

FUSE-SWITCH-DISCONNECTOR 3-POLE, NH00,  
160A 60MM BUSBAR SYSTEM COVERS FOR RITTAL  
FLAT CONNECTOR



Model		
product brand name		SENTRON
Product designation		Fuse switch disconnecter
Design of the product		3-pole
Busbar design		busbar thickness 5 or 10 mm
Design of the operating mechanism		handle unit
Design of the load switch / Strip form		No
Type of the driving mechanism / motor drive		No

General technical data		
Number of poles		3
Type of device		snap on mount on busbar system eib Rittal 60 mm
Size of disconnecting link		00 and 000
Size of fuse link		NH000, NH00
Continuous current / at 35 °C / Rated value	A	160
Let-through current / with closed switch / maximum permissible	kA	23
cut-off value $I^{**}2t_{max.}$ / 500 V	A <sup>2</sup> .s	158 000
$I2t$ value / with closed switch / maximum permissible	kA <sup>2</sup> .s	158
Power factor		

<ul style="list-style-type: none"> <li>• at AC-22 B</li> <li>• at AC-23 B</li> <li>• with capacitive load</li> </ul>		0.65
		0.45
		-0.25
<b>circuit-breaker / Design</b>		3NP11
<b>Mechanical service life (switching cycles) / typical</b>		2 000
<b>Fuse system</b>		LV HRC fuse

Voltage		
Insulation voltage / Rated value	V	690
<b>Power factor / at AC-21 B</b>		0.95
Surge voltage resistance / Rated value	kV	8

Protection class		
<b>Protection class IP</b>		
<ul style="list-style-type: none"> <li>• with closed switch / with cover or cable lug cover</li> </ul>		IP40
<ul style="list-style-type: none"> <li>• with closed switch / without cover or cable lug cover</li> </ul>		IP30
<ul style="list-style-type: none"> <li>• on the front</li> </ul>		IP40
<ul style="list-style-type: none"> <li>• open</li> </ul>		IP20

Dissipation		
<b>Active power loss</b>		
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	W	12

Electricity		
<b>Continuous current</b>		
<ul style="list-style-type: none"> <li>• Rated value</li> </ul>	A	160
<ul style="list-style-type: none"> <li>• at 40 °C / Rated value</li> </ul>	A	155
<ul style="list-style-type: none"> <li>• at 45 °C / Rated value</li> </ul>	A	145
<ul style="list-style-type: none"> <li>• at 50 °C / Rated value</li> </ul>	A	140
<ul style="list-style-type: none"> <li>• at 55 °C / Rated value</li> </ul>	A	133
<b>Let-through current / with high-speed activation / maximum permissible</b>	kA	15
<b>Let-through current / I<sub>c</sub> / maximum permissible</b>		
<ul style="list-style-type: none"> <li>• 400 V</li> </ul>	A	23 000
<ul style="list-style-type: none"> <li>• 500V</li> </ul>	A	23 000
<b>cut-off value I<sup>2</sup>t<sub>max</sub> / 400 V</b>	A <sup>2</sup> ·s	158 000

Main circuit		
<b>Operating voltage</b>		
<ul style="list-style-type: none"> <li>• at AC / Rated value / maximum</li> </ul>	V	690
<ul style="list-style-type: none"> <li>• at DC / Rated value</li> </ul>	V	440
<ul style="list-style-type: none"> <li>• at DC / Rated value / maximum</li> </ul>	V	440
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at AC-21 B / at 400 V / Rated value</li> </ul>	A	160

• at AC-21 B / at 500 V / Rated value	A	160
• at AC-21 B / at 690 V / Rated value	A	160
• at AC-22 B / at 400 V / Rated value	A	160
• at AC-22 B / at 500 V / Rated value	A	160
• at AC-22 B / at 690 V / Rated value	A	125
• at AC-23 B / at 400 V / Rated value	A	160
• at AC-23 B / at 500 V / Rated value	A	63
• at AC-23 B / at 690 V / Rated value	A	35
• at DC-21 B / at 240 V / Rated value / maximum	A	160
• at DC-21 B / at 440 V / Rated value / maximum	A	160
• at DC-22 B / at 240 V / Rated value / maximum	A	160
• at DC-22 B / at 440 V / Rated value / maximum	A	125
• at DC-23 B / at 240 V / Rated value / maximum	A	100
• at DC-23 B / at 440 V / Rated value / maximum	A	63
• with capacitive load / at 400 V / maximum	A	72
• with capacitive load / at 500 V / maximum	A	55

#### Auxiliary circuit

Number of CO contacts / for auxiliary contacts		0
<b>Number of NC contacts / for auxiliary contacts</b>		0
<b>Number of NO contacts / for auxiliary contacts</b>		0

#### Suitability

<b>Suitability for use</b>		
• Main switch		No
• switch disconnecter		Yes
• EMERGENCY OFF switch		No
• safety switch		Yes
• maintenance/repair switch		Yes

#### Product details

Product feature / interlock		Yes
<b>Product component</b>		
• Trip indicator		No
• Phase failure monitoring		No
• undervoltage release		No
• undervoltage release with leading contact		No
Product property / sealable		Yes
<b>Product expansion</b>		
• Auxiliary switch		Yes
• optional		
— locking capability		Yes
— motor drive		No

— Phase failure monitoring	Yes
— fuse monitoring	Yes
— Voltage trigger	No
— Overvoltage protection monitoring	Yes

#### Product function

##### Product function

• fuse monitoring	No
• Overvoltage protection monitoring	No

#### Short circuit

##### Conditional short-circuit current (I<sub>q</sub>)

• Rated value	kA	80
• at AC / at 500 V / with high-speed activation / Rated value	kA	80
• at AC / at 690 V / with high-speed activation / Rated value	kA	80
• with closed switch / at AC / at 500 V / Rated value	kA	120
• with closed switch / at AC / at 690 V / Rated value	kA	120

#### Connections

Arrangement of electrical connectors / for main current circuit		other
Connectable conductor cross-section / for main contacts		
• single or multi-stranded / minimum	mm <sup>2</sup>	2.5
• single or multi-stranded / maximum	mm <sup>2</sup>	95
• stranded / minimum	mm <sup>2</sup>	2.5
• stranded / maximum	mm <sup>2</sup>	95
Tightening torque / with screw-type terminals		
• minimum	N·m	10
• maximum	N·m	12
Type of electrical connection / for main current circuit		flat connector

#### Mechanical Design

Height	mm	215.1
Width	mm	105.8
Depth	mm	134.5
mounting position		horizontally or vertically
Mounting type		busbar mounting
Mounting type		
• floor mounting		No
• front mounting		No





• front mounting with 4-hole attachment		No
• front mounting with central attachment		No
• rail mounting		Yes
<b>Busbar center-to-center spacing</b>	mm	60
<b>Net weight</b>	kg	0.98

### Environmental conditions

<b>Degree of pollution</b>		3
<b>Ambient temperature</b>		
• during operation / minimum	°C	-25
• during operation / maximum	°C	55
• during storage / minimum	°C	-50
• during storage / maximum	°C	80

### Certificates

<b>Equipment marking</b>		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

General Product Approval	Declaration of Conformity	Test Certificates
 CB	 CCC	 EAC
 EG-Konf.	<a href="#">spezielle Prüfbescheinigung</a> n	<a href="#">Typprüfbescheinigung/Werkszeugnis</a>

### Shipping Approval



DNV

GL

LRS

### Further information

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

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

#### Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3NP11331JC10>

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

<http://support.automation.siemens.com/WW/view/en/3NP11331JC10/all>

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

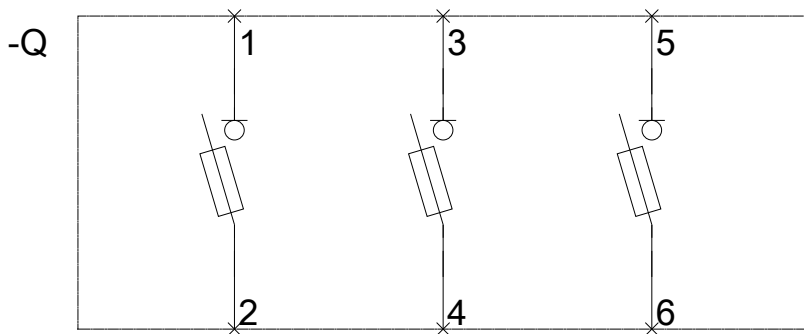
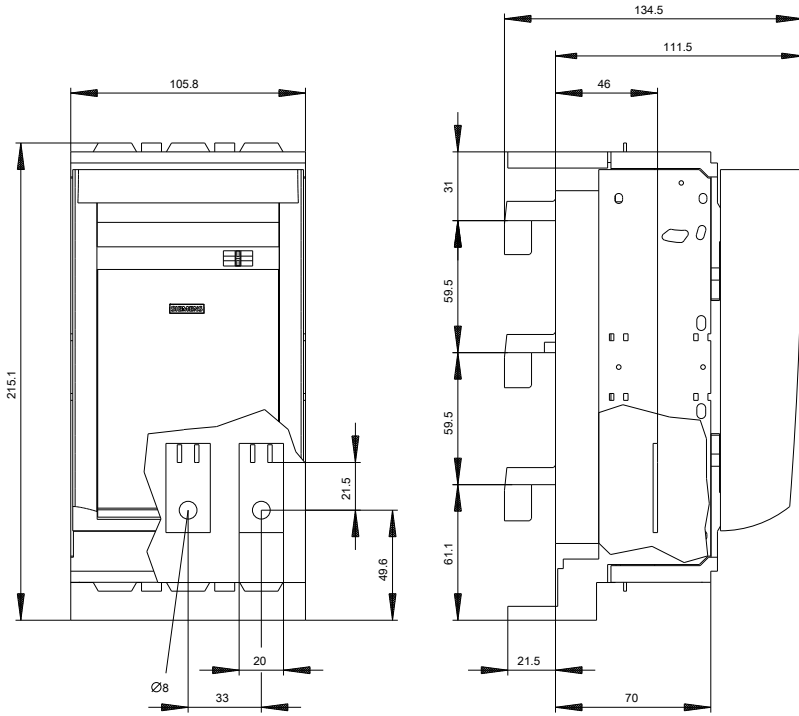
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3NP11331JC10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3NP11331JC10)

#### CAX-Online-Generator

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

#### Tender specifications

<http://ausschreibungstexte.siemens.com/tiplv>



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