## **SIEMENS**

Data sheet 3NP1163-1BC12

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH3, 630 A, for Busbar system 8US 60 mm, flat terminal, Fuse monitoring: electronic EFM10, Cover level 32/70 mm



Model	
Product brand name	SENTRON
Product designation	3NP1 fuse switch disconnector
Design of the product	cover level 32/70 mm
Busbar design	busbar thickness 5 or 10 mm
Design of the safety monitoring	electronic EFM 10
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	3 and 2
Size of fuse link	NH2, NH3
Continuous current / at 35 °C / rated value	630 A
Let-through current / with closed switch / maximum permissible	60 kA
cut-off value I**2t,max. / 500 V	5 400 000 A <sup>2</sup> ·s
Power factor	

• at AC-22 B	0.65
• at AC-23 B	0.35
with capacitive load	-0.25
circuit-breaker / Design	3NP11
Mechanical service life (switching cycles) / typical	1 000
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	
<ul> <li>with closed switch / with cover or cable lug cover</li> </ul>	IP40
with closed switch / without cover or cable lug	IP30
cover	
• on the front	IP40
• open	IP20
Electricity	
Continuous current	
• rated value	630 A
• at 40 °C / rated value	610 A
• at 45 °C / rated value	575 A
• at 50 °C / rated value	555 A
• at 55 °C / rated value	530 A
Let-through current / with high-speed activation /	50 kA
maximum permissible	
Let-through current / Ic / maximum permissible	
• 400 V	60 000 A
• 500V	60 000 A
cut-off value I**2t,max. / 400 V	5 400 000 A²·s
Main circuit	
Operating voltage	
• at AC / rated value / minimum	230 V
<ul><li>at AC / rated value / maximum</li></ul>	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
Suitability	
Suitability for use	
Main switch	No
switch disconnector	Yes
EMERGENCY OFF switch	No
safety switch	Yes
• maintenance/repair switch	Yes
Product details	
Product feature / interlock	Yes
Product component	
Trip indicator	Yes
<ul> <li>Phase failure monitoring</li> </ul>	No
undervoltage release	No
<ul> <li>undervoltage release with leading contact</li> </ul>	No
Product feature / sealable	Yes
Product extension	
Auxiliary switch	Yes
• optional	
<ul><li>— locking capability</li></ul>	Yes
— motor drive	No
<ul> <li>— Phase failure monitoring</li> </ul>	Yes
— Voltage trigger	No
<ul> <li>Overvoltage protection monitoring</li> </ul>	Yes
Product function	
Product function	
• fuse monitoring	Yes
<ul> <li>Overvoltage protection monitoring</li> </ul>	No
Short circuit	
Conditional short-circuit current (Iq)	
• rated value	50 kA
<ul> <li>at AC / at 500 V / with high-speed activation / rated value</li> </ul>	50 kA
<ul> <li>at AC / at 690 V / with high-speed activation / rated value</li> </ul>	50 kA
<ul> <li>with closed switch / at AC / at 500 V / rated value</li> </ul>	100 kA
<ul> <li>with closed switch / at AC / at 690 V / rated value</li> </ul>	100 kA
Connections	

Arrangement of electrical connectors / for main current circuit	other
Connectable conductor cross-section / for main contacts	
• single or multi-stranded / minimum	120 mm²
<ul> <li>single or multi-stranded / maximum</li> </ul>	300 mm²
stranded / minimum	120 mm²
• stranded / maximum	300 mm²
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	306 mm
Width	249.4 mm
Depth	195.7 mm
Mounting position	horizontal/vertical
Mounting type	busbar
Mounting type	
• floor mounting	No
• front mounting	No
<ul> <li>front mounting with 4-hole attachment</li> </ul>	No
<ul> <li>front mounting with central attachment</li> </ul>	No
rail mounting	Yes
Busbar center-to-center spacing	60 mm
Net weight	6.98 kg
Environmental conditions	
Degree of pollution	2
Ambient temperature	
<ul><li>during operation / minimum</li></ul>	-25 °C
<ul><li>during operation / maximum</li></ul>	55 °C
<ul><li>during storage / minimum</li></ul>	-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 Certific**ates







Miscellaneous



Type Test Certificates/Test Report

## **Shipping Approval**



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=3NP1163-1BC12

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

https://support.industry.siemens.com/cs/ww/en/ps/3NP1163-1BC12

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1163-1BC12">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1163-1BC12</a>

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications





