



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH000, 160 A, for assembly and installation on Mounting plate, box terminal, Cover level 45 mm

Model	
product designation	3NP1 fuse switch disconnecter
design of the safety monitoring	Without
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	000
size of fuse link	NH000
let-through current with closed switch maximum	15 kA
mechanical service life (operating cycles) typical	2 000
I <sup>2</sup> t value with closed switch maximum	223 kA <sup>2</sup> .s
power factor	
• at AC-22 B	0.65
• at AC-23 B	0.45
• with capacitive load	-0.25
fuse system	LV HRC fuse
degree of pollution	3
Voltage	
insulation voltage	
• rated value	690 V
• with degree of pollution 3 at AC rated value	690 V
• with degree of pollution 2 at AC rated value	1 000 V
power factor at AC-21 B	0.95
surge voltage resistance rated value	8 kV
operating voltage	
• at AC rated value maximum	690 V
• at DC rated value	440 V
• at DC rated value maximum	440 V
Protection class	
protection class IP	
• with closed switch with cover or cable lug cover	IP40
• with closed switch without cover or cable lug cover	IP30
• open	IP20
Dissipation	
power loss [W]	
• with conventional rated thermal current without fuse per pole	5 W
• with conventional rated thermal current without fuse per device	15 W

<ul style="list-style-type: none"> <li>• for rated value of the current at AC in hot operating state per pole</li> </ul>	14 W
<ul style="list-style-type: none"> <li>• of the fuse per fuse maximum</li> </ul>	9 W
operational current	
<ul style="list-style-type: none"> <li>• at 35 °C rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at 40 °C rated value</li> </ul>	150 A
<ul style="list-style-type: none"> <li>• at 45 °C rated value</li> </ul>	140 A
<ul style="list-style-type: none"> <li>• at 50 °C rated value</li> </ul>	130 A
<ul style="list-style-type: none"> <li>• at 55 °C rated value</li> </ul>	120 A
<ul style="list-style-type: none"> <li>• at AC-21 B at 240 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-21 B at 400 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-21 B at 500 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-21 B at 690 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-22 B at 240 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-22 B at 400 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-22 B at 500 V rated value</li> </ul>	125 A
<ul style="list-style-type: none"> <li>• at AC-22 B at 690 V rated value</li> </ul>	50 A
<ul style="list-style-type: none"> <li>• at AC-23 B at 690 V rated value</li> </ul>	25 A
<ul style="list-style-type: none"> <li>• at AC-23 B at 500 V rated value</li> </ul>	40 A
<ul style="list-style-type: none"> <li>• at AC-23 B at 400 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at AC-23 B at 240 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at DC-21 B at 120 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at DC-21 B at 240 V rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at DC-21 B at 440 V rated value</li> </ul>	100 A
<ul style="list-style-type: none"> <li>• at DC-22 B at 120 V rated value</li> </ul>	100 A
<ul style="list-style-type: none"> <li>• at DC-22 B at 240 V rated value</li> </ul>	100 A
<ul style="list-style-type: none"> <li>• at DC-22 B at 440 V rated value</li> </ul>	50 A
<ul style="list-style-type: none"> <li>• at DC-23 B at 120 V rated value</li> </ul>	80 A
<ul style="list-style-type: none"> <li>• at DC-23 B at 240 V rated value</li> </ul>	80 A
<ul style="list-style-type: none"> <li>• at DC-23 B at 440 V rated value</li> </ul>	25 A
let-through current with high-speed activation maximum permissible	10 kA
<b>Main circuit</b>	
operational current	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	125 A
<ul style="list-style-type: none"> <li>• with capacitive load at 400 V rated value</li> </ul>	72 A
<ul style="list-style-type: none"> <li>• with capacitive load at 500 V rated value</li> </ul>	55 A
<b>Auxiliary circuit</b>	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
<b>Suitability</b>	
suitability for use	
<ul style="list-style-type: none"> <li>• main switch</li> </ul>	No
<ul style="list-style-type: none"> <li>• switch disconnecter</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• EMERGENCY OFF switch</li> </ul>	No
<ul style="list-style-type: none"> <li>• safety switch</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• maintenance/repair switch</li> </ul>	Yes
<b>Product details</b>	
product component	
<ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release with leading contact</li> </ul>	No
product feature sealable	Yes
product extension auxiliary switch	Yes
product extension optional	
<ul style="list-style-type: none"> <li>• locking capability</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• phase failure monitoring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• fuse monitoring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>• overvoltage protection monitoring</li> </ul>	Yes
<b>Product function</b>	

product function overvoltage protection monitoring	No
<b>Connections</b>	
arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	
• solid or stranded minimum	1.5 mm <sup>2</sup>
• solid or stranded maximum	50 mm <sup>2</sup>
• finely stranded with core end processing minimum	1.5 mm <sup>2</sup>
• finely stranded with core end processing maximum	35 mm <sup>2</sup>
• stranded minimum	1.5 mm <sup>2</sup>
• stranded maximum	50 mm <sup>2</sup>
tightening torque with screw-type terminals	
• minimum	3.5 N·m
• maximum	4 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	8 x 8 mm
type of connection technology	Box terminal

<b>Mechanical Design</b>	
height	141.7 mm
width	88.8 mm
depth	74.1 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
• rail mounting	No
mounting position	horizontal/vertical
net weight	0.47 kg

<b>Environmental conditions</b>	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-50 °C
• maximum	80 °C

<b>Certificates</b>	
reference code according to IEC 81346-2	Q

#### General Product Approval



[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
 EG-Konf.	 <a href="#">Special Test Certificate</a> <a href="#">Type Test Certificates/Test Report</a>	 URS



other	Environment
<a href="#">Confirmation</a> <a href="#">Miscellaneous</a>	<a href="#">Environmental Conformations</a>

#### Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an

EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**Information on the packaging**

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

**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=3NP1123-1CA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1123-1CA20>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1123-1CA20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1123-1CA20)

**CAX-Online-Generator**

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

**Tender specifications**

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





