## **SIEMENS**

## Data sheet

## 3NP1143-1JC21

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH1, 250 A, for Rittal busbar system 60 mm, Box terminal, Fuse monitoring: electromechanical, Cover level 32/70 mm



Product brand nameSENTRONProduct designation3NP1 fuse switch disconnectorDesign of the productcover level 32/70 mmBusbar designbusbar thickness 5 or 10 mmDesign of the safety monitoringelectro mechanicalDesign of the operating mechanismCover handleDesign of the load switch / Strip formNoType of the driving mechanism / motor driveNoOver randleOver randleDesign of deviceFor Rittal 60 mm busbar systemType of deviceFor Rittal 60 mm busbar systemSize of disconnecting link1 and 0Size of fuse linkNH0, NH1Continuous current / at 35 °C / rated value250 ALet-through current / with closed switch / maximum permissible32 kAcut-off value I**2t,max. / 500 V780 000 A²-sPower factorFor Rittal 60 mm busbar system	Model				
Design of the productcover level 32/70 mmBusbar designbusbar thickness 5 or 10 mmDesign of the safety monitoringelectro mechanicalDesign of the operating mechanismCover handleDesign of the load switch / Strip formNoType of the driving mechanism / motor driveNoGeneral technical dataNumber of poles3Type of deviceFor Rittal 60 mm busbar systemSize of disconnecting link1 and 0Size of fuse linkNH0, NH1Continuous current / at 35 °C / rated value250 ALet-through current / with closed switch / maximum permissible32 kAcut-off value I**2t,max. / 500 V780 000 A²-s	Product brand name	SENTRON			
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Size of disconnecting link1 and 0Size of fuse linkNH0, NH1Continuous current / at 35 °C / rated value250 ALet-through current / with closed switch / maximum permissible32 kAcut-off value I**2t,max. / 500 V780 000 A²-s	Number of poles	3			
Size of fuse link       NH0, NH1         Continuous current / at 35 °C / rated value       250 A         Let-through current / with closed switch / maximum permissible       32 kA         cut-off value I**2t,max. / 500 V       780 000 A²-s	Type of device	For Rittal 60 mm busbar system			
Continuous current / at 35 °C / rated value     250 A       Let-through current / with closed switch / maximum permissible     32 kA       cut-off value I**2t,max. / 500 V     780 000 A²-s	Size of disconnecting link	1 and 0			
Let-through current / with closed switch / maximum     32 kA       permissible     780 000 A <sup>2</sup> ·s	Size of fuse link	NH0, NH1			
permissible cut-off value I**2t,max. / 500 V 780 000 A <sup>2</sup> ·s	Continuous current / at 35 °C / rated value	250 A			
cut-off value I**2t,max. / 500 V 780 000 A <sup>2</sup> ·s	Let-through current / with closed switch / maximum	32 kA			
	permissible				
Power factor	cut-off value I**2t,max. / 500 V	780 000 A <sup>2</sup> ·s			
	Power factor				

• at AC-22 B	0.65
• at AC-23 B	0.45
<ul> <li>with capacitive load</li> </ul>	-0.25
circuit-breaker / Design	3NP11
Mechanical service life (switching cycles) / typical	1 600
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	
	IP40
<ul> <li>with closed switch / with cover or cable lug cover</li> </ul>	IF 40
<ul> <li>with closed switch / without cover or cable lug</li> </ul>	IP30
cover	
• on the front	IP40
• open	IP20
Electricity	
Continuous current	
• rated value	250 A
• at 40 °C / rated value	245 A
● at 45 °C / rated value	240 A
● at 50 °C / rated value	233 A
● at 55 °C / rated value	233 A
Let-through current / with high-speed activation / maximum permissible	25 kA
Let-through current / Ic / maximum permissible	
• 400 V	32 000 A
• 500V	32 000 A
cut-off value I**2t,max. / 400 V	780 000 A²·s
Main circuit	
Operating voltage	
• at AC / rated value / minimum	24 V
• at AC / rated value / maximum	690 V
• at DC / rated value	250 V
<ul> <li>at DC / rated value / minimum</li> </ul>	24 V
<ul> <li>at DC / rated value / maximum</li> </ul>	250 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	NL.
Main switch	No
switch disconnector	Yes
<ul> <li>EMERGENCY OFF switch</li> </ul>	No
<ul> <li>safety switch</li> </ul>	Yes
<ul> <li>maintenance/repair switch</li> </ul>	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	
— locking capability	Yes
— motor drive	No
— Phase failure monitoring	Yes
— Voltage trigger	No
— Overvoltage protection monitoring	Yes
Product function	
Product function	
• fuse monitoring	Yes
Overvoltage protection monitoring	No
Chort oirquit	
Short circuit Conditional short-circuit current (Ig)	
rated value	80 kA
<ul> <li>at AC / at 500 V / with high-speed activation /</li> </ul>	80 kA
• at AC / at 500 V / with high-speed activation / rated value	
<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>	120 kA

 $\bullet$  with closed switch / at AC / at 690 V / rated value

Connections

0011100110113	
Arrangement of electrical connectors / for main current circuit	other
Connectable conductor cross-section / for main	
contacts	
<ul> <li>single or multi-stranded / minimum</li> </ul>	70 mm²
<ul> <li>single or multi-stranded / maximum</li> </ul>	185 mm²
• stranded / minimum	70 mm²
<ul> <li>stranded / maximum</li> </ul>	185 mm²
Tightening torque / with screw-type terminals	
• minimum	10 N·m
• maximum	10 N·m
Type of connectable conductor cross-sections / of the	10 x 20 mm
laminated conductors / maximum	
Type of electrical connection / for main current circuit	box terminal
Mechanical Design	
Height	306 mm
Width	183.7 mm
Depth	215.8 mm
Mounting position	horizontal/vertical
Mounting type	busbar
Mounting type	
<ul> <li>floor mounting</li> </ul>	No
<ul> <li>front mounting</li> </ul>	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	3.29 kg
Environmental conditions	
Degree of pollution	3
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
<ul> <li>during storage / maximum</li> </ul>	80 °C
Certificates	
Reference code	
• acc. to DIN EN 61346-2	Q

<ul> <li>acc. to DII</li> </ul>	N EN 81346-2	Q			
General Pro	duct Approval		Declaration of	Test Certific-	Shipping Ap-
			Conformity	ates	proval
	VDE	<u>Miscellaneous</u>	EG-Konf.	Type Test Certific- ates/Test Report	Lloyd's Register 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=3NP1143-1JC21

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1JC21

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1143-1JC21

**CAx-Online-Generator** http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications









