

SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH1, 250 A, for assembly and installation on mounting plate, Box terminal, Fuse monitoring: electronic EFM20, Cover level 70 mm



Model	
Product brand name	SENTRON
Product designation	3NP1 fuse switch disconnecter
Design of the product	cover level 70 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 assembly and installation on mounting plate
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 $I^{*2t,max.}$ / 500 V	780 000 A ² ·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
Degree of pollution	2

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	250 A
Operating voltage	
• at AC / rated value / minimum	230 V
• at AC / rated value / maximum	690 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	8 W
• with conventional rated thermal current / without fuse / per device	24 W
• for rated value of the current / at AC / in hot operating state / per pole	31 W
• of the fuse / per fuse / maximum	23 W

Current

Operating current	
• at AC-23 B / at 690 V / rated value	100 A
• at AC-23 B / at 500 V / rated value	200 A
• at AC-23 B / at 400 V / rated value	250 A
• at AC-23 B / at 240 V / rated value	250 A
• at AC-22 B / at 690 V / rated value	250 A

• at AC-22 B / at 500 V / rated value	250 A
• at AC-22 B / at 400 V / rated value	250 A
• at AC-22 B / at 240 V / rated value	250 A
• at AC-21 B / at 690 V / rated value	250 A
• at AC-21 B / at 500 V / rated value	250 A
• at AC-21 B / at 400 V / rated value	250 A
• at AC-21 B / at 240 V / rated value	250 A
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 _c / maximum permissible	
• 400 V	32 000 A
• 500V	32 000 A
cut-off value I ² t _{max.} / 400 V	551 000 A ² ·s

Main circuit

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

Suitability for use	
• 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	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

Product function

Product function	
• fuse monitoring	Yes
• Overvoltage protection monitoring	Yes

Short circuit

Conditional short-circuit current (I _q)	
• 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	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	
• single or multi-stranded	70 ... 185 mm ²
• finely stranded / with core end processing	70 ... 120 mm ²
• stranded	70 ... 185 mm ²
Tightening torque / with screw-type terminals	10 ... 10 N·m
Type of connection	Box terminal
Type of electrical connection / for main current circuit	box terminal





Mechanical Design

Height	306 mm
Width	183.7 mm
Depth	146.5 mm

Mounting type	mounting plate
Mounting type	
<ul style="list-style-type: none"> • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting 	<p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
Mounting position	horizontal/vertical
Net weight	2.33 kg
<ul style="list-style-type: none"> • during operation • during storage 	<p>-25 ... +55 °C</p> <p>-50 ... +80 °C</p>

Certificates

Reference code	
<ul style="list-style-type: none"> • acc. to DIN EN 61346-2 • acc. to DIN EN 81346-2 	<p>Q</p> <p>Q</p>

General Product Approval	Declaration of Conformity	Test Certificates
 <p>CCC</p>  <p>UR</p>  <p>VDE</p>	<p>Miscellaneous</p>  <p>EG-Konf.</p>	<p>Type Test Certificates/Test Report</p>

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=3NP1143-1DA23>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1DA23>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1DA23

CAX-Online-Generator

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

Tender specifications

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

