



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH00, 160 A, for assembly and installation on mounting plate, flat 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	00 and 000
size of fuse link	NH000, NH00
let-through current with closed switch maximum	23 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	
<b>insulation voltage</b>	
• 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
<b>operational current</b>	
• at 35 °C rated value	160 A
• at 40 °C rated value	155 A
• at 45 °C rated value	145 A
• at 50 °C rated value	140 A
• at 55 °C rated value	133 A
• at AC-21 B at 240 V rated value	160 A
• at AC-21 B at 400 V rated value	160 A
• at AC-21 B at 500 V rated value	160 A
• at AC-21 B at 690 V rated value	160 A
• at AC-22 B at 240 V rated value	160 A
• at AC-22 B at 400 V rated value	160 A
• at AC-22 B at 500 V rated value	160 A
• at AC-22 B at 690 V rated value	125 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>	35 A 63 A 160 A 160 A 160 A 160 A 160 A 160 A 160 A 125 A 100 A 100 A 63 A
let-through current with high-speed activation maximum permissible	15 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>	690 V 440 V 440 V
<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>	IP40 IP30 IP20
<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>	5 W 15 W 17 W 12 W
<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>	160 A 72 A 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> <li>• switch disconnecter</li> <li>• EMERGENCY OFF switch</li> <li>• safety switch</li> <li>• maintenance/repair switch</li> </ul>	No Yes No Yes Yes
<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>	No No
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>	Yes Yes Yes No Yes

### Product function

product function overvoltage protection monitoring	No
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### Short circuit

<b>conditional short-circuit current (I<sub>q</sub>)</b>	
• at AC at 240 V with high-speed activation 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	50 kA
• with closed switch at AC at 240 V rated value	120 kA
• with closed switch at AC at 500 V rated value	120 kA
• with closed switch at AC at 690 V rated value	100 kA

### Connections

arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	
• solid or stranded minimum	2.5 mm <sup>2</sup>
• solid or stranded maximum	95 mm <sup>2</sup>
• stranded minimum	2.5 mm <sup>2</sup>
• stranded maximum	95 mm <sup>2</sup>
tightening torque with screw-type terminals	
• minimum	10 N·m
• maximum	12 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	24 x 12 mm
type of connection technology	Flat terminal

### Mechanical Design

height	202 mm
width	105.8 mm
depth	86.5 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
• rail mounting	No
mounting position	horizontal/vertical
net weight	0.73 kg

### Environmental conditions

ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-50 °C
• maximum	80 °C

### 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=3NP1133-1CA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1CA10>

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

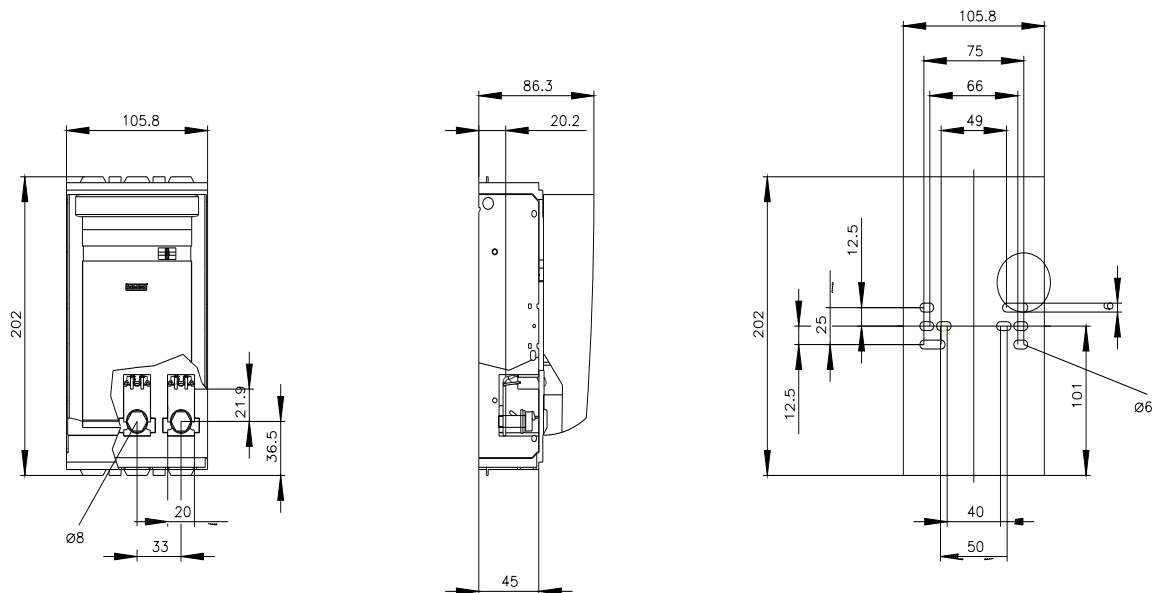
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1133-1CA10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1CA10)

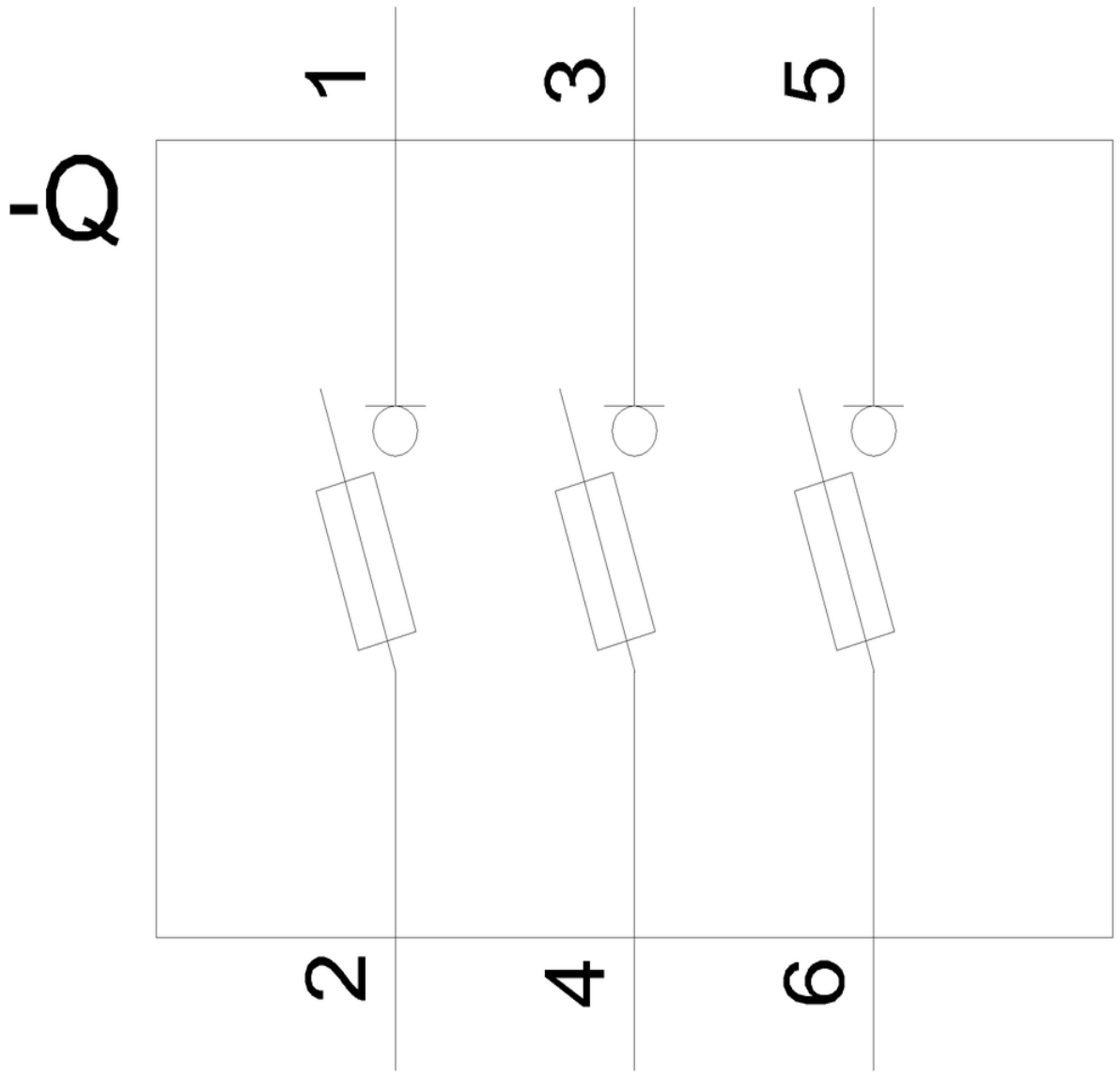
**CAX-Online-Generator**

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

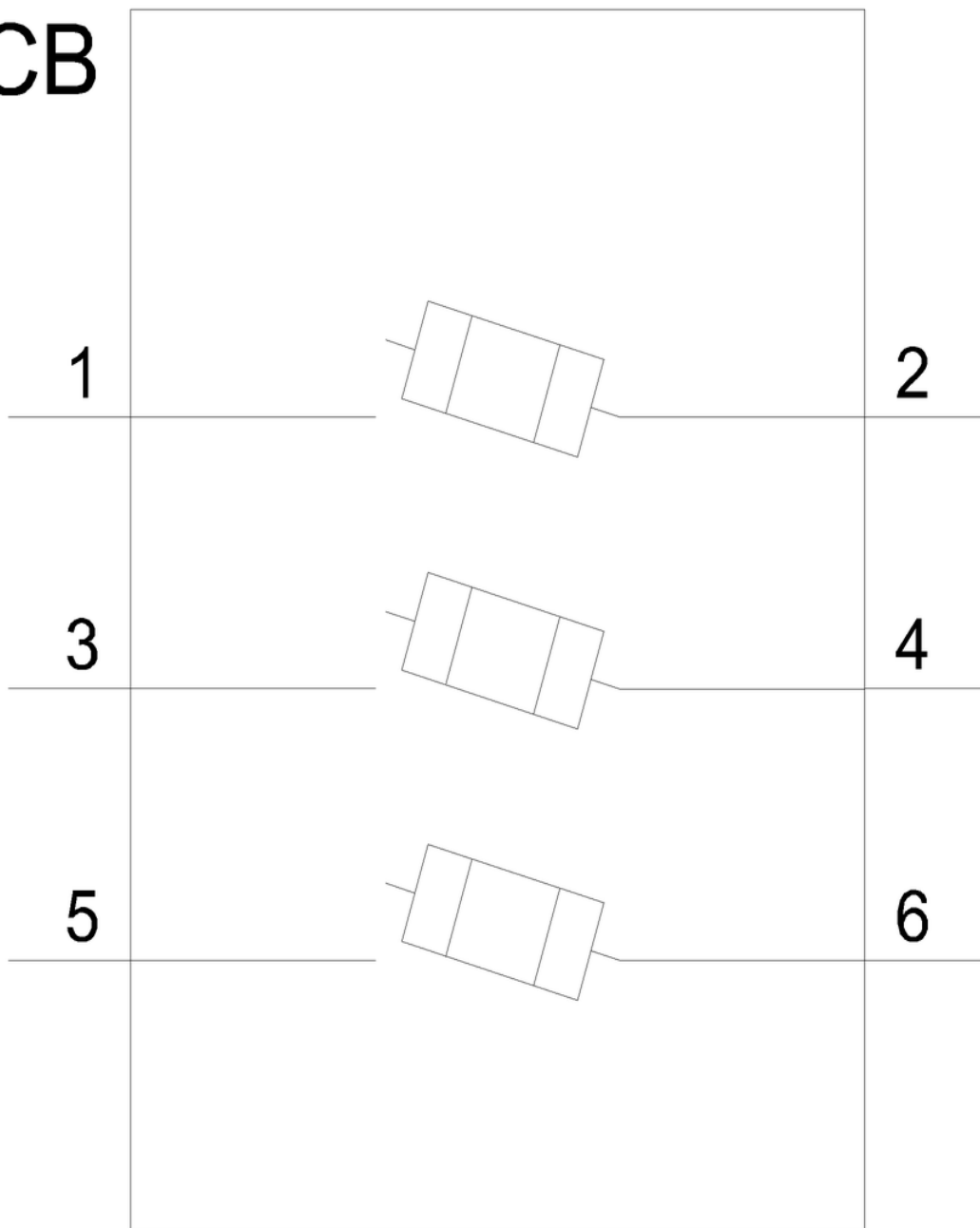
**Tender specifications**

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





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last modified:

12/16/2020 