

SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH2, 400 A, for Busbar system 8US 60 mm, Box terminal, Cover level 32/70 mm



Model	
Product brand name	SENTRON
Product designation	3NP1 fuse switch disconnecter
Design of the product	cover level 32/70 mm
Busbar design	busbar thickness 5 or 10 mm
Design of the safety monitoring	Without
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 60 mm 8US busbar system
Size of disconnecting link	2 and 1
Size of fuse link	NH1, NH2
Continuous current / at 35 °C / rated value	400 A
Let-through current / with closed switch / maximum permissible	40 kA
cut-off value $I^{*2}t_{max.}$ / 500 V	2 150 000 A <sup>2</sup> -s
Power factor	

• at AC-22 B	0.65
• at AC-23 B	0.35
• with capacitive load	-0.25
circuit-breaker / Design	3NP11
Mechanical service life (switching cycles) / typical	1 000
Fuse system	LV HRC fuse
Degree of pollution	3

## Voltage

Insulation voltage	
• rated value	690 V
• with degree of pollution 3 / rated value	690 V
• with degree of pollution 2 / rated value	1 000 V
Power factor / at AC-21 B	0.95
Surge voltage resistance / rated value	8 kV
Current / at AC / rated value	400 A
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
• on the front	IP40
• open	IP20

## Dissipation

Power loss [W]	
• with conventional rated thermal current / without fuse / per pole	14 W
• with conventional rated thermal current / without fuse / per device	42 W
• for rated value of the current / at AC / in hot operating state / per pole	48 W
• of the fuse / per fuse / maximum	34 W

## Current

Operating current	
• at AC-23 B / at 690 V / rated value	125 A
• at AC-23 B / at 500 V / rated value	315 A
• at AC-23 B / at 400 V / rated value	400 A

• at AC-23 B / at 240 V / rated value	400 A
• at AC-22 B / at 690 V / rated value	400 A
• at AC-22 B / at 500 V / rated value	400 A
• at AC-22 B / at 400 V / rated value	400 A
• at AC-22 B / at 240 V / rated value	400 A
• at AC-21 B / at 690 V / rated value	400 A
• at AC-21 B / at 500 V / rated value	400 A
• at AC-21 B / at 400 V / rated value	400 A
• at AC-21 B / at 240 V / rated value	400 A
• at DC-23 B / at 440 V / rated value / maximum	160 A
• at DC-23 B / at 240 V / rated value / maximum	250 A
• at DC-23 B / at 120 V / rated value / maximum	250 A
• at DC-22 B / at 440 V / rated value / maximum	315 A
• at DC-22 B / at 240 V / rated value / maximum	400 A
• at DC-22 B / at 120 V / rated value / maximum	400 A
• at DC-21 B / at 440 V / rated value / maximum	400 A
• at DC-21 B / at 240 V / rated value / maximum	400 A
• at DC-21 B / at 120 V / rated value / maximum	400 A
Continuous current	
• rated value	400 A
• at 40 °C / rated value	400 A
• at 45 °C / rated value	392 A
• at 50 °C / rated value	372 A
• at 55 °C / rated value	356 A
Let-through current / with high-speed activation / maximum permissible	40 kA
Let-through current / I <sub>c</sub> / maximum permissible	
• 400 V	40 000 A
• 500V	40 000 A
cut-off value I <sup>2</sup> t <sub>max.</sub> / 400 V	1 515 000 A <sup>2</sup> ·s
<b>Main circuit</b>	
Operating current / with capacitive load	
• at 400 V / maximum	72 A
• at 500 V / maximum	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>	
<b>Suitability for use</b>	
• Main switch	No

• switch disconnector	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes

### Product details

Product feature / interlock	Yes
Product component	
• Trip indicator	No
• 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
— 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	80 kA
• 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	100 kA
• with closed switch / at AC / at 500 V / rated value	100 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	
<ul style="list-style-type: none"> <li>• single or multi-stranded</li> </ul>	120 ... 300 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded / with core end processing</li> </ul>	120 ... 240 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded</li> </ul>	120 ... 300 mm <sup>2</sup>
Tightening torque / with screw-type terminals	25 ... 25 N·m
Type of connection	Box terminal
Type of electrical connection / for main current circuit	box terminal

## Mechanical Design

Height	306 mm
Width	209.4 mm
Width	
<ul style="list-style-type: none"> <li>• of the busbar</li> </ul>	12 ... 30 mm
Depth	157 mm
Mounting type	busbar
Mounting type	
<ul style="list-style-type: none"> <li>• floor mounting</li> </ul>	No
<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>	Yes
Mounting position	horizontal/vertical
Busbar center-to-center spacing	60 mm
Net weight	4.76 kg
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +55 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-50 ... +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	<a href="#">Miscellaneous</a>	 EG-Konf.
				<a href="#">Type Test Certificates/Test Report</a>

Test Certificates	Shipping Approval
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[Special Test Certificate](#)



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## 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=3NP1153-1BC20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1153-1BC20>

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

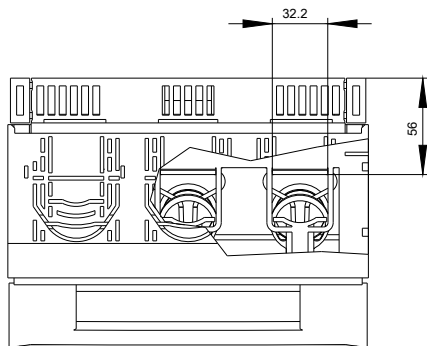
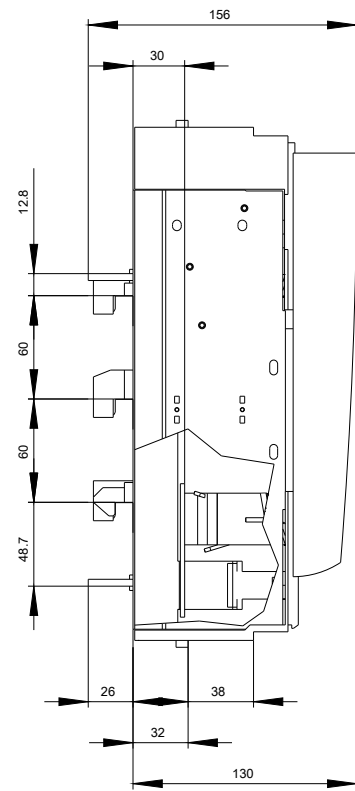
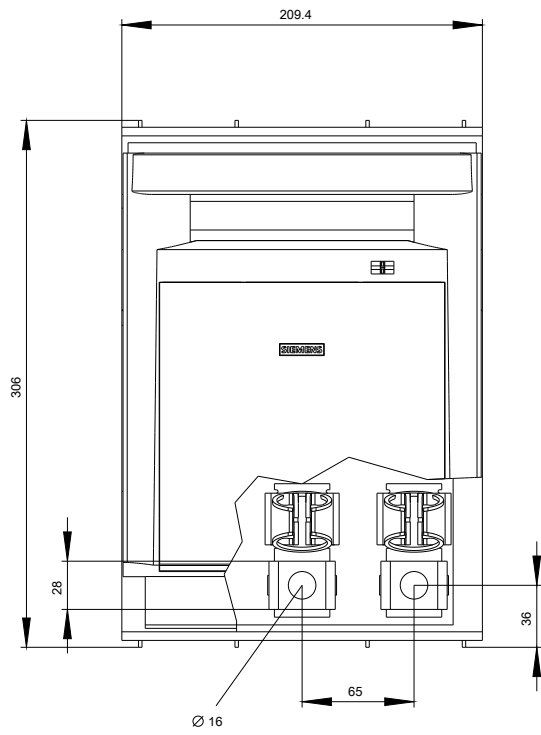
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1153-1BC20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1153-1BC20)

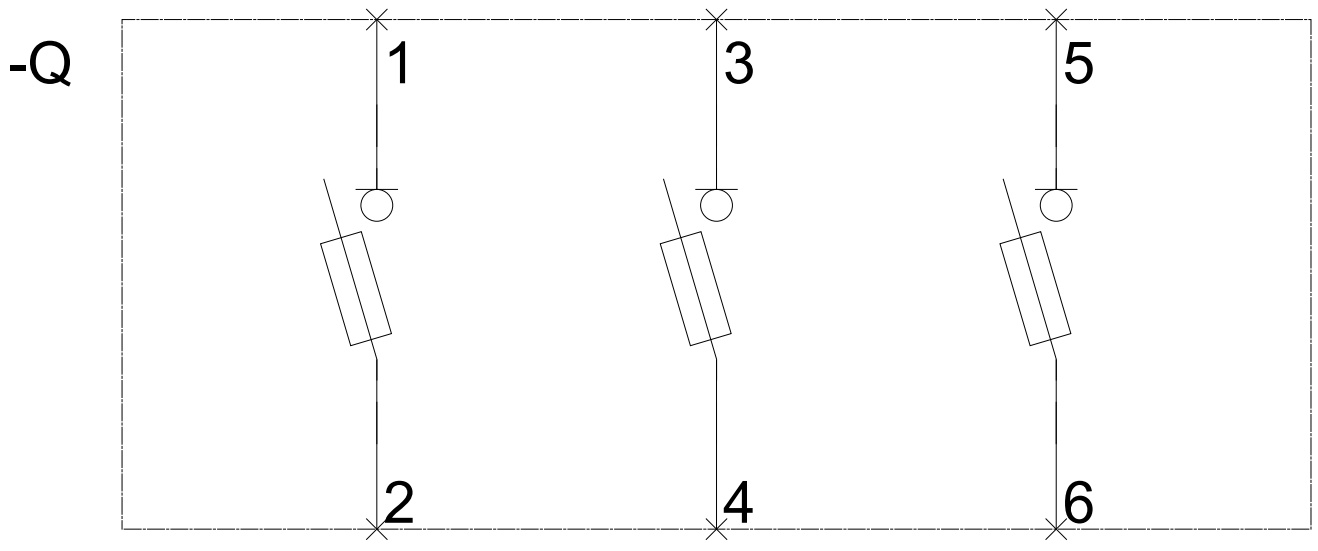
### CAX-Online-Generator

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

### Tender specifications

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







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