



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH1, 250 A, for assembly and installation on mounting plate, flat terminal, cover level 70 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	1 and 0
size of fuse link	NH0, NH1
let-through current with closed switch maximum	32 kA
mechanical service life (operating cycles) typical	1 600
I <sup>2</sup> t value with closed switch maximum	780 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
operational current	
• at 35 °C rated value	250 A
• at 40 °C rated value	245 A
• at 45 °C rated value	240 A
• at 50 °C rated value	233 A
• at 55 °C rated value	233 A
• at AC-21 B at 240 V rated value	250 A
• at AC-21 B at 400 V rated value	250 A
• at AC-21 B at 500 V rated value	250 A
• at AC-21 B at 690 V rated value	250 A
• at AC-22 B at 240 V rated value	250 A
• at AC-22 B at 400 V rated value	250 A
• at AC-22 B at 500 V rated value	250 A
• at AC-22 B at 690 V rated value	250 A

<ul style="list-style-type: none"> <li>• at AC-23 B at 690 V rated value</li> <li>• at AC-23 B at 500 V rated value</li> <li>• at AC-23 B at 400 V rated value</li> <li>• at AC-23 B at 240 V rated value</li> <li>• at DC-21 B at 120 V rated value</li> <li>• at DC-21 B at 240 V rated value</li> <li>• at DC-21 B at 440 V rated value</li> <li>• at DC-22 B at 120 V rated value</li> <li>• at DC-22 B at 240 V rated value</li> <li>• at DC-22 B at 440 V rated value</li> <li>• at DC-23 B at 120 V rated value</li> <li>• at DC-23 B at 240 V rated value</li> <li>• at DC-23 B at 440 V rated value</li> </ul>	<p>100 A</p> <p>200 A</p> <p>250 A</p> <p>250 A</p> <p>250 A</p> <p>250 A</p> <p>250 A</p> <p>250 A</p> <p>250 A</p> <p>200 A</p> <p>200 A</p> <p>200 A</p> <p>100 A</p>
let-through current with high-speed activation maximum permissible	25 kA
operating voltage	
<ul style="list-style-type: none"> <li>• at AC rated value maximum</li> <li>• at DC rated value</li> <li>• at DC rated value maximum</li> </ul>	<p>690 V</p> <p>440 V</p> <p>440 V</p>
<b>Protection class</b>	
protection class IP	
<ul style="list-style-type: none"> <li>• with closed switch with cover or cable lug cover</li> <li>• with closed switch without cover or cable lug cover</li> <li>• open</li> </ul>	<p>IP40</p> <p>IP30</p> <p>IP20</p>
<b>Dissipation</b>	
power loss [W]	
<ul style="list-style-type: none"> <li>• with conventional rated thermal current without fuse per pole</li> <li>• with conventional rated thermal current without fuse per device</li> <li>• for rated value of the current at AC in hot operating state per pole</li> <li>• of the fuse per fuse maximum</li> </ul>	<p>8 W</p> <p>24 W</p> <p>31 W</p> <p>23 W</p>
<b>Main circuit</b>	
operational current	
<ul style="list-style-type: none"> <li>• rated value</li> <li>• with capacitive load at 400 V rated value</li> <li>• with capacitive load at 500 V rated value</li> </ul>	<p>250 A</p> <p>72 A</p> <p>55 A</p>
<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> <li>• switch disconnecter</li> <li>• EMERGENCY OFF switch</li> <li>• safety switch</li> <li>• maintenance/repair switch</li> </ul>	<p>No</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p>
<b>Product details</b>	
product function phase failure monitoring	No
product component	
<ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• undervoltage release with leading contact</li> </ul>	<p>No</p> <p>No</p>
product feature sealable	Yes
product extension auxiliary switch	Yes
<b>product extension optional</b>	
<ul style="list-style-type: none"> <li>• locking capability</li> <li>• phase failure monitoring</li> <li>• fuse monitoring</li> <li>• voltage trigger</li> <li>• overvoltage protection monitoring</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p>

**Product function**

product function overvoltage protection monitoring	No
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**Short circuit**

<b>conditional short-circuit current (Iq)</b>	
<ul style="list-style-type: none"> <li>at AC at 240 V with high-speed activation rated value</li> <li>at AC at 500 V with high-speed activation rated value</li> <li>at AC at 690 V with high-speed activation rated value</li> <li>with closed switch at AC at 240 V rated value</li> <li>with closed switch at AC at 500 V rated value</li> <li>with closed switch at AC at 690 V rated value</li> </ul>	<ul style="list-style-type: none"> <li>80 kA</li> <li>80 kA</li> <li>50 kA</li> <li>120 kA</li> <li>120 kA</li> <li>100 kA</li> </ul>

**Connections**

arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	
<ul style="list-style-type: none"> <li>solid or stranded minimum</li> <li>solid or stranded maximum</li> <li>stranded minimum</li> <li>stranded maximum</li> </ul>	<ul style="list-style-type: none"> <li>16 mm<sup>2</sup></li> <li>150 mm<sup>2</sup></li> <li>16 mm<sup>2</sup></li> <li>150 mm<sup>2</sup></li> </ul>
tightening torque with screw-type terminals	
<ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	<ul style="list-style-type: none"> <li>10 N·m</li> <li>12 N·m</li> </ul>
type of connectable conductor cross-sections of the laminated conductors maximum	25 x 18 mm
type of connection technology	Flat terminal

**Mechanical Design**

height	306 mm
width	183.7 mm
depth	116 mm
fastening method	mounting plate
fastening method	
<ul style="list-style-type: none"> <li>floor mounting</li> <li>rail mounting</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>
mounting position	horizontal/vertical
net weight	2.19 kg

**Environmental conditions**

ambient temperature during operation	
<ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	<ul style="list-style-type: none"> <li>-25 °C</li> <li>55 °C</li> </ul>
ambient temperature during storage	
<ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	<ul style="list-style-type: none"> <li>-50 °C</li> <li>80 °C</li> </ul>

**Certificates**

reference code according to IEC 81346-2	Q
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**Approvals Certificates**

**General Product Approval**



[Confirmation](#)



**General Product Approval      Test Certificates      Marine / Shipping**

[Miscellaneous](#)



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



**other      Environment**

[Confirmation](#)

[Miscellaneous](#)

[Environmental Con-](#)

[Environmental Con-](#)

**Further information****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=3NP1143-1DA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1DA10>

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

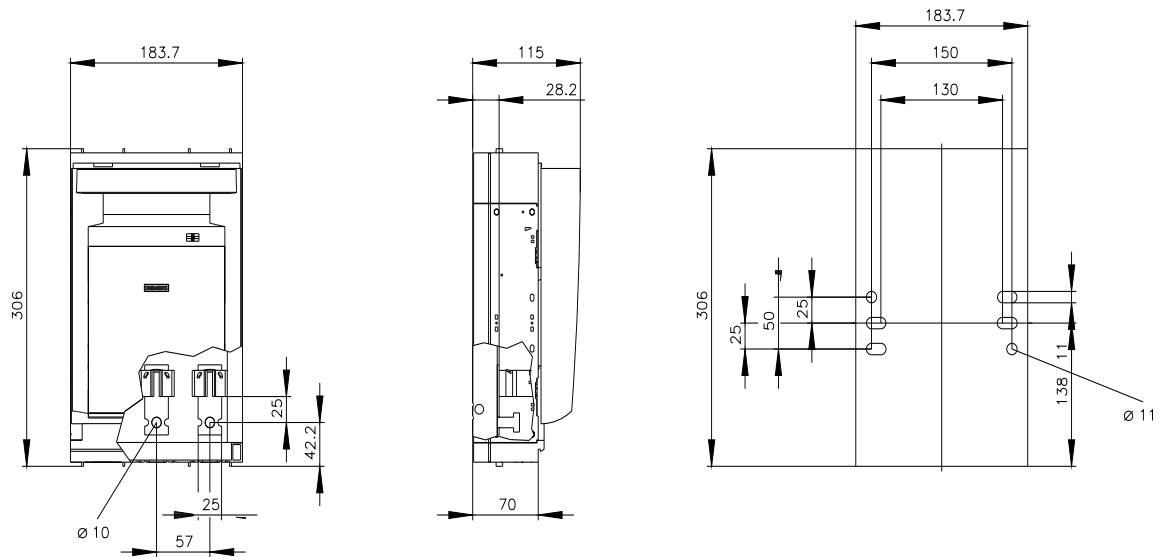
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1143-1DA10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1DA10)

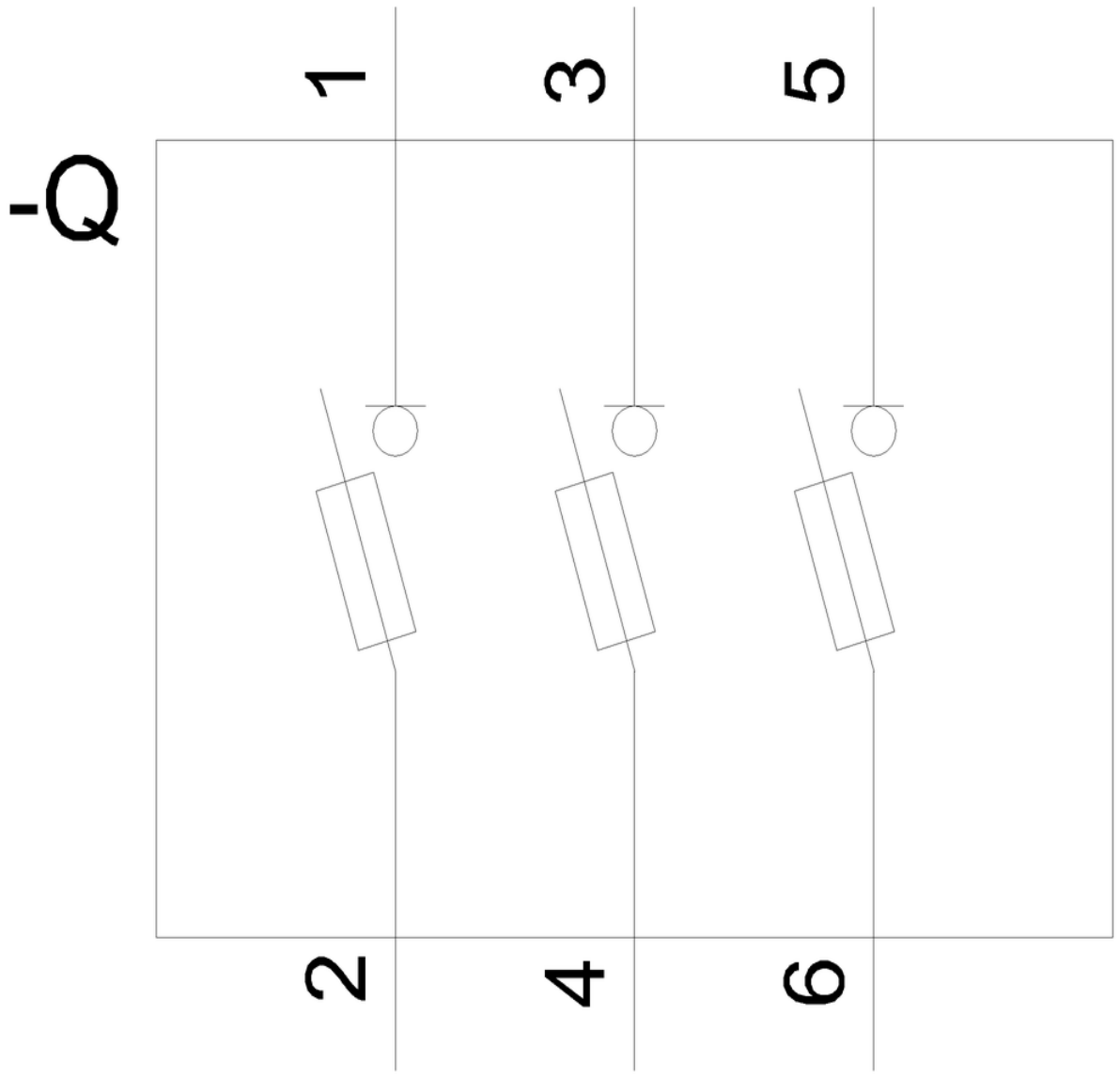
**CAX-Online-Generator**

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

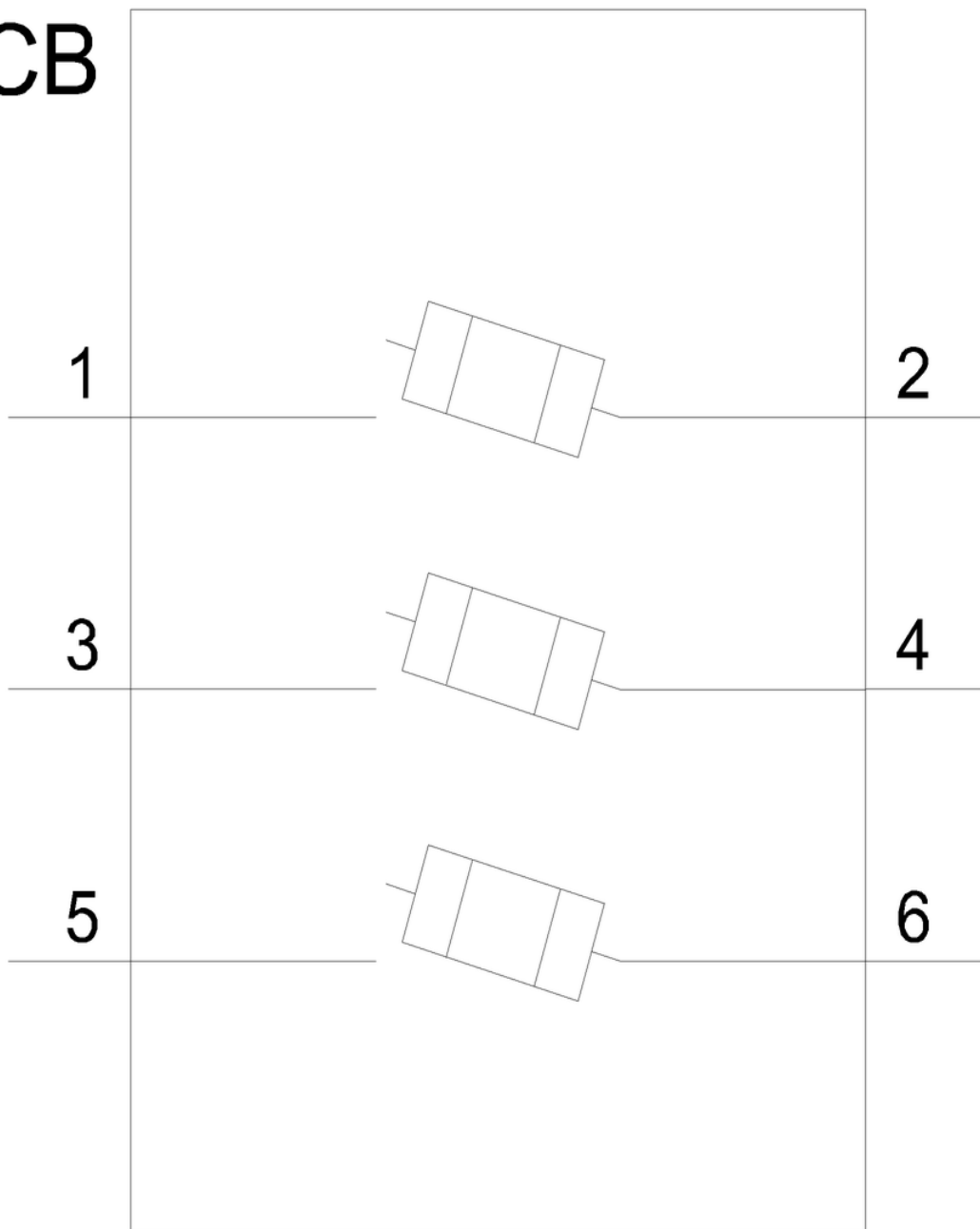
**Tender specifications**

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





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