

SETRON, Fuse switch disconnecter 3NP1, 3-pole, NH1, 250 A, for Busbar system 8US 60 mm, flat 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 60 mm 8US busbar system
Size of disconnecting link	1 and 0
Size of fuse link	NH0, NH1
Continuous current / at 35 °C / rated value	250 A
Let-through current / with closed switch / maximum permissible	32 kA
cut-off value $I^{*2}t_{max.}$ / 500 V	780 000 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	1 600
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	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
Let-through current / with high-speed activation / maximum permissible	25 kA
Let-through current / I <sub>c</sub> / maximum permissible	
• 400 V	32 000 A
• 500V	32 000 A
cut-off value I <sup>2</sup> t <sub>max</sub> / 400 V	780 000 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	50 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	
• single or multi-stranded / minimum	16 mm <sup>2</sup>
• single or multi-stranded / maximum	150 mm <sup>2</sup>
• stranded / minimum	16 mm <sup>2</sup>
• stranded / maximum	150 mm <sup>2</sup>
Tightening torque / with screw-type terminals	
• minimum	10 N·m
• maximum	12 N·m
Type of electrical connection / for main current circuit	busbar connection

## Mechanical Design





Height	306 mm
Width	183.7 mm
Depth	218.8 mm
Mounting position	horizontal/vertical
Mounting type	busbar
Mounting type	
• floor mounting	No
• front mounting	No
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	Yes
Busbar center-to-center spacing	60 mm
Net weight	3.29 kg


## Environmental conditions

Degree of pollution	3
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	55 °C
• during storage / minimum	-50 °C
• during storage / maximum	80 °C

## Certificates

Reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval			Declaration of Conformity	Test Certificates
 CCC	 UR	 VDE	<a href="#">Miscellaneous</a>	<a href="#">Type Test Certificates/Test Report</a>
			 EG-Konf.	

Shipping Approval
 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=3NP1143-1BC11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1BC11>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1143-1BC11](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1BC11)

**CAX-Online-Generator**

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

**Tender specifications**

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

