



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH00, 160 A, for assembly and installation on mounting plate, Box terminal, Cover level 45 mm

Model	
product designation	3NP1 fuse switch disconnector
design of the safety monitoring	Without
design of the load switch strip form	No
type of the driving mechanism	motor drive
General technical data	
number of poles	3
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	23 kA
mechanical service life (operating cycles) typical	2 000
I <sub>2</sub> t value with closed switch maximum permissible	223 kA <sub>2</sub> .s
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
• open	IP20
Dissipation	
power loss [W]	
• with conventional rated thermal current without fuse per pole	5 W
• with conventional rated thermal current without fuse	15 W

per device	
• of the fuse per fuse maximum operational current	12 W
• 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-23 B at 690 V rated value	35 A
• at AC-23 B at 500 V rated value	63 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	125 A
• at AC-22 B at 500 V rated value	160 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	63 A
• at DC-23 B at 240 V rated value	100 A
• at DC-23 B at 120 V rated value	100 A
• at DC-22 B at 440 V rated value	125 A
• at DC-22 B at 240 V rated value	160 A
• at DC-22 B at 120 V rated value	160 A
• at DC-21 B at 440 V rated value	160 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	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 disconnector	Yes
• EMERGENCY OFF switch	No
• safety switch	Yes
• maintenance/repair switch	Yes

#### Product details

product component	
• undervoltage release	No
• undervoltage release with leading contact	No
product feature sealable	Yes
product extension auxiliary switch	Yes
product extension optional	
• locking capability	Yes
• phase failure monitoring	Yes
• fuse monitoring	Yes
• voltage trigger	No
• overvoltage protection monitoring	Yes

#### Product function

product function overvoltage protection monitoring	No
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#### Connections

arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	
• solid or stranded minimum	6 mm <sup>2</sup>
• solid or stranded maximum	70 mm <sup>2</sup>
• finely stranded with core end processing minimum	6 mm <sup>2</sup>
• finely stranded with core end processing maximum	50 mm <sup>2</sup>
• stranded minimum	6 mm <sup>2</sup>
• stranded maximum	70 mm <sup>2</sup>
tightening torque with screw-type terminals	
• minimum	10 N·m
• maximum	10 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	9 x 12 mm
type of connection technology	Box terminal

## Mechanical Design

height	202 mm
width	105.8 mm
depth	86.5 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
• rail mounting	No
mounting position	horizontal/vertical
net weight	0.73 kg

## Environmental conditions

ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-50 °C
• maximum	80 °C

## Certificates

reference code according to IEC 81346-2	Q
<b>General Product Approval</b>	



[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



other	Environment
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[Miscellaneous](#)

[Confirmation](#)

[Environmental Confirmations](#)

## Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these

products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**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=3NP1133-1CA20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1CA20>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1133-1CA20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1CA20)

**CAx-Online-Generator**

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

**Tender specifications**

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





