SIEMENS

Data sheet 3KF4440-0MF11

SWITCH DISCONNECTOR FUSE 400A, FRAME SIZE 4, 4-POLE FOR LV HRC FUSE SIZE 1 AND 2 FRONT OPERATING CENTER 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 the front
Type of the driving mechanism / motor drive	No
Number of poles	4
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 A²·s

• with closed switch / for combination switch + fuse / at 400 V / maximum	1 205 000 A²·s
• with closed switch / at 690 V / for combination switch + gG fuse / maximum	1 300 000 A²·s
• with closed switch / at 690 V / for combination switch + aM fuse / maximum	1 300 000 A²·s
• of the fuse / at 500 V / maximum permissible	2 150 000 A²·s
• of the gG fuse / at 690 V / maximum permissible	2 600 000 A²·s
• of the aM fuse / at 690 V / maximum permissible	2 600 000 A²·s
Mechanical service life (switching cycles) / typical	8 000
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	
• with degree of pollution 2 / at DC / rated value / Note	440 / 3
• with degree of pollution 3 / at DC / rated value / Note	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	
• with closed switch / with cover or cable lug cover	IP20
• on the front	IP00

Dissipation

Power loss [W]	
• with conventional rated thermal current / per pole	26 W
• with conventional rated thermal current / per device	78 W
• with conventional rated thermal current / without fuse / per pole	26 W
• with conventional rated thermal current / without fuse / per device	78 W
• of the fuse / per fuse / maximum	34 W
• maximum	180 W
Operating current	

• at AC-21 A / at 400 V / maximum	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 / maximum	400 A
• 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 / 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
• at 690 V / for combination switch + gG fuse / maximum permissible	41 140 A
• for combination switch + fuse / at 400 V / maximum permissible	39 400 A

• for combination switch + fuse / at 500 V / maximum permissible	39 400 A
Short-time current resistance (Icw) / at 690 V AC/440 V DC / limited to 1 s / rated value	12 kA

Main circuit

Operating power / at AC-23 A	
• at 400 V / at 50/60 Hz / rated value	220 kW
• at 500 V / at 50/60 Hz / rated value	280 kW
• at 690 V / at 50/60 Hz / rated value	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 contacts	0
Number of connected NO contacts / for auxiliary contacts	0
Number of connected CO contacts / for auxiliary contacts	0
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 component	
• Voltage trigger	No
• undervoltage release	No
• undervoltage release with leading contact	No
Product feature / sealable	Yes
Product extension	
• Auxiliary switch	Yes
• optional	
— 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	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
• Type of connectable conductor cross-sections / for copper busbar	1x (30x10 mm)
• Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug	1x (6 ... 240 mm²), 2x (6 ... 150 mm²)
• Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46234	1x (6 ... 240 mm²), 2x (6 ... 150 mm²)
• Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235	1x (16 ... 185 mm²), 2x (16 ... 150 mm²)
Type of electrical connection	
• for main current circuit	flat connector

Mechanical Design

Height	215 mm
Width	360.1 mm
Depth	206.5 mm
Mounting position	any
Mounting type	floor mounting
Mounting type	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	No
Net weight	7 650 g

Environmental conditions

Degree of pollution	3
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-50 °C
• during storage / maximum	80 °C

Certificates

Equipment marking / acc. to DIN EN 61346-2	Q

General Product Approval	other
CCC, VDE	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=3KF4440-0MF11

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3KF4440-0MF11

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF4440-0MF11

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

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