

SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH1, 250 A, for Rittal busbar system 60 mm, flat terminal, Fuse monitoring: electronic EFM20, 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	electronic EFM 20
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	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	230 V
• at AC / rated value / maximum	690 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
<b>Suitability</b>	
<b>Suitability for use</b>	
• Main switch	No
• switch disconnecter	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes
<b>Product details</b>	
Product feature / interlock	Yes
Product component	
• Trip indicator	Yes
• Phase failure monitoring	Yes
• 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
— Voltage trigger	No
<b>Product function</b>	
Product function	
• fuse monitoring	Yes
• Overvoltage protection monitoring	Yes
<b>Short circuit</b>	
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
<b>Connections</b>	
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	169.3 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	2.99 kg

Environmental conditions	
Degree of pollution	2
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	Shipping Approval
				
CCC	VDE	EG-Konf.	LRS	

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

## 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=3NP1143-1JC13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1JC13>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1143-1JC13](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1JC13)

**CAX-Online-Generator**

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

**Tender specifications**

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

