

SWITCH DISCONNECTOR FUSE 800A, FRAME SIZE 5, 4-POLE FOR LV HRC FUSE SIZE 2 AND 3 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 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	3 and 2
Size of switch disconnecter	5
Size of fuse link	NH2, NH3
Electrical endurance (switching cycles)	
• at AC-23 A / at 440 V / at 50/60 Hz	1 500
• at AC-23 A / at 690 V / at 50/60 Hz	1 000
• at DC-23 A / at 440 V	500
I ² t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	4 100 000 A ² ·s

<ul style="list-style-type: none"> • with closed switch / for combination switch + fuse / at 400 V / maximum 	4 100 000 A ² ·s
<ul style="list-style-type: none"> • with closed switch / at 690 V / for combination switch + gG fuse / maximum 	2 050 000 A ² ·s
<ul style="list-style-type: none"> • with closed switch / at 690 V / for combination switch + aM fuse / maximum 	2 050 000 A ² ·s
<ul style="list-style-type: none"> • of the fuse / at 500 V / maximum permissible 	10 400 000 A ² ·s
<ul style="list-style-type: none"> • of the gG fuse / at 690 V / maximum permissible 	7 000 000 A ² ·s
<ul style="list-style-type: none"> • of the aM fuse / at 690 V / maximum permissible 	7 000 000 A ² ·s
Mechanical service life (switching cycles) / typical	6 000
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	IP00
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 	IP00

Dissipation	
Power loss [W]	
<ul style="list-style-type: none"> • with conventional rated thermal current / per pole 	50 W
<ul style="list-style-type: none"> • with conventional rated thermal current / per device 	150 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per pole 	50 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per device 	150 W
<ul style="list-style-type: none"> • of the fuse / per fuse / maximum 	60 W
<ul style="list-style-type: none"> • maximum 	330 W
Operating current	

• at AC-21 A / at 400 V / maximum	800 A
• at AC-21 A / at 500 V / maximum	800 A
• at AC-21 A / at 690 V / maximum	800 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	800 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	800 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	800 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	800 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	800 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	800 A
• at DC-23 A / at 440 V / rated value / maximum	800 A
• at DC-23 A / at 220 V / rated value / maximum	800 A
• at DC-22 A / at 440 V / rated value / maximum	800 A
• at DC-22 A / at 220 V / rated value / maximum	800 A
• at DC-21 A / at 440 V / rated value / maximum	800 A
• at DC-21 A / at 220 V / maximum	800 A
Continuous current	
• rated value	800 A
• at 40 °C / rated value	800 A
• at 45 °C / rated value	700 A
• at 50 °C / rated value	670 A
• at 55 °C / rated value	630 A
• at 60 °C / rated value	630 A
• at 65 °C / rated value	560 A
• at 70 °C / rated value	560 A
Continuous current / at DC / rated value	800 A
Let-through current / of the fuse / at 500 V / maximum permissible	77 400 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	65 000 A
Let-through current / of the aM fuse / at 690 V / maximum permissible	65 000 A
Let-through current / with closed switch	
• at 690 V / for combination switch + aM fuse / maximum permissible	46 590 A
• at 690 V / for combination switch + gG fuse / maximum permissible	46 590 A
• for combination switch + fuse / at 400 V / maximum permissible	58 500 A

<ul style="list-style-type: none"> • for combination switch + fuse / at 500 V / maximum permissible 	58 500 A
Short-time current resistance (I _{cw}) / at 690 V AC/440 V DC / limited to 1 s / rated value	22 kA

Main circuit

Operating power / at AC-23 A	
<ul style="list-style-type: none"> • at 400 V / at 50/60 Hz / rated value • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value 	<p>400 kW</p> <p>560 kW</p> <p>800 kW</p>
Operating voltage	
<ul style="list-style-type: none"> • at AC / at 50/60 Hz / rated value • at AC / rated value / maximum 	<p>690 V</p> <p>690 V</p>

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 • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
Product feature / interlock	No
Product component	
<ul style="list-style-type: none"> • Voltage trigger • undervoltage release • undervoltage release with leading contact 	<p>No</p> <p>No</p> <p>No</p>
Product feature / sealable	Yes
Product extension	
<ul style="list-style-type: none"> • Auxiliary switch • optional <ul style="list-style-type: none"> — locking capability — motor drive — fuse monitoring 	<p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p>
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	44 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 	100 kA 80 kA

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 	50 N·m 75 N·m
<ul style="list-style-type: none"> • Type of connectable conductor cross-sections / for copper busbar • Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug • Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46234 • Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235 	2x (50x5 mm) 1x (25 ... 300 mm ²), 2x (25 ... 300 mm ²) 1x (25 ... 240 mm ²), 2x (25 ... 240 mm ²) 1x (25 ... 300 mm ²), 2x (25 ... 300 mm ²)
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	flat connector

Mechanical Design

Height	270 mm
Width	490 mm
Depth	262 mm
Mounting position	any
Mounting type	floor mounting
Mounting type	
<ul style="list-style-type: none"> • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting 	No No No
Net weight	18 850 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 	-25 °C 70 °C -50 °C 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=3KF5480-0MF11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF5480-0MF11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF5480-0MF11

CAX-Online-Generator

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

Tender specifications

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



