# **SIEMENS**

## Data sheet

## 3NP1143-1DA10

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH1, 250 A, for assembly and installation on mounting plate, flat terminal, cover level 70 mm



Model	
Product brand name	SENTRON
Product designation	3NP1 fuse switch disconnector
Design of the product	cover level 70 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 assembly and installation on mounting plate
Size of disconnecting link	1 and 0
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
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	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		
<ul> <li>with closed switch / with cover or cable lug cover</li> </ul>	IP40	
<ul> <li>with closed switch / without cover or cable lug cover</li> </ul>	IP30	
• 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 /	25 kA	
maximum permissible		
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 A <sup>2.</sup> s	
Main circuit Operating voltage		
at AC / rated value / maximum	690 V	
	440 V	
at DC / rated value     at DC / rated value	440 V	
at DC / rated value / maximum		
Operating current / with capacitive load	72 A	
• at 400 V / maximum	55 A	
• at 500 V / maximum		
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
<ul> <li>switch disconnector</li> </ul>	Yes
EMERGENCY OFF switch	No
<ul> <li>safety switch</li> </ul>	Yes
• maintenance/repair switch	Yes
Product details	
Product feature / interlock	Yes
Product component	
Trip indicator	No
<ul> <li>Phase failure monitoring</li> </ul>	No
<ul> <li>undervoltage release</li> </ul>	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
— fuse monitoring	Yes
— Voltage trigger	No
<ul> <li>Overvoltage protection monitoring</li> </ul>	Yes
Product function	
Product function	
<ul> <li>fuse monitoring</li> </ul>	No
<ul> <li>Overvoltage protection monitoring</li> </ul>	No
Short circuit	
Conditional short-circuit current (Iq)	
rated value	80 kA
<ul> <li>at AC / at 500 V / with high-speed activation / rated value</li> </ul>	80 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>	120 kA
<ul> <li>with closed switch / at AC / at 690 V / rated value</li> </ul>	100 kA

Connections	
Arrangement of electrical connectors / for main	other
current circuit	
Connectable conductor cross-section / for main	
contacts	
<ul> <li>single or multi-stranded / minimum</li> </ul>	16 mm <sup>2</sup>
<ul> <li>single or multi-stranded / maximum</li> </ul>	150 mm²
<ul> <li>stranded / minimum</li> </ul>	16 mm <sup>2</sup>
<ul> <li>stranded / maximum</li> </ul>	150 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	306 mm
Width	183.7 mm
Depth	115 mm
Mounting position	horizontal/vertical
Mounting type	mounting plate
Mounting type	
<ul> <li>floor mounting</li> </ul>	Yes
<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	No
Net weight	2.19 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
• acc. to DIN EN 81346-2	Q

General Proc	duct Approval		Declaration of Conformity	Test Certific- ates
	<b>GAN</b> ®	<u>Miscellaneous</u>	CE EG-Konf.	<u>Special Test Certi-</u> <u>ficate</u>

Test Certific- ates	Shipping Approval
Type Test Certific- ates/Test Report	LRS

115

• O 

8

0

:

70

#### 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=3NP1143-1DA10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1DA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1143-1DA10

#### **CAx-Online-Generator**

http://www.siemens.com/cax

### **Tender specifications**

http://www.siemens.com/specifications







