

SWITCH DISCONNECTOR FUSE 250A, FRAME SIZE 3, 4-POLE FOR LV HRC FUSE SIZE 0 AND 1 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	1 and 0
Size of switch disconnecter	3
Size of fuse link	NH0, NH1
Electrical endurance (switching cycles)	
• at AC-23 A / at 440 V / at 50/60 Hz	5 000
• at AC-23 A / at 690 V / at 50/60 Hz	4 000
• at DC-23 A / at 440 V	1 000
I ² t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	437 000 A ² ·s

<ul style="list-style-type: none"> • with closed switch / for combination switch + fuse / at 400 V / maximum 	437 000 A ² ·s
<ul style="list-style-type: none"> • with closed switch / at 690 V / for combination switch + gG fuse / maximum 	490 100 A ² ·s
<ul style="list-style-type: none"> • with closed switch / at 690 V / for combination switch + aM fuse / maximum 	490 100 A ² ·s
<ul style="list-style-type: none"> • of the fuse / at 500 V / maximum permissible 	1 500 000 A ² ·s
<ul style="list-style-type: none"> • of the gG fuse / at 690 V / maximum permissible 	940 000 A ² ·s
<ul style="list-style-type: none"> • of the aM fuse / at 690 V / maximum permissible 	1 400 000 A ² ·s
Mechanical service life (switching cycles) / typical	10 000
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 	15 W
<ul style="list-style-type: none"> • with conventional rated thermal current / per device 	45 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per pole 	15 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per device 	45 W
<ul style="list-style-type: none"> • of the fuse / per fuse / maximum 	25.5 W
<ul style="list-style-type: none"> • maximum 	121.5 W
Operating current	

• at AC-21 A / at 400 V / maximum	250 A
• at AC-21 A / at 500 V / maximum	250 A
• at AC-21 A / at 690 V / maximum	250 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	250 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	250 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	250 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	250 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	250 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	250 A
• at DC-23 A / at 440 V / rated value / maximum	250 A
• at DC-23 A / at 220 V / rated value / maximum	250 A
• at DC-22 A / at 440 V / rated value / maximum	250 A
• at DC-22 A / at 220 V / rated value / maximum	250 A
• at DC-21 A / at 440 V / rated value / maximum	250 A
• at DC-21 A / at 220 V / maximum	250 A
Continuous current	
• rated value	250 A
• at 40 °C / rated value	250 A
• at 45 °C / rated value	250 A
• at 50 °C / rated value	250 A
• at 55 °C / rated value	250 A
• at 60 °C / rated value	250 A
• at 65 °C / rated value	250 A
• at 70 °C / rated value	200 A
Continuous current / at DC / rated value	250 A
Let-through current / of the fuse / at 500 V / maximum permissible	33 700 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	37 700 A
Let-through current / of the aM fuse / at 690 V / maximum permissible	39 700 A
Let-through current / with closed switch	
• at 690 V / for combination switch + aM fuse / maximum permissible	30 310 A
• at 690 V / for combination switch + gG fuse / maximum permissible	30 310 A
• for combination switch + fuse / at 400 V / maximum permissible	28 700 A

<ul style="list-style-type: none"> • for combination switch + fuse / at 500 V / maximum permissible 	28 700 A
Short-time current resistance (I _{cw}) / at 690 V AC/440 V DC / limited to 1 s / rated value	8 kA

Main circuit

Operating power / at AC-23 A	
<ul style="list-style-type: none"> • at 400 V / at 50/60 Hz / rated value 	132 kW
<ul style="list-style-type: none"> • at 500 V / at 50/60 Hz / rated value 	160 kW
<ul style="list-style-type: none"> • at 690 V / at 50/60 Hz / rated value 	250 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 disconnecter 	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	13.6 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>30 N·m</p> <p>44 N·m</p>
<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 	<p>1x (25x3 mm)</p> <p>1x (6 ... 240 mm²), 2x (6 ... 120 mm²)</p> <p>1x (6 ... 240 mm²), 2x (6 ... 120 mm²)</p> <p>1x (6 ... 240 mm²), 2x (6 ... 120 mm²)</p>
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	flat connector

Mechanical Design

Height	207 mm
Width	306.7 mm
Depth	188.5 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 	<p>No</p> <p>No</p> <p>No</p>
Net weight	5 350 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=3KF3425-0MF11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF3425-0MF11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF3425-0MF11

CAX-Online-Generator

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

Tender specifications

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



