

SETRON, Fuse switch disconnecter 3NP1, 3-pole, NH00, 160 A, for Rittal busbar system 60 mm, Box terminal, Fuse monitoring: electromechanical, Cover level 32/70 mm



Model	
Product brand name	SETRON
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	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 Rittal 60 mm busbar system
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 $I^{*2}t_{max.}$ / 500 V	158 000 A <sup>2</sup> ·s
Power factor	

• at AC-22 B	0.65
• at AC-23 B	0.45
• with capacitive load	-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	
• 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

Electricity	
Continuous current	
• 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
Let-through current / with high-speed activation / maximum permissible	15 kA
Let-through current / I <sub>c</sub> / maximum permissible	
• 400 V	23 000 A
• 500V	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	
• at AC / rated value / minimum	24 V
• at AC / rated value / maximum	690 V
• at DC / rated value	250 V
• at DC / rated value / minimum	24 V
• at DC / rated value / maximum	250 V
Operating current / with capacitive load	
• at 400 V / maximum	72 A
• at 500 V / maximum	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	
<b>Suitability for use</b>	
• 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>	6 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• single or multi-stranded / maximum</li> </ul>	70 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded / with core end processing / minimum</li> </ul>	6 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded / with core end processing / maximum</li> </ul>	50 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded / minimum</li> </ul>	6 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded / maximum</li> </ul>	70 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>	10 N·m
Type of electrical connection / for main current circuit	box terminal

## Mechanical Design

Height	215.1 mm
Width	105.8 mm
Depth	213.5 mm
Mounting position	horizontal/vertical
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
Busbar center-to-center spacing	60 mm
Net weight	1.42 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

- acc. to DIN EN 61346-2
- acc. to DIN EN 81346-2

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#### General Product Approval

#### Declaration of Conformity

#### Test Certific- ates

#### Shipping Ap- proval



CCC



VDE

[Miscellaneous](#)



EG-Konf.

[Type Test Certific-  
ates/Test Report](#)



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=3NP1133-1JC21>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1JC21>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1133-1JC21](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1JC21)

##### CAX-Online-Generator

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

##### Tender specifications

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









