



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

Model	
product brand name	SETRON
product designation	3NP1 fuse switch disconnecter
design of the product	cover level 70 mm
design of the safety monitoring	Without
design of the actuating element	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
let-through current / with closed switch / maximum permissible	32 kA
mechanical service life (switching cycles) / typical	1 600
power factor	
• at AC-22 B	0.65
• at AC-23 B	0.45
• with capacitive load	-0.25
fuse system	LV HRC fuse
degree of pollution	3
Voltage	
insulation voltage	
• rated value	690 V
• with degree of pollution 3 / at AC / rated value	690 V
• with degree of pollution 2 / at AC / rated value	1 000 V
power factor / at AC-21 B	0.95
surge voltage resistance / rated value	8 kV
operating voltage	
• at AC / rated value / maximum	690 V
• at DC / rated value	440 V
• at DC / rated value / maximum	440 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
<b>Dissipation</b>	
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
<b>Current</b>	
operational current	
• at 35 °C / 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
• at AC / rated value	250 A
• 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
• at DC-23 B / at 440 V / rated value	100 A
• at DC-23 B / at 240 V / rated value	200 A
• at DC-23 B / at 120 V / rated value	200 A
• at DC-22 B / at 440 V / rated value	200 A
• at DC-22 B / at 240 V / rated value	250 A
• at DC-22 B / at 120 V / rated value	250 A
• at DC-21 B / at 440 V / rated value	250 A
• at DC-21 B / at 240 V / rated value	250 A
• at DC-21 B / at 120 V / rated value	250 A
let-through current / with high-speed activation / maximum permissible	25 kA
<b>Main circuit</b>	
operational current	
• rated value	250 A
• with capacitive load / at 400 V / rated value	72 A
• with capacitive load / at 500 V / rated value	55 A
<b>Auxiliary circuit</b>	
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>	
suitability for use	
• 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
<ul style="list-style-type: none"> <li>• product component / trip indicator</li> <li>• product function / phase failure monitoring</li> <li>• product component / undervoltage release</li> <li>• product component / undervoltage release with leading contact</li> </ul>	No No No No
product feature / sealable	Yes
product extension / auxiliary switch	Yes
product extension / optional	
<ul style="list-style-type: none"> <li>• locking capability</li> <li>• motor drive</li> <li>• phase failure monitoring</li> <li>• fuse monitoring</li> <li>• voltage trigger</li> <li>• overvoltage protection monitoring</li> </ul>	Yes No Yes Yes No Yes
<b>Product function</b>	
product function	
<ul style="list-style-type: none"> <li>• fuse monitoring</li> <li>• overvoltage protection monitoring</li> </ul>	No No
<b>Short circuit</b>	
conditional short-circuit current (I <sub>q</sub> )	
<ul style="list-style-type: none"> <li>• rated value</li> <li>• at AC / at 240 V / with high-speed activation / rated value</li> <li>• at AC / at 500 V / with high-speed activation / rated value</li> <li>• at AC / at 690 V / with high-speed activation / rated value</li> <li>• with closed switch / at AC / at 240 V / rated value</li> <li>• with closed switch / at AC / at 500 V / rated value</li> <li>• with closed switch / at AC / at 690 V / rated value</li> </ul>	80 kA 80 kA 80 kA 50 kA 120 kA 120 kA 100 kA
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	other
connectable conductor cross-section / for main contacts	
<ul style="list-style-type: none"> <li>• solid or stranded / minimum</li> <li>• solid or stranded / maximum</li> <li>• finely stranded / with core end processing / minimum</li> <li>• finely stranded / with core end processing / maximum</li> <li>• stranded / minimum</li> <li>• stranded / maximum</li> </ul>	70 mm <sup>2</sup> 185 mm <sup>2</sup> 70 mm <sup>2</sup> 120 mm <sup>2</sup> 70 mm <sup>2</sup> 185 mm <sup>2</sup>
tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	10 N·m 10 N·m
type of connectable conductor cross-sections / of the laminated conductors / maximum	20 x 10 mm
type of connection technology	Box terminal
type of electrical connection / for main current circuit	box terminal
<b>Mechanical Design</b>	
height	306 mm
width	183.7 mm
depth	116 mm
fastening method	mounting plate
fastening method	
<ul style="list-style-type: none"> <li>• floor mounting</li> <li>• 4-hole front mounting</li> <li>• front mounting with central attachment</li> </ul>	Yes No No

• rail mounting	No	
mounting position	horizontal/vertical	
net weight	2.19 kg	
<b>Environmental conditions</b>		
ambient temperature / during operation		
• minimum	-25 °C	
• maximum	55 °C	
ambient temperature / during storage		
• minimum	-50 °C	
• maximum	80 °C	
<b>General Product Approval</b>	<b>Declaration of Conformity</b>	<b>Test Certificates</b>



[Miscellaneous](#)



[Type Test Certificates/Test Report](#)

<b>Test Certificates</b>	<b>Marine / Shipping</b>	<b>other</b>
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[Special Test Certificate](#)



[Miscellaneous](#)

**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=3NP1143-1DA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1DA20>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1143-1DA20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1DA20)

CAx-Online-Generator

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

Tender specifications

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





