



SENTRON, fuse switch disconnecter 3NP1, 4-pole, NH000, 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	4
type of device	For assembly and installation on mounting plate
size of disconnecting link	000
size of fuse link	NH000
let-through current / with closed switch / maximum permissible	15 kA
mechanical service life (switching cycles) / typical	2 000
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
Dissipation	
power loss [W]	
• with conventional rated thermal current / without fuse / per pole	5 W
• with conventional rated thermal current / without fuse / per device	20 W
• for rated value of the current / at AC / in hot operating state / per pole	14 W
• of the fuse / per fuse / maximum	9 W
Current	
operational current	
• at 35 °C / rated value	160 A
• at 40 °C / rated value	150 A
• at 45 °C / rated value	140 A
• at 50 °C / rated value	130 A
• at 55 °C / rated value	120 A
• at AC / rated value	160 A
• at AC-23 B / at 690 V / rated value	25 A
• at AC-23 B / at 500 V / rated value	40 A
• at AC-23 B / at 400 V / rated value	160 A
• at AC-23 B / at 240 V / rated value	160 A
• at AC-22 B / at 690 V / rated value	50 A
• at AC-22 B / at 500 V / rated value	125 A
• at AC-22 B / at 400 V / rated value	160 A
• at AC-22 B / at 240 V / rated value	160 A
• at AC-21 B / at 690 V / rated value	160 A
• at AC-21 B / at 500 V / rated value	160 A
• at AC-21 B / at 400 V / rated value	160 A
• at AC-21 B / at 240 V / rated value	160 A
• at DC-23 B / at 440 V / rated value	25 A
• at DC-23 B / at 240 V / rated value	80 A
• at DC-23 B / at 120 V / rated value	80 A
• at DC-22 B / at 440 V / rated value	50 A
• at DC-22 B / at 240 V / rated value	100 A
• at DC-22 B / at 120 V / rated value	100 A
• at DC-21 B / at 440 V / rated value	100 A
• at DC-21 B / at 240 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	10 kA
Main circuit	
operational current	
• rated value	100 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
<ul style="list-style-type: none"> • product component / trip indicator • product function / phase failure monitoring • product component / undervoltage release • product component / undervoltage release with leading contact 	No No No No
product feature / sealable	Yes
product extension / auxiliary switch	Yes
product extension / optional	
<ul style="list-style-type: none"> • locking capability • motor drive • phase failure monitoring • fuse monitoring • voltage trigger • overvoltage protection monitoring 	Yes No Yes Yes No Yes
Product function	
product function	
<ul style="list-style-type: none"> • fuse monitoring • overvoltage protection monitoring 	No No
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 • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 240 V / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value 	80 kA 80 kA 80 kA 50 kA 120 kA 120 kA 100 kA
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 	1.5 mm ² 50 mm ² 1.5 mm ² 35 mm ² 1.5 mm ² 50 mm ²
tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> • minimum • maximum 	3.5 N·m 4 N·m
type of connectable conductor cross-sections / of the laminated conductors / maximum	8 x 8 mm
type of connection technology	Box terminal
type of electrical connection / for main current circuit	box terminal
Mechanical Design	
height	141.7 mm
width	127.7 mm
depth	74.1 mm
fastening method	mounting plate
fastening method	
<ul style="list-style-type: none"> • floor mounting • 4-hole front mounting • front mounting with central attachment 	No No No

• rail mounting	No			
mounting position	horizontal/vertical			
net weight	0.71 kg			
Environmental conditions				
ambient temperature / during operation				
• minimum	-25 °C			
• maximum	55 °C			
ambient temperature / during storage				
• minimum	-50 °C			
• maximum	80 °C			
General Product Approval	Declaration of Conformity	Test Certificates	Marine / Shipping	other

[Miscellaneous](#)



[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=3NP1124-1CA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1124-1CA20>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1124-1CA20

CAX-Online-Generator

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

Tender specifications

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

