

SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH00, 160 A, for assembly and installation on mounting plate, flat terminal, Fuse monitoring: electromechanical, Cover level 45 mm



Model	
Product brand name	SENTRON
Product designation	3NP1 fuse switch disconnecter
Design of the product	cover level 45 mm
Design of the safety monitoring	electro mechanical
Design of the operating mechanism	Cover handle
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	For assembly and installation on mounting plate
Size of disconnecting link	00 and 000
Size of fuse link	NH000, NH00
Continuous current / at 35 °C / rated value	160 A
Let-through current / with closed switch / maximum permissible	23 kA
cut-off value $I^{*2t,max.}$ / 500 V	158 000 A <sup>2</sup> ·s
Power factor	
• at AC-22 B	0.65

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

### Voltage

Insulation voltage / rated value	690 V
Power factor / at AC-21 B	0.95
Surge voltage resistance / rated value	8 kV

### Protection class

Protection class IP	
<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

### Electricity

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

### Main circuit

Operating voltage	
<ul style="list-style-type: none"> <li>• at AC / rated value / minimum</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• at AC / rated value / maximum</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• at DC / rated value</li> </ul>	250 V
<ul style="list-style-type: none"> <li>• at DC / rated value / minimum</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• at DC / rated value / maximum</li> </ul>	250 V
Operating current / with capacitive load	
<ul style="list-style-type: none"> <li>• at 400 V / maximum</li> </ul>	72 A
<ul style="list-style-type: none"> <li>• at 500 V / maximum</li> </ul>	55 A

### Auxiliary circuit

Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	0

### Suitability

#### Suitability for use

• Main switch	No
• switch disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes

### Product details

Product feature / interlock	Yes
Product component	
• Trip indicator	Yes
• Phase failure monitoring	No
• undervoltage release	No
• undervoltage release with leading contact	No
Product feature / sealable	Yes
Product extension	
• Auxiliary switch	Yes
• optional	
— locking capability	Yes
— motor drive	No
— Phase failure monitoring	Yes
— Voltage trigger	No
— Overvoltage protection monitoring	Yes

### Product function

Product function	
• fuse monitoring	Yes
• Overvoltage protection monitoring	No

### Short circuit

Conditional short-circuit current (I <sub>q</sub> )	
• rated value	80 kA
• at AC / at 500 V / with high-speed activation / rated value	80 kA
• at AC / at 690 V / with high-speed activation / rated value	80 kA
• with closed switch / at AC / at 500 V / rated value	120 kA
• with closed switch / at AC / at 690 V / rated value	120 kA

Connections	
Arrangement of electrical connectors / for main current circuit	other
Connectable conductor cross-section / for main contacts	
<ul style="list-style-type: none"> <li>• single or multi-stranded / minimum</li> </ul>	2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• single or multi-stranded / maximum</li> </ul>	95 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded / minimum</li> </ul>	2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded / maximum</li> </ul>	95 mm <sup>2</sup>
Tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	10 N·m
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	12 N·m
Type of electrical connection / for main current circuit	busbar connection

Mechanical Design	
Height	202 mm
Width	105.8 mm
Depth	165.5 mm
Mounting position	horizontal/vertical
Mounting type	mounting plate
Mounting type	
<ul style="list-style-type: none"> <li>• floor mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• front mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• front mounting with 4-hole attachment</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
Net weight	1.17 kg

Environmental conditions	
Degree of pollution	3
Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation / minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>• during operation / maximum</li> </ul>	55 °C
<ul style="list-style-type: none"> <li>• during storage / minimum</li> </ul>	-50 °C
<ul style="list-style-type: none"> <li>• during storage / maximum</li> </ul>	80 °C

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

General Product Approval	Declaration of Conformity	Test Certificates
--------------------------	---------------------------	-------------------



CCC



UR



VDE

[Miscellaneous](#)



EG-Konf.

[Type Test Certificates/Test Report](#)

**Shipping Approval**



LRS

**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=3NP1133-1CA11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1CA11>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1133-1CA11](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1CA11)

**CAX-Online-Generator**

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

**Tender specifications**

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







