

SWITCH DISCONNECTOR FUSE 630A, 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	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	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	1 000
I <sup>2</sup> t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	4 100 000 A <sup>2</sup> ·s

<ul style="list-style-type: none"> <li>• with closed switch / for combination switch + fuse / at 400 V / maximum</li> </ul>	4 100 000 A <sup>2</sup> ·s
<ul style="list-style-type: none"> <li>• with closed switch / at 690 V / for combination switch + gG fuse / maximum</li> </ul>	2 050 000 A <sup>2</sup> ·s
<ul style="list-style-type: none"> <li>• with closed switch / at 690 V / for combination switch + aM fuse / maximum</li> </ul>	2 050 000 A <sup>2</sup> ·s
<ul style="list-style-type: none"> <li>• of the fuse / at 500 V / maximum permissible</li> </ul>	10 400 000 A <sup>2</sup> ·s
<ul style="list-style-type: none"> <li>• of the gG fuse / at 690 V / maximum permissible</li> </ul>	7 000 000 A <sup>2</sup> ·s
<ul style="list-style-type: none"> <li>• of the aM fuse / at 690 V / maximum permissible</li> </ul>	7 000 000 A <sup>2</sup> ·s
<b>Mechanical service life (switching cycles) / typical</b>	6 000
<b>Position / of the switch operating mechanism</b>	after the second pole
<b>Fuse system</b>	LV HRC fuse
<b>Overvoltage category</b>	IV
<b>Operating voltage / with current paths in series</b>	
<ul style="list-style-type: none"> <li>• with degree of pollution 2 / at DC / rated value / Note</li> </ul>	440 / 3
<ul style="list-style-type: none"> <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
<b>Overvoltage in percent / relative to the operating voltage / at AC / at 50/60 Hz</b>	10 %

<b>Protection class</b>	
<b>Protection class IP</b>	IP00
<b>Protection class IP</b>	
<ul style="list-style-type: none"> <li>• with closed switch / with cover or cable lug cover</li> </ul>	IP20
<ul style="list-style-type: none"> <li>• on the front</li> </ul>	IP00

<b>Dissipation</b>	
<b>Power loss [W]</b>	
<ul style="list-style-type: none"> <li>• with conventional rated thermal current / per pole</li> </ul>	40 W
<ul style="list-style-type: none"> <li>• with conventional rated thermal current / per device</li> </ul>	120 W
<ul style="list-style-type: none"> <li>• with conventional rated thermal current / without fuse / per pole</li> </ul>	40 W
<ul style="list-style-type: none"> <li>• with conventional rated thermal current / without fuse / per device</li> </ul>	120 W
<ul style="list-style-type: none"> <li>• of the fuse / per fuse / maximum</li> </ul>	48 W
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	264 W
<b>Operating current</b>	

• at AC-21 A / at 400 V / maximum	630 A
• at AC-21 A / at 500 V / maximum	630 A
• at AC-21 A / at 690 V / maximum	630 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	630 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	630 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	630 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	630 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	630 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	630 A
• at DC-23 A / at 440 V / rated value / maximum	630 A
• at DC-23 A / at 220 V / rated value / maximum	630 A
• at DC-22 A / at 440 V / rated value / maximum	630 A
• at DC-22 A / at 220 V / rated value / maximum	630 A
• at DC-21 A / at 440 V / rated value / maximum	630 A
• at DC-21 A / at 220 V / maximum	630 A
<b>Continuous current</b>	
• rated value	630 A
• at 40 °C / rated value	630 A
• at 45 °C / rated value	630 A
• at 50 °C / rated value	630 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	630 A
<b>Let-through current / of the fuse / at 500 V / maximum permissible</b>	77 400 A
<b>Let-through current / of the gG fuse / at 690 V / maximum permissible</b>	65 000 A
<b>Let-through current / of the aM fuse / at 690 V / maximum permissible</b>	65 000 A
<b>Let-through current / with closed switch</b>	
• 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"> <li>• for combination switch + fuse / at 500 V / maximum permissible</li> </ul>	58 500 A
Short-time current resistance (I <sub>cw</sub> ) / at 690 V AC/440 V DC / limited to 1 s / rated value	22 kA

### Main circuit

<b>Operating power / at AC-23 A</b>	
<ul style="list-style-type: none"> <li>• at 400 V / at 50/60 Hz / rated value</li> </ul>	355 kW
<ul style="list-style-type: none"> <li>• at 500 V / at 50/60 Hz / rated value</li> </ul>	400 kW
<ul style="list-style-type: none"> <li>• at 690 V / at 50/60 Hz / rated value</li> </ul>	630 kW
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• at AC / at 50/60 Hz / rated value</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• at AC / rated value / maximum</li> </ul>	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
<b>Suitability for use</b>	
<ul style="list-style-type: none"> <li>• Main switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• switch disconnector</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• EMERGENCY OFF switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• safety switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• maintenance/repair switch</li> </ul>	Yes
Product feature / interlock	No
<b>Product component</b>	
<ul style="list-style-type: none"> <li>• Voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release with leading contact</li> </ul>	No
Product feature / sealable	Yes
<b>Product extension</b>	
<ul style="list-style-type: none"> <li>• Auxiliary switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• optional</li> </ul>	
<ul style="list-style-type: none"> <li>— locking capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>— motor drive</li> </ul>	No
<ul style="list-style-type: none"> <li>— fuse monitoring</li> </ul>	Yes
<b>Product function</b>	
<ul style="list-style-type: none"> <li>• fuse monitoring</li> </ul>	No

### Short circuit

Short-circuit current making capacity (I <sub>cm</sub> ) / for switch disconnecter / at 690 V AC/440 V DC / without fuse link / rated value / minimum	44 kA
<b>Conditional short-circuit current / with line-side fuse protection</b>	
• at 500 V / by gG fuse / rated value	100 kA
• at 690 V / by gG fuse / rated value	80 kA

### Connections

Arrangement of electrical connectors / for main current circuit	Top and bottom
<b>Tightening torque / with screw-type terminals</b>	
• minimum	50 N·m
• maximum	75 N·m
• Type of connectable conductor cross-sections / for copper busbar	1x (50x10 mm)
• Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug	1x (25 ... 300 mm <sup>2</sup> ), 2x (25 ... 300 mm <sup>2</sup> )
• Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46234	1x (25 ... 240 mm <sup>2</sup> ), 2x (25 ... 240 mm <sup>2</sup> )
• Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235	1x (25 ... 300 mm <sup>2</sup> ), 2x (25 ... 300 mm <sup>2</sup> )
<b>Type of electrical connection</b>	
• for main current circuit	flat connector

### Mechanical Design

<b>Height</b>	270 mm
<b>Width</b>	490 mm
<b>Depth</b>	262 mm
<b>Mounting position</b>	any
<b>Mounting type</b>	floor mounting
<b>Mounting type</b>	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	No
<b>Net weight</b>	18 850 g

### Environmental conditions

<b>Degree of pollution</b>	3
<b>Ambient temperature</b>	
• 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=3KF5463-0MF11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF5463-0MF11>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3KF5463-0MF11](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF5463-0MF11)

**CAX-Online-Generator**

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

**Tender specifications**

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



