SIEMENS

Data sheet 3KF1406-0MB11

SWITCH DISCONNECTOR FUSE 63A, 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
I2t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	33 200 $A^2 \cdot s$

• with closed switch / for combination switch + fuse / at 400 V / maximum	33 200 A²·s
• with closed switch / at 690 V / for combination switch + gG fuse / maximum	40 700 A²·s
• with closed switch / at 690 V / for combination switch + aM fuse / maximum	40 700 A²·s
• of the fuse / at 500 V / maximum permissible	34 000 A²·s
• of the gG fuse / at 690 V / maximum permissible	55 000 A²·s
• of the aM fuse / at 690 V / maximum 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	
• 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	IP20
Protection class IP	
• with closed switch / with cover or cable lug cover	IP20
• on the front	IP20

Dissipation

Power loss [W]	
• with conventional rated thermal current / per pole	1.7 W
• with conventional rated thermal current / per device	5.1 W
• with conventional rated thermal current / without fuse / per pole	1.7 W
• with conventional rated thermal current / without fuse / per device	5.1 W
• of the fuse / per fuse / maximum	7.5 W
• maximum	27.6 W
Operating current	

• at AC-21 A / at 400 V / maximum	63 A
• at AC-21 A / at 500 V / maximum	63 A
• at AC-21 A / at 690 V / maximum	63 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	63 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	63 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	63 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	63 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	63 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	63 A
• at DC-23 A / at 440 V / rated value / maximum	63 A
• at DC-23 A / at 220 V / rated value / maximum	63 A
• at DC-22 A / at 440 V / rated value / maximum	63 A
• at DC-22 A / at 220 V / rated value / maximum	63 A
• at DC-21 A / at 440 V / rated value / maximum	63 A
• at DC-21 A / at 220 V / maximum	63 A
Continuous current	
• rated value	63 A
• at 40 °C / rated value	63 A
• at 45 °C / rated value	63 A
• at 50 °C / rated value	63 A
• at 55 °C / rated value	63 A
• at 60 °C / rated value	63 A
• at 65 °C / rated value	63 A
• at 70 °C / rated value	63 A
Continuous current / at DC / rated value	63 A
Let-through current / of the fuse / at 500 V / maximum permissible	11 800 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	11 500 A
Let-through current / of the aM fuse / at 690 V / maximum permissible	11 500 A
Let-through current / with closed switch	
• at 690 V / for combination switch + aM fuse / maximum permissible	11 200 A
• at 690 V / for combination switch + gG fuse / maximum permissible	11 200 A
• for combination switch + fuse / at 400 V / maximum permissible	10 400 A

• for combination switch + fuse / at 500 V / maximum permissible	10 400 A
Short-time current resistance (Icw) / at 690 V AC/440 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	30 kW
• at 500 V / at 50/60 Hz / rated value	37 kW
• at 690 V / at 50/60 Hz / rated value	55 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	3.55 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	5 N·m
• maximum	6.5 N·m
• Type of connectable conductor cross-sections / for copper conductor / solid	1x (1 ... 16 mm²)
• Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing	1x (6 ... 25 mm²)
• Type of connectable conductor cross-sections / with flexible busbar	2x (0,8x9 mm)
• Type of connectable conductor cross-sections / for copper conductor / stranded	1x (6 ... 25 mm²)
Type of electrical connection	
• for main current circuit	Box terminal

Mechanical Design

Height	122 mm
Width	181 mm
Depth	130.5 mm
Mounting position	any
Mounting type	Floor mounting and snap-on mounting on 35 mm standard mounting rail
Mounting type	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	Yes
Net weight	1 650 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=3KF1406-0MB11

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3KF1406-0MB11

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF1406-0MB11

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

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