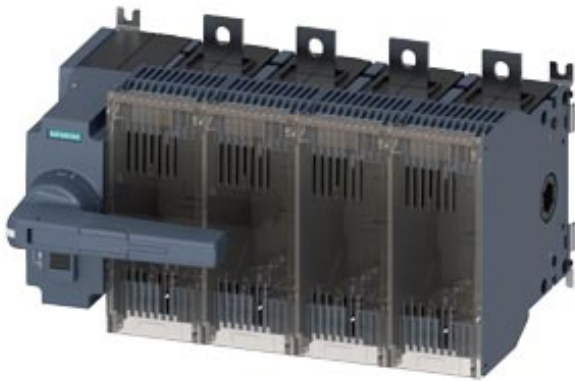


SWITCH DISCONNECTOR FUSE 400A, FRAME SIZE 4, 4-POLE
 FOR LV HRC FUSE SIZE 1 AND 2 FRONT OPERATING LEFT
 COMPLETE ASSEMBLY DIRECT OPERATING MECHANISM
 GREY FLAT TERMINAL WITHOUT FUSES



Model	
Product brand name	SENTRON
Product designation	Switching device
Design of the product	3KF switch disconnector with fuses
Design of the operating mechanism	manual operating mechanism
Design of handle	Direct operating mechanism, gray
Direction of actuation	from the front
Type of the driving mechanism / motor drive	No
Number of poles	4
Size of disconnecting link	2 and 1
Size of switch disconnector	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 left 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 • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value 	<p>220 kW</p> <p>280 kW</p> <p>400 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>No</p> <p>Yes</p> <p>Yes</p>
Product feature / interlock	Yes
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>No</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	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 	100 kA 100 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 	30 N·m 44 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 	1x (30x10 mm) 1x (6 ... 240 mm ²), 2x (6 ... 150 mm ²) 1x (6 ... 240 mm ²), 2x (6 ... 150 mm ²) 1x (16 ... 185 mm ²), 2x (16 ... 150 mm ²)
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	flat connector

Mechanical Design

Height	215 mm
Width	363 mm
Depth	269.6 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	8 150 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=3KF4440-2LF11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF4440-2LF11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF4440-2LF11

CAX-Online-Generator

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

Tender specifications

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

