## SIEMENS

## Data sheet

## 3KF1406-0LB11

SWITCH DISCONNECTOR FUSE 63A, FRAME SIZE 1, 4-POLE FOR LV HRC FUSE SIZE 000 FRONT OPERATING LEFT 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	
l2t value		
<ul> <li>with closed switch / for combination switch + fuse / at 500 V / maximum</li> </ul>	33 200 A²·s	

<ul> <li>with closed switch / for combination switch + fuse / at 400 V / maximum</li> </ul>	33 200 A²·s
<ul> <li>with closed switch / at 690 V / for combination switch + gG fuse / maximum</li> </ul>	40 700 A <sup>2</sup> ·s
<ul> <li>with closed switch / at 690 V / for combination switch + aM fuse / maximum</li> </ul>	40 700 A²·s
<ul> <li>of the fuse / at 500 V / maximum permissible</li> </ul>	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	at the left 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 / 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	IP20
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>	1.7 W
<ul> <li>with conventional rated thermal current / per device</li> </ul>	5.1 W
<ul> <li>with conventional rated thermal current / without fuse / per pole</li> </ul>	1.7 W
<ul> <li>with conventional rated thermal current / without fuse / per device</li> </ul>	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 /	11 800 A
maximum permissible	
Let-through current / of the gG fuse / at 690 V /	11 500 A
maximum permissible	
Let-through current / of the aM fuse / at 690 V /	11 500 A
maximum permissible	
Let-through current / with closed switch	
<ul> <li>at 690 V / for combination switch + aM fuse / maximum permissible</li> </ul>	11 200 A
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	11 200 A
• for combination switch + fuse / at 400 V / maximum permissible	10 400 A

<ul> <li>for combination switch + fuse / at 500 V / maximum permissible</li> </ul>	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
<ul> <li>switch disconnector</li> </ul>	Yes
EMERGENCY OFF switch	Yes
<ul> <li>safety switch</li> </ul>	Yes
<ul> <li>maintenance/repair switch</li> </ul>	Yes
Product feature / interlock	No
Product component	
Voltage trigger	No
• undervoltage release	No
<ul> <li>undervoltage release with leading contact</li> </ul>	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		
<ul> <li>at 500 V / by gG fuse / rated value</li> </ul>	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	
<ul> <li>Type of connectable conductor cross-sections / for copper conductor / solid</li> </ul>	1x (1 16 mm²)	
• Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing	1x (6 25 mm²)	
<ul> <li>Type of connectable conductor cross-sections / with flexible busbar</li> </ul>	2x (0,8x9 mm)	
<ul> <li>Type of connectable conductor cross-sections / for copper conductor / stranded</li> </ul>	1x (6 25 mm²)	
Type of electrical connection		
• for main current circuit	Box terminal	
Mechanical Design		
Height	122 mm	
Width	185.5 mm	
Depth	130.5 mm	
Depth	130.5 mm	
Depth Mounting position	130.5 mm any	
•		
Mounting position	any Floor mounting and snap-on mounting on 35 mm standard	
Mounting position Mounting type	any Floor mounting and snap-on mounting on 35 mm standard	
Mounting position Mounting type Mounting type	any Floor mounting and snap-on mounting on 35 mm standard mounting rail	
Mounting position         Mounting type         • front mounting with 4-hole attachment	any Floor mounting and snap-on mounting on 35 mm standard mounting rail	
Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No	
Mounting position         Mounting type         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No Yes	
Mounting position         Mounting type         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No Yes	
Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No Yes 1 650 g	
Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No Yes 1 650 g	
Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution         Ambient temperature	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No Yes 1 650 g	
Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution         Ambient temperature         • during operation / minimum	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No Yes 1 650 g 3 -25 °C	
Mounting position         Mounting type         • front mounting with 4-hole attachment         • front mounting with central attachment         • rail mounting         Net weight         Environmental conditions         Degree of pollution         Ambient temperature         • during operation / minimum         • during operation / maximum	any Floor mounting and snap-on mounting on 35 mm standard mounting rail No No Yes 1 650 g 3 -25 °C 70 °C	

Certificates			
Equipment marking /	acc. to DIN EN 61346-2	Q	
General Product	Approval	other	
(	DVE	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=3KF1406-0LB11

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3KF1406-0LB11

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KF1406-0LB11

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

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







