

switch disconnecter with fuse 160 A, frame size 2, 3-pole for LV HRC fuse size 000 and 00 front operating mechanism left complete unit with direct operating mechanism flat connector without fuses



Model	
product brand name	SENTRON
product designation	3KF switch disconnecter with fuses
design of the product	3KF switch disconnecter with fuses
product version	3KF NH
design of the actuating element	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	3
size of disconnecting link	00 and 000
size of switch disconnecter	2
size of fuse link	NH000, NH00
mechanical service life (operating cycles) typical	12 000
electrical endurance (operating cycles)	
• at AC-23 A at 440 V	8 000
• at AC-23 A at 690 V	5 000
• 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	150 600 A <sup>2</sup> ·s
• with closed switch for combination switch + fuse at 400 V maximum	150 600 A <sup>2</sup> ·s
• with closed switch at 690 V for combination switch + gG fuse maximum	89 640 A <sup>2</sup> ·s
• of the fuse at 500 V maximum permissible	223 000 A <sup>2</sup> ·s
• of the gG fuse at 690 V maximum permissible	360 000 A <sup>2</sup> ·s
• of the aM fuse at 690 V maximum permissible	565 000 A <sup>2</sup> ·s
position of the switch operating mechanism	left
fuse system	LV HRC fuse
overvoltage category	IV
operating voltage with current paths in series	
• with degree of pollution 2 at DC rated value	440 / 3
• with degree of pollution 3 at DC rated value	440 / 3
surge voltage resistance rated value	12 kV
Supply voltage	
operating voltage at AC rated value maximum	690 V
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 7.2 W
- with conventional rated thermal current per device 21.6 W
- with conventional rated thermal current without fuse per pole 7.2 W
- with conventional rated thermal current without fuse per device 21.6 W
- 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

### Main circuit

- operating power at AC-23 A at 500 V rated value 110 kW
- operational current rated value 160 A

### 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 main switch** Yes
- suitability for use switch disconnecter** Yes
- suitability for use EMERGENCY OFF switch** No
- suitability for use safety switch** Yes
- suitability for use maintenance/repair switch** Yes
- product feature interlock** Yes
- product function phase failure monitoring** No
- product component**
  - voltage trigger No
  - undervoltage release No
  - undervoltage release with leading contact No
- product feature sealable** Yes
- product extension auxiliary switch** Yes
- product extension optional locking capability** No
- product extension optional motor drive** No
- product extension optional fuse monitoring** Yes
- product function**
  - fuse monitoring No
  - overvoltage protection monitoring 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 7.65 kA
- conditional short-circuit current with line-side fuse protection**
  - at 500 V by gG fuse rated value 100 kA
  - at 690 V by gG fuse rated value 100 kA

### Connections

- arrangement of electrical connectors for main current circuit Top and bottom
- tightening torque with screw-type terminals**
  - minimum 15 N·m
  - maximum 22 N·m
- type of connectable conductor cross-sections for aluminum conductor stranded with lug 1x (2.5 ... 95 mm<sup>2</sup>), 2x (2.5 ... 50 mm<sup>2</sup>)
- type of connectable conductor cross-sections**
  - for copper busbar 1x (20 x 3 mm<sup>2</sup>)
- type of connectable conductor cross-sections for copper conductor**

<ul style="list-style-type: none"> <li>• stranded with lug according to DIN 46234</li> </ul>	1x (2.5 ... 95 mm <sup>2</sup> ), 2x (2.5 ... 50 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• stranded with lug according to DIN 46235</li> </ul>	1x (25 ... 70 mm <sup>2</sup> ), 2x (25 ... 50 mm <sup>2</sup> )
type of electrical connection for main current circuit	flat connector
<b>Mechanical Design</b>	
height	150 mm
width	190 mm
depth	206.5 mm
fastening method	floor mounting
fastening method	
<ul style="list-style-type: none"> <li>• 4-hole front mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• front mounting with central attachment</li> </ul>	No
<ul style="list-style-type: none"> <li>• rail mounting</li> </ul>	No
mounting position	any
Net Weight	3.15 kg
<b>Environmental conditions</b>	
ambient temperature during operation	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	70 °C
ambient temperature during storage	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-50 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	80 °C

#### Approvals Certificates

##### General Product Approval



[Confirmation](#)



[Miscellaneous](#)

##### General Product Approval

##### Test Certificates

##### Maritime application

##### other



[Type Test Certificates/Test Report](#)



[Confirmation](#)

[Miscellaneous](#)

#### Environment

[Environmental Confirmations](#)

[Environmental Confirmations](#)

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

##### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3KF2316-2LF11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KF2316-2LF11>

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

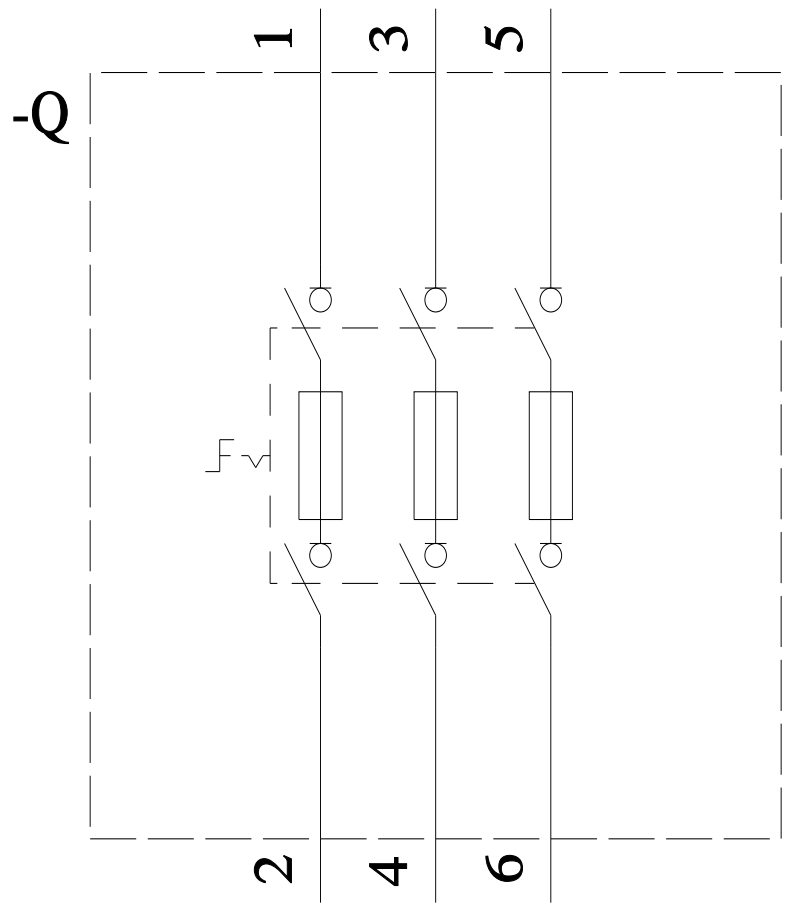
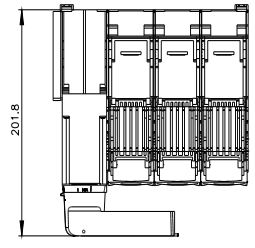
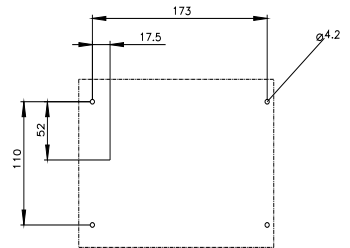
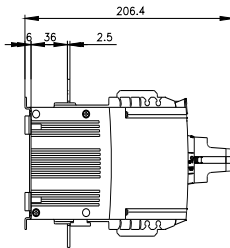
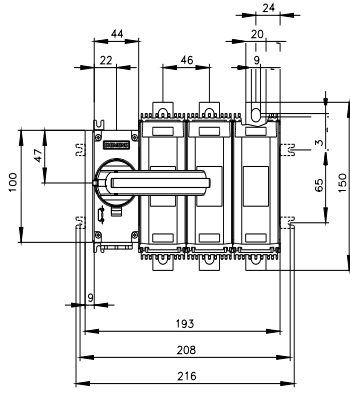
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3KF2316-2LF11](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KF2316-2LF11)

##### CAX-Online-Generator

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

##### Tender specifications

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





last modified:

4/3/2025 

