

SWITCH DISCONNECTOR FUSE 400A, FRAME SIZE 4, 4-POLE FOR LV HRC FUSE SIZE 1 AND 2 SIDE OPERATING RIGHT 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 right
Type of the driving mechanism / motor drive	No
Number of poles	4
Size of disconnecting link	2 and 1
Size of switch disconnecter	4
Size of fuse link	NH1, NH2
Electrical endurance (switching cycles)	
• at AC-23 A / at 440 V / at 50/60 Hz	3 000
• at AC-23 A / at 690 V / at 50/60 Hz	2 000
• at DC-23 A / at 440 V	1 000
I ² t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	1 205 000 A ² ·s

• with closed switch / for combination switch + fuse / at 400 V / maximum	1 205 000 A ² -s
• with closed switch / at 690 V / for combination switch + gG fuse / maximum	1 300 000 A ² -s
• with closed switch / at 690 V / for combination switch + aM fuse / maximum	1 300 000 A ² -s
• of the fuse / at 500 V / maximum permissible	2 150 000 A ² -s
• of the gG fuse / at 690 V / maximum permissible	2 600 000 A ² -s
• of the aM fuse / at 690 V / maximum permissible	2 600 000 A ² -s
Mechanical service life (switching cycles) / typical	8 000
Position / of the switch operating mechanism	at the right end
Fuse system	LV HRC fuse
Overvoltage category	IV
Operating voltage / with current paths in series	
• with degree of pollution 2 / at DC / rated value / Note	440 / 3
• 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	
• with closed switch / with cover or cable lug cover	IP20
• on the front	IP00

Dissipation	
Power loss [W]	
• with conventional rated thermal current / per pole	26 W
• with conventional rated thermal current / per device	78 W
• with conventional rated thermal current / without fuse / per pole	26 W
• with conventional rated thermal current / without fuse / per device	78 W
• of the fuse / per fuse / maximum	34 W
• maximum	180 W
Operating current	

• at AC-21 A / at 400 V / maximum	400 A
• at AC-21 A / at 500 V / maximum	400 A
• at AC-21 A / at 690 V / maximum	400 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	400 A
• at DC-23 A / at 440 V / rated value / maximum	400 A
• at DC-23 A / at 220 V / rated value / maximum	400 A
• at DC-22 A / at 440 V / rated value / maximum	400 A
• at DC-22 A / at 220 V / rated value / maximum	400 A
• at DC-21 A / at 440 V / rated value / maximum	400 A
• at DC-21 A / at 220 V / maximum	400 A
Continuous current	
• rated value	400 A
• at 40 °C / rated value	400 A
• at 45 °C / rated value	350 A
• at 50 °C / rated value	315 A
• at 55 °C / rated value	315 A
• at 60 °C / rated value	315 A
• at 65 °C / rated value	280 A
• at 70 °C / rated value	280 A
Continuous current / at DC / rated value	400 A
Let-through current / of the fuse / at 500 V / maximum permissible	37 100 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	47 000 A
Let-through current / of the aM fuse / at 690 V / maximum permissible	47 000 A
Let-through current / with closed switch	
• at 690 V / for combination switch + aM fuse / maximum permissible	41 140 A
• at 690 V / for combination switch + gG fuse / maximum permissible	41 140 A
• for combination switch + fuse / at 400 V / maximum permissible	39 400 A

<ul style="list-style-type: none"> • for combination switch + fuse / at 500 V / maximum permissible 	39 400 A
Short-time current resistance (I _{cw}) / at 690 V AC/440 V DC / limited to 1 s / rated value	12 kA

Main circuit

Operating power / at AC-23 A	
<ul style="list-style-type: none"> • at 400 V / at 50/60 Hz / rated value 	220 kW
<ul style="list-style-type: none"> • at 500 V / at 50/60 Hz / rated value 	280 kW
<ul style="list-style-type: none"> • at 690 V / at 50/60 Hz / rated value 	400 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	24 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 (30x10 mm)</p> <p>1x (6 ... 240 mm²), 2x (6 ... 150 mm²)</p> <p>1x (6 ... 240 mm²), 2x (6 ... 150 mm²)</p> <p>1x (16 ... 185 mm²), 2x (16 ... 150 mm²)</p>
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	flat connector

Mechanical Design

Height	215 mm
Width	376.5 mm
Depth	206.5 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	7 700 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=3KF4440-4RF11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF4440-4RF11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF4440-4RF11

CAX-Online-Generator

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

Tender specifications

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



