

SETRON, fuse switch disconnecter 3NP1, 3-pole, NH1, 250 A, for assembly and installation on mounting plate, Flachanschluss, Fuse monitoring: electromechanical, cover level 70mm



Model	
product brandname	SETRON
Product designation	3NP1 fuse switch disconnecter
Design of the product	cover level 70 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 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

<ul style="list-style-type: none"> • at AC-23 B 	0.45
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • with closed switch / with cover or cable lug cover 	IP40
<ul style="list-style-type: none"> • with closed switch / without cover or cable lug cover 	IP30
<ul style="list-style-type: none"> • on the front 	IP40
<ul style="list-style-type: none"> • open 	IP20

Dissipation

Power loss [W]	
<ul style="list-style-type: none"> • for rated value of the current / at AC / in hot operating state / per pole 	7.66 W
<ul style="list-style-type: none"> • maximum 	23 W

Electricity

Continuous current	
<ul style="list-style-type: none"> • rated value 	250 A
<ul style="list-style-type: none"> • at 40 °C / rated value 	245 A
<ul style="list-style-type: none"> • at 45 °C / rated value 	240 A
<ul style="list-style-type: none"> • at 50 °C / rated value 	233 A
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 400 V 	32 000 A
<ul style="list-style-type: none"> • 500V 	32 000 A
cut-off value I**2t,max. / 400 V	780 000 A ² ·s

Main circuit

Operating voltage	
<ul style="list-style-type: none"> • at AC / rated value / minimum 	24 V
<ul style="list-style-type: none"> • at AC / rated value / maximum 	690 V
<ul style="list-style-type: none"> • at DC / rated value 	250 V
<ul style="list-style-type: none"> • at DC / rated value / minimum 	24 V

<ul style="list-style-type: none"> • at DC / rated value / maximum 	250 V
Operating current / with capacitive load	
<ul style="list-style-type: none"> • at 400 V / maximum 	72 A
<ul style="list-style-type: none"> • at 500 V / maximum 	55 A

Suitability

Suitability for use	
<ul style="list-style-type: none"> • Main switch 	No
<ul style="list-style-type: none"> • switch disconnecter 	Yes
<ul style="list-style-type: none"> • EMERGENCY OFF switch 	No
<ul style="list-style-type: none"> • safety switch 	Yes
<ul style="list-style-type: none"> • maintenance/repair switch 	Yes

Product details

Product feature / interlock	Yes
Product component	
<ul style="list-style-type: none"> • Trip indicator 	Yes
<ul style="list-style-type: none"> • Phase failure monitoring 	No
<ul style="list-style-type: none"> • undervoltage release 	No
<ul style="list-style-type: none"> • undervoltage release with leading contact 	No
Product feature / sealable	Yes
Product extension	
<ul style="list-style-type: none"> • Auxiliary switch 	Yes
<ul style="list-style-type: none"> • optional 	
<ul style="list-style-type: none"> — locking capability 	Yes
<ul style="list-style-type: none"> — motor drive 	No
<ul style="list-style-type: none"> — Phase failure monitoring 	Yes
<ul style="list-style-type: none"> — Voltage trigger 	No
<ul style="list-style-type: none"> — Overvoltage protection monitoring 	Yes

Product function

Product function	
<ul style="list-style-type: none"> • fuse monitoring 	Yes
<ul style="list-style-type: none"> • Overvoltage protection monitoring 	No

Short circuit

Conditional short-circuit current (I_q)	
<ul style="list-style-type: none"> • rated value 	80 kA
<ul style="list-style-type: none"> • at AC / at 500 V / with high-speed activation / rated value 	80 kA
<ul style="list-style-type: none"> • at AC / at 690 V / with high-speed activation / rated value 	50 kA
<ul style="list-style-type: none"> • with closed switch / at AC / at 500 V / rated value 	120 kA

<ul style="list-style-type: none"> with closed switch / at AC / at 690 V / rated value 	100 kA
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Connections

Arrangement of electrical connectors / for main current circuit	other
Connectable conductor cross-section / for main contacts	
<ul style="list-style-type: none"> single or multi-stranded / minimum 	16 mm ²
<ul style="list-style-type: none"> single or multi-stranded / maximum 	150 mm ²
<ul style="list-style-type: none"> stranded / minimum 	16 mm ²
<ul style="list-style-type: none"> stranded / maximum 	150 mm ²
Tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> minimum 	10 N·m
<ul style="list-style-type: none"> maximum 	12 N·m
Type of electrical connection / for main current circuit	busbar connection

Mechanical Design

Height	306 mm
Width	183.7 mm
Depth	192.8 mm
Mounting position	horizontal/vertical
Mounting type	mounting plate
Mounting type	
<ul style="list-style-type: none"> floor mounting 	Yes
<ul style="list-style-type: none"> front mounting 	No
<ul style="list-style-type: none"> front mounting with 4-hole attachment 	No
<ul style="list-style-type: none"> front mounting with central attachment 	No
<ul style="list-style-type: none"> rail mounting 	No
Net weight	2.63 kg

Environmental conditions

Degree of pollution	3
Ambient temperature	
<ul style="list-style-type: none"> during operation / minimum 	-25 °C
<ul style="list-style-type: none"> during operation / maximum 	55 °C
<ul style="list-style-type: none"> during storage / minimum 	-50 °C
<ul style="list-style-type: none"> during storage / maximum 	80 °C

Certificates

Equipment marking	
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 	Q
<ul style="list-style-type: none"> acc. to DIN EN 81346-2 	Q

General Product Approval	Declaration of Conformity	Test Certificates	Shipping Approval
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CCC



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EG-Konf.

[Typrüfbescheinigung/Werkszeugnis](#)



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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=3NP1143-1DA11>

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

<http://support.automation.siemens.com/WW/view/en/3NP1143-1DA11/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1DA11

CAX-Online-Generator

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

Tender specifications

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





