes
Product feature / interlock	No
<ul> <li>Product function / Phase failure monitoring</li> </ul>	No
Product component / Voltage trigger	No
Product component / undervoltage release	No
<ul> <li>Product component / undervoltage release with leading contact</li> </ul>	No
Product feature / sealable	Yes
Product extension / Auxiliary switch	Yes
Product extension / optional	
locking capability	Yes
• motor drive	No
• fuse monitoring	Yes
Product function	
• fuse monitoring	No
Overvoltage protection monitoring	No

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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	Top and bottom
current circuit	
Tightening torque / with screw-type terminals	
• minimum	15 N·m
• maximum	22 N·m
Type of connectable conductor cross-sections / for	
aluminum conductor	
• stranded / with lug	1x (2.5 95 mm²), 2x (2.5 50 mm²)
Type of connectable conductor cross-sections	
• for copper busbar	1x (15 x 3 mm²)
Type of connectable conductor cross-sections / for	
copper conductor	
<ul><li>stranded / with lug / acc. to DIN 46234</li></ul>	1x (2.5 95 mm²), 2x (2.5 50 mm²)
• stranded / with lug / acc. to DIN 46235	1x (25 70 mm²), 2x (25 50 mm²)
Type of electrical connection	
for main current circuit	flat connector

Mechanical Design	
Height	150 mm
Width	203.7 mm
Depth	161.5 mm
Mounting type	floor mounting
<ul> <li>Mounting type / front mounting with 4-hole attachment</li> </ul>	No
<ul> <li>Mounting type / front mounting with central attachment</li> </ul>	No
<ul><li>mounting type / rail mounting</li></ul>	No
mounting position	any
net weight	2 300 g

Environmental conditions	
Ambient temperature / during operation	
• minimum	-25 °C
• maximum	70 °C
Ambient temperature / during storage	
• minimum	-50 °C

80 °C maximum

## Certificates

• reference code / acc. to DIN EN 61346-2 Q • Reference code / acc. to DIN EN 81346-2 Q

**Declaration of** 

**General Product Approval** other Conformity





Miscellaneous



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=3KF2312-4RF11

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

https://support.industry.siemens.com/cs/ww/en/ps/3KF2312-4RF11

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KF2312-4RF11">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KF2312-4RF11</a>

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications











