

SWITCH DISCONNECTOR FUSE 80A, 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	SETRON
Product designation	Switching device
Design of the product	3KF switch disconnecter 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 disconnecter	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
I ² t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	33 200 A ² ·s

<ul style="list-style-type: none"> • with closed switch / for combination switch + fuse / at 400 V / maximum 	33 200 A ² ·s
<ul style="list-style-type: none"> • with closed switch / at 690 V / for combination switch + gG fuse / maximum 	40 700 A ² ·s
<ul style="list-style-type: none"> • with closed switch / at 690 V / for combination switch + aM fuse / maximum 	40 700 A ² ·s
<ul style="list-style-type: none"> • of the fuse / at 500 V / maximum permissible 	34 000 A ² ·s
<ul style="list-style-type: none"> • of the gG fuse / at 690 V / maximum permissible 	55 000 A ² ·s
<ul style="list-style-type: none"> • of the aM fuse / at 690 V / maximum permissible 	55 000 A ² ·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	
<ul style="list-style-type: none"> • with degree of pollution 2 / at DC / rated value / Note 	440 / 3
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • with closed switch / with cover or cable lug cover 	IP20
<ul style="list-style-type: none"> • on the front 	IP20

Dissipation	
Power loss [W]	
<ul style="list-style-type: none"> • with conventional rated thermal current / per pole 	2.8 W
<ul style="list-style-type: none"> • with conventional rated thermal current / per device 	8.4 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per pole 	2.8 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per device 	8.4 W
<ul style="list-style-type: none"> • of the fuse / per fuse / maximum 	8.5 W
<ul style="list-style-type: none"> • maximum 	33.9 W
Operating current	

• at AC-21 A / at 400 V / maximum	80 A
• at AC-21 A / at 500 V / maximum	80 A
• at AC-21 A / at 690 V / maximum	80 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	80 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	80 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	80 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	80 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	80 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	80 A
• at DC-23 A / at 440 V / rated value / maximum	80 A
• at DC-23 A / at 220 V / rated value / maximum	80 A
• at DC-22 A / at 440 V / rated value / maximum	80 A
• at DC-22 A / at 220 V / rated value / maximum	80 A
• at DC-21 A / at 440 V / rated value / maximum	80 A
• at DC-21 A / at 220 V / maximum	80 A
Continuous current	
• rated value	80 A
• at 40 °C / rated value	80 A
• at 45 °C / rated value	80 A
• at 50 °C / rated value	80 A
• at 55 °C / rated value	80 A
• at 60 °C / rated value	80 A
• at 65 °C / rated value	80 A
• at 70 °C / rated value	80 A
Continuous current / at DC / rated value	80 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

<ul style="list-style-type: none"> • for combination switch + fuse / at 500 V / maximum permissible 	10 400 A
Short-time current resistance (I _{cw}) / at 690 V AC/440 V DC / limited to 1 s / rated value	2.5 kA

Main circuit

Operating power / at AC-23 A	
<ul style="list-style-type: none"> • at 400 V / at 50/60 Hz / rated value 	37 kW
<ul style="list-style-type: none"> • at 500 V / at 50/60 Hz / rated value 	55 kW
<ul style="list-style-type: none"> • at 690 V / at 50/60 Hz / rated value 	75 kW
Operating voltage	
<ul style="list-style-type: none"> • at AC / at 50/60 Hz / rated value 	690 V
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • Main switch 	Yes
<ul style="list-style-type: none"> • switch disconnector 	Yes
<ul style="list-style-type: none"> • EMERGENCY OFF switch 	Yes
<ul style="list-style-type: none"> • safety switch 	Yes
<ul style="list-style-type: none"> • maintenance/repair switch 	Yes
Product feature / interlock	No
Product component	
<ul style="list-style-type: none"> • Voltage trigger 	No
<ul style="list-style-type: none"> • undervoltage release 	No
<ul style="list-style-type: none"> • undervoltage release with leading contact 	No
Product feature / sealable	Yes
Product extension	
<ul style="list-style-type: none"> • Auxiliary switch 	Yes
<ul style="list-style-type: none"> • optional 	
<ul style="list-style-type: none"> — locking capability 	Yes
<ul style="list-style-type: none"> — motor drive 	No
<ul style="list-style-type: none"> — fuse monitoring 	Yes
Product function	
<ul style="list-style-type: none"> • fuse monitoring 	No

Short circuit

Short-circuit current making capacity (I _{cm}) / for switch disconnecter / 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 style="list-style-type: none"> • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value 	<p>100 kA</p> <p>100 kA</p>

Connections

Arrangement of electrical connectors / for main current circuit	Top and bottom
Tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> • minimum • maximum 	<p>5 N·m</p> <p>6.5 N·m</p>
<ul style="list-style-type: none"> • Type of connectable conductor cross-sections / for copper conductor / solid • Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing • Type of connectable conductor cross-sections / with flexible busbar • Type of connectable conductor cross-sections / for copper conductor / stranded 	<p>1x (1 ... 16 mm²)</p> <p>1x (6 ... 25 mm²)</p> <p>2x (0,8x9 mm)</p> <p>1x (6 ... 25 mm²)</p>
Type of electrical connection	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting 	<p>No</p> <p>No</p> <p>Yes</p>
Net weight	1 650 g

Environmental conditions

Degree of pollution	3
Ambient temperature	
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	<p>-25 °C</p> <p>70 °C</p> <p>-50 °C</p> <p>80 °C</p>

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=3KF1408-0MB11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF1408-0MB11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF1408-0MB11

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



