

Switch disconnecter with fuse 160 A, Size 2, 3-pole for LV HRC fuse
 Sz. 000 and 00 Front operating mechanism left Basic unit without
 handle flat terminal



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	3
Size of disconnecting link	00 and 000
Size of switch disconnecter	2
Size of fuse link	NH000, NH00
Electrical endurance (switching cycles)	
• at AC-23 A / at 440 V / at 50/60 Hz	8 000
• at AC-23 A / at 690 V / at 50/60 Hz	5 000
• at DC-23 A / at 440 V	1 000
I²t value	
• with closed switch / for combination switch + fuse / at 500 V / maximum	150 600 A ² ·s

<ul style="list-style-type: none"> • with closed switch / for combination switch + fuse / at 400 V / maximum 	150 600 A ² ·s
<ul style="list-style-type: none"> • with closed switch / at 690 V / for combination switch + gG fuse / maximum 	89 640 A ² ·s
<ul style="list-style-type: none"> • of the fuse / at 500 V / maximum permissible 	223 000 A ² ·s
<ul style="list-style-type: none"> • of the gG fuse / at 690 V / maximum permissible 	360 000 A ² ·s
<ul style="list-style-type: none"> • of the aM fuse / at 690 V / maximum permissible 	565 000 A ² ·s
Mechanical service life (switching cycles) / typical	12 000
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	
<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 %
Operating voltage	
<ul style="list-style-type: none"> • at AC / rated value / maximum 	690 V
<ul style="list-style-type: none"> • at AC / at 50/60 Hz / rated value 	690 V

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 	7.2 W
<ul style="list-style-type: none"> • with conventional rated thermal current / per device 	21.6 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per pole 	7.2 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per device 	21.6 W
<ul style="list-style-type: none"> • for rated value of the current / at AC / in hot operating state / per pole 	7.2 W

• of the fuse / per fuse / maximum	12 W
Operating current	
• at AC-21 A / at 400 V / maximum	160 A
• at AC-21 A / at 500 V / maximum	160 A
• at AC-21 A / at 690 V / maximum	160 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	160 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	160 A
• at DC-23 A / at 440 V / rated value / maximum	160 A
• at DC-23 A / at 220 V / rated value / maximum	160 A
• at DC-22 A / at 440 V / rated value / maximum	160 A
• at DC-22 A / at 220 V / rated value / maximum	160 A
• at DC-21 A / at 440 V / rated value / maximum	160 A
• at DC-21 A / at 220 V / maximum	160 A
Continuous current	
• rated value	160 A
• at 40 °C / rated value	160 A
• at 45 °C / rated value	160 A
• at 50 °C / rated value	160 A
• at 55 °C / rated value	160 A
• at 60 °C / rated value	160 A
• at 65 °C / rated value	160 A
• at 70 °C / rated value	160 A
Continuous current / at DC / rated value	160 A
Let-through current / of the fuse / at 500 V / maximum permissible	18 000 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	25 500 A
Let-through current / of the aM fuse / at 690 V / maximum permissible	33 200 A
Let-through current / with closed switch	
• at 690 V / for combination switch + aM fuse / maximum permissible	27 300 A

<ul style="list-style-type: none"> • at 690 V / for combination switch + gG fuse / maximum permissible 	16 870 A
<ul style="list-style-type: none"> • for combination switch + fuse / at 400 V / maximum permissible 	18 200 A
<ul style="list-style-type: none"> • for combination switch + fuse / at 500 V / maximum permissible 	18 200 A
Short-time current resistance (I _{cw}) / at 690 V AC/440 V DC / limited to 1 s / rated value	5 kA

Main circuit

Operating power / at AC-23 A	
<ul style="list-style-type: none"> • at 400 V / at 50/60 Hz / rated value 	90 kW
<ul style="list-style-type: none"> • at 500 V / at 50/60 Hz / rated value 	110 kW
<ul style="list-style-type: none"> • at 690 V / at 50/60 Hz / rated value 	132 kW

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
Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	6
Number of NO contacts / for auxiliary contacts	6
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"> • Phase failure monitoring 	No
<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
<ul style="list-style-type: none"> • Overvoltage protection 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	7.65 kA
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Connections

Arrangement of electrical connectors / for main current circuit	Top and bottom
Tightening torque / with screw-type terminals	15 ... 22 N·m
<ul style="list-style-type: none"> • Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug 	1x (2.5 ... 95 mm ²), 2x (2.5 ... 50 mm ²)
<ul style="list-style-type: none"> • Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46234 	1x (2.5 ... 95 mm ²), 2x (2.5 ... 50 mm ²)
<ul style="list-style-type: none"> • Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235 	1x (25 ... 70 mm ²), 2x (25 ... 50 mm ²)
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	flat connector

Mechanical Design




Height	150 mm
Width	190 mm
Depth	161.5 mm
Mounting type	floor mounting
Mounting type	
<ul style="list-style-type: none"> • front mounting with 4-hole attachment 	No
<ul style="list-style-type: none"> • front mounting with central attachment 	No
<ul style="list-style-type: none"> • rail mounting 	No
Mounting position	any
Net weight	2 200 g

Environmental conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +70 °C
<ul style="list-style-type: none"> • during storage 	-50 ... +80 °C

Certificates

Reference code	
<ul style="list-style-type: none"> • acc. to DIN EN 61346-2 	Q
<ul style="list-style-type: none"> • acc. to DIN EN 81346-2 	Q

General Product Approval		Declaration of Conformity	other
 CCC	 VDE	 EG-Konf.	Miscellaneous

[Miscellaneous](#)

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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=3KF2316-0LF11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF2316-0LF11>

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

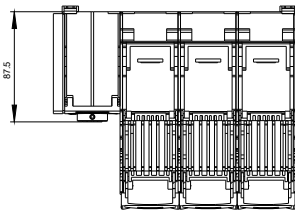
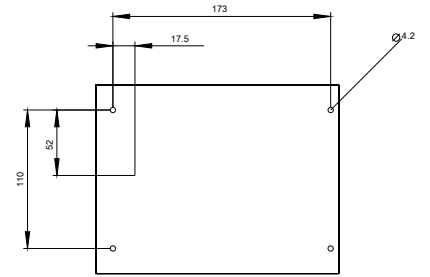
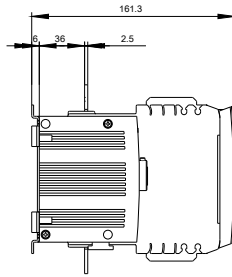
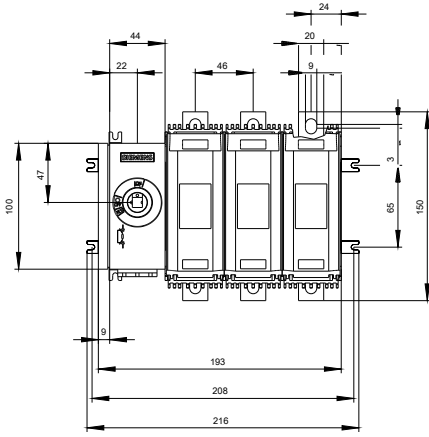
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF2316-0LF11

CAX-Online-Generator

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

Tender specifications

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



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