



SENTRON, fuse switch disconnecter 3NP1, 1-pole, NH00, 160 A, for assembly and installation on mounting plate, box terminal, cover level 45 mm

Model	
product brand name	SENTRON
product designation	3NP1 fuse switch disconnecter
design of the product	cover level 45 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	1
type of device	For assembly and installation on mounting plate
size of disconnecting link	00 and 000
size of fuse link	NH000, NH00
let-through current / with closed switch / maximum permissible	20 kA
mechanical service life (switching cycles) / typical	2 000
power factor	
• at AC-22 B	0.65
• at AC-23 B	0.35
• 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	240 V
• at DC / rated value	120 V
• at DC / rated value / maximum	120 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	5 W
• with conventional rated thermal current / without fuse / per device	5 W
• for rated value of the current / at AC / in hot operating state / per pole	17 W
• of the fuse / per fuse / maximum	12 W
Current	
operational current	
• at 35 °C / rated value	160 A
• at 40 °C / rated value	155 A
• at 45 °C / rated value	145 A
• at 50 °C / rated value	140 A
• at 55 °C / rated value	133 A
• at AC / rated value	160 A
• at AC-23 B / at 240 V / rated value	160 A
• at AC-22 B / at 240 V / rated value	160 A
• at AC-21 B / at 240 V / rated value	160 A
• at DC-23 B / at 120 V / rated value	100 A
• at DC-22 B / at 120 V / rated value	160 A
• at DC-21 B / at 120 V / rated value	160 A
let-through current / with high-speed activation / maximum permissible	15 kA
Main circuit	
operational current	
• rated value	160 A
• with capacitive load / at 400 V / rated value	72 A
• with capacitive load / at 500 V / rated value	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	No
• product function / phase failure monitoring	No
• product component / undervoltage release	No
• product component / undervoltage release with leading contact	No
product feature / sealable	Yes
product extension / auxiliary switch	Yes
product extension / optional	
• locking capability	Yes
• motor drive	No
• phase failure monitoring	Yes
• fuse monitoring	Yes
• voltage trigger	No
• overvoltage protection monitoring	Yes

Product function			
product function			
<ul style="list-style-type: none"> • fuse monitoring • overvoltage protection monitoring 	<p>No</p> <p>No</p>		
Short circuit			
conditional short-circuit current (I _q)			
<ul style="list-style-type: none"> • rated value • at AC / at 240 V / with high-speed activation / rated value • with closed switch / at AC / at 240 V / rated value 	<p>80 kA</p> <p>80 kA</p> <p>120 kA</p>		
Connections			
arrangement of electrical connectors / for main current circuit	other		
connectable conductor cross-section / for main contacts			
<ul style="list-style-type: none"> • solid or stranded / minimum • solid or stranded / maximum • finely stranded / with core end processing / minimum • finely stranded / with core end processing / maximum • stranded / minimum • stranded / maximum 	<p>6 mm²</p> <p>70 mm²</p> <p>6 mm²</p> <p>50 mm²</p> <p>6 mm²</p> <p>70 mm²</p>		
tightening torque / with screw-type terminals			
<ul style="list-style-type: none"> • minimum • maximum 	<p>10 N·m</p> <p>10 N·m</p>		
type of connectable conductor cross-sections / of the laminated conductors / maximum	9 x 12 mm		
type of connection technology	Box terminal		
type of electrical connection / for main current circuit	box terminal		
Mechanical Design			
height	202 mm		
width	41.8 mm		
depth	86.5 mm		
fastening method	mounting plate		
fastening method			
<ul style="list-style-type: none"> • floor mounting • 4-hole front mounting • front mounting with central attachment • rail mounting 	<p>No</p> <p>No</p> <p>No</p> <p>No</p>		
mounting position	horizontal/vertical		
net weight	0.32 kg		
Environmental conditions			
ambient temperature / during operation			
<ul style="list-style-type: none"> • minimum • maximum 	<p>-25 °C</p> <p>55 °C</p>		
ambient temperature / during storage			
<ul style="list-style-type: none"> • minimum • maximum 	<p>-50 °C</p> <p>80 °C</p>		
General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping

[Miscellaneous](#)



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



other

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?mfb=3NP1131-1CA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1131-1CA20>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3NP1131-1CA20

CAX-Online-Generator

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

Tender specifications

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





