

SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH00, 160 A, for Busbar system 8US 40 mm, flat terminal, Fuse monitoring: electronic EFM20, 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	electronic EFM 20
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 40 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 <sup>2</sup> ·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

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 <sub>c</sub> / maximum permissible	
• 400 V	23 000 A
• 500V	23 000 A
cut-off value I <sup>2</sup> t <sub>max</sub> / 400 V	158 000 A <sup>2</sup> ·s

Main circuit	
Operating voltage	
• at AC / rated value / minimum	230 V
• at AC / rated value / maximum	690 V
Operating current / with capacitive load	
• at 400 V / maximum	72 A
• at 500 V / maximum	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
<b>Suitability</b>	
<b>Suitability for use</b>	
• 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
Product component	
• Trip indicator	Yes
• Phase failure monitoring	Yes
• undervoltage release	No
• undervoltage release with leading contact	No
Product feature / sealable	Yes
Product extension	
• Auxiliary switch	Yes
• optional	
— locking capability	Yes
— motor drive	No
— Voltage trigger	No
<b>Product function</b>	
Product function	
• fuse monitoring	Yes
• Overvoltage protection monitoring	Yes
<b>Short circuit</b>	
Conditional short-circuit current (I <sub>q</sub> )	
• 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
<b>Connections</b>	
Arrangement of electrical connectors / for main current circuit	other


Connectable conductor cross-section / for main contacts	
• single or multi-stranded / minimum	2.5 mm <sup>2</sup>
• single or multi-stranded / maximum	95 mm <sup>2</sup>
• stranded / minimum	2.5 mm <sup>2</sup>
• stranded / maximum	95 mm <sup>2</sup>
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	177.2 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	40 mm
Net weight	1.12 kg

Environmental conditions	
Degree of pollution	2
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	55 °C
• during storage / minimum	-50 °C
• during storage / maximum	80 °C

Certificates	
Reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval			Declaration of Conformity	Test Certificates
 CCC	 UR	 VDE	<a href="#">Miscellaneous</a>	<a href="#">Type Test Certificates/Test Report</a>
			 EG-Konf.	

Shipping Approval
 LRS

Further information
<b>Information- and Downloadcenter (Catalogs, Brochures,...)</b> <a href="http://www.siemens.com/lowvoltage/catalogs">http://www.siemens.com/lowvoltage/catalogs</a>
<b>Industry Mall (Online ordering system)</b> <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1133-1BB13">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1133-1BB13</a>
<b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b> <a href="https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1BB13">https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1BB13</a>
<b>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)</b> <a href="http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1BB13">http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1BB13</a>
<b>CAX-Online-Generator</b> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
<b>Tender specifications</b> <a href="http://www.siemens.com/specifications">http://www.siemens.com/specifications</a>

