

SENTRON, fuse switch disconnectors 3NP1, 3-pole, NH00, 160 A, for 60mm 8US busbar system, Flachanschluss, cover level 32/70 mm



Model	
Product brand name	SENTRON
Product designation	3NP1 fuse switch disconnecter
Design of the product	cover level 32/70 mm
Busbar design	busbar thickness 5 or 10 mm
Design of the safety monitoring	Without
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 60 mm 8US busbar system
Size of disconnecting link	00 and 000
Size of fuse link	NH000, NH00
Continuous current / at 35 °C / rated value	160 A
Let-through current / with closed switch / maximum permissible	23 kA
cut-off value $I^{**2t,max.}$ / 500 V	158 000 A ² ·s
Power factor	

• at AC-22 B	0.65
• at AC-23 B	0.45
• with capacitive load	-0.25
circuit-breaker / Design	3NP11
Mechanical service life (switching cycles) / typical	2 000
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	
• 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]	
• for rated value of the current / at AC / in hot operating state / per pole	4 W
• maximum	12 W

Electricity	
Continuous current	
• 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
Let-through current / with high-speed activation / maximum permissible	15 kA
Let-through current / I_c / maximum permissible	
• 400 V	23 000 A
• 500V	23 000 A
cut-off value I²t_{max} / 400 V	158 000 A ² ·s

Main circuit	
Operating voltage	
• at AC / rated value / maximum	690 V
• at DC / rated value	440 V
• at DC / rated value / maximum	440 V

Operating current / with capacitive load	
• at 400 V / maximum	72 A
• at 500 V / maximum	55 A

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
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Product component	
• Trip indicator	No
• Phase failure monitoring	No
• undervoltage release	No
• undervoltage release with leading contact	No

Product feature / sealable	Yes
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Product extension	
• Auxiliary switch	Yes
• 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	
• fuse monitoring	No
• Overvoltage protection monitoring	No

Short circuit

Conditional short-circuit current (I_q)	
• rated value	80 kA
• at AC / at 500 V / with high-speed activation / rated value	80 kA
• at AC / at 690 V / with high-speed activation / rated value	80 kA
• with closed switch / at AC / at 500 V / rated value	120 kA

• with closed switch / at AC / at 690 V / rated value	120 kA
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Connections

Arrangement of electrical connectors / for main current circuit	other
Connectable conductor cross-section / for main contacts	
• single or multi-stranded / minimum	2.5 mm ²
• single or multi-stranded / maximum	95 mm ²
• stranded / minimum	2.5 mm ²
• stranded / maximum	95 mm ²
Tightening torque / with screw-type terminals	
• minimum	10 N·m
• maximum	12 N·m
Type of electrical connection / for main current circuit	busbar connection

Mechanical Design





Height	210.4 mm
Width	105.8 mm
Depth	137.5 mm
Mounting position	horizontal/vertical
Mounting type	busbar
Mounting type	
• floor mounting	No
• front mounting	No
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	Yes
Busbar center-to-center spacing	60 mm
Net weight	0.98 kg

Environmental conditions

Degree of pollution	3
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	55 °C
• during storage / minimum	-50 °C
• during storage / maximum	80 °C

Certificates

Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval			Declaration of Conformity	Test Certificates	
 CCC	 UL	 VDE	 EG-Konf.	Type Test Certificates/Test Report	Special Test Certificate

Shipping Approval



LRS

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=3NP1133-1BC10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1BC10>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1BC10

CAX-Online-Generator

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

Tender specifications

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

