## **SIEMENS**

Data sheet 3NP1133-1JC12



FUSE-SWITCH-DISCONNECTOR 3-POLE, NH00, 160A 60MM BUSBAR SYSTEM COVERS FOR RITTAL FLAT CONNECTOR FUSE MONITORING ELECTRONIC, EFM 10

Model	
product brand name	SENTRON
Product designation	Fuse switch disconnector
Design of the product	3-pole
Busbar design	busbar thickness 5 or 10 mm
Design of the safety monitoring	electronic EFM 10
Design of the operating mechanism	handle unit
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		snap on mount on busbar system eib Rittal 60 mm	
Size of disconnecting link		00 and 000	
Size of fuse link		NH000, NH00	
Continuous current / at 35 °C / Rated value	Α	160	
Let-through current / with closed switch / maximum permissible	kA	23	
cut-off value I**2t,max. / 500 V	A²·s	158 000	
I2t value / with closed switch / maximum permissible	kA2.s	158	
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	

Insulation voltage / Rated value	Fuse system		LV HRC fuse
Power factor / at AC-21 B  Surge voltage resistance / Rated value  Protection class  Protection class IP  • with closed switch / with cover or cable lug cover • with closed switch / without cover or cable lug cover • on the front • open  Dissipation  Active power loss • maximum  W  12  Electricity  Continuous current • Rated value • at 40 °C / Rated value • at 45 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 55 °C / Rated value	Voltage		
Protection class  Protection class IP  • with closed switch / with cover or cable lug cover • with closed switch / without cover or cable lug cover • on the front • open  Dissipation  Active power loss • maximum  Pated value • at 40 °C / Rated value • at 45 °C / Rated value • at 55 °C / Rated value		V	690
Protection class IP  • with closed switch / with cover or cable lug cover • with closed switch / without cover or cable lug cover • on the front • open  Dissipation  Active power loss • maximum  W 12  Electricity  Continuous current • Rated value • at 40 °C / Rated value • at 45 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 55 °C / Rated value	Power factor / at AC-21 B		0.95
Protection class IP  • with closed switch / with cover or cable lug cover  • with closed switch / without cover or cable lug cover  • on the front • open  Dissipation  Active power loss • maximum  W 12  Electricity  Continuous current • Rated value • at 40 °C / Rated value • at 45 °C / Rated value • at 50 °C / Rated value	Surge voltage resistance / Rated value	kV	8
<ul> <li>with closed switch / with cover or cable lug cover</li> <li>with closed switch / without cover or cable lug cover</li> <li>on the front</li> <li>open</li> <li>IP40</li> <li>open</li> <li>IP20</li> </ul> Dissipation Active power loss <ul> <li>maximum</li> <li>Rated value</li> <li>at 40 °C / Rated value</li> <li>at 45 °C / Rated value</li> <li>at 45 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>at 50 °C / Rated value</li> </ul>			
cover  • with closed switch / without cover or cable lug cover  • on the front • open  Dissipation  Active power loss • maximum  W 12  Electricity  Continuous current • Rated value • at 40 °C / Rated value • at 45 °C / Rated value • at 50 °C / Rated value • at 55 °C / Rated value	Protection class IP		
cover  • on the front • open  Dissipation  Active power loss • maximum  W 12  Electricity  Continuous current • Rated value • at 40 °C / Rated value • at 45 °C / Rated value • at 55 °C / Rated value • at 55 °C / Rated value • at 55 °C / Rated value  • at 55 °C / Rated value	-		IP40
on the front     open     IP40     IP20  Dissipation  Active power loss     maximum     W     12  Electricity  Continuous current     Rated value     A    160     at 40 °C / Rated value     A    155     at 45 °C / Rated value     A    145     at 50 °C / Rated value     A    140     at 55 °C / Rated value     A    133  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible			IP30
Open      IP20  Dissipation  Active power loss     • maximum      W  12  Electricity  Continuous current      • Rated value     • at 40 °C / Rated value     • at 45 °C / Rated value     • at 55 °C / Rated value  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible			ID40
Dissipation  Active power loss  • maximum  W 12  Electricity  Continuous current  • Rated value  • at 40 °C / Rated value  • at 45 °C / Rated value  • at 50 °C / Rated value  • at 55 °C / Rated value  A 133  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible			
Active power loss  • maximum    Maximum   Maximum   Maximum	• open		IP20
<ul> <li>● maximum</li> <li>■ Electricity</li> <li>Continuous current</li> <li>● Rated value</li> <li>● at 40 °C / Rated value</li> <li>● at 45 °C / Rated value</li> <li>● at 50 °C / Rated value</li> <li>● at 50 °C / Rated value</li> <li>A 145</li> <li>● at 55 °C / Rated value</li> <li>A 140</li> <li>● at 55 °C / Rated value</li> <li>A 133</li> <li>Let-through current / with high-speed activation / maximum permissible</li> <li>Let-through current / Ic / maximum permissible</li> </ul>	Dissipation		
Continuous current  • Rated value  • at 40 °C / Rated value  • at 45 °C / Rated value  • at 50 °C / Rated value  • at 55 °C / Rated value  A 140  • at 55 °C / Rated value  A 133  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible	Active power loss		
Continuous current  Rated value  A  160  at 40 °C / Rated value  A  155  at 45 °C / Rated value  A  145  at 50 °C / Rated value  A  140  at 55 °C / Rated value  A  133  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible	• maximum	W	12
<ul> <li>Rated value</li> <li>at 40 °C / Rated value</li> <li>at 45 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>A 140</li> <li>at 55 °C / Rated value</li> <li>A 133</li> <li>Let-through current / with high-speed activation / maximum permissible</li> <li>Let-through current / Ic / maximum permissible</li> </ul>	Electricity		
<ul> <li>at 40 °C / Rated value</li> <li>at 45 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>A 133</li> <li>Let-through current / with high-speed activation / maximum permissible</li> <li>Let-through current / Ic / maximum permissible</li> </ul>	Continuous current		
<ul> <li>at 45 °C / Rated value</li> <li>at 50 °C / Rated value</li> <li>at 55 °C / Rated value</li> <li>A 140</li> <li>at 55 °C / Rated value</li> <li>A 133</li> <li>Let-through current / with high-speed activation / maximum permissible</li> <li>Let-through current / Ic / maximum permissible</li> </ul>	Rated value	Α	160
at 50 °C / Rated value  at 50 °C / Rated value  at 55 °C / Rated value  A 133  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible	• at 40 °C / Rated value	Α	155
at 55 °C / Rated value     A 133  Let-through current / with high-speed activation / maximum permissible  Let-through current / Ic / maximum permissible	• at 45 °C / Rated value	Α	145
Let-through current / with high-speed activation / kA 15 maximum permissible  Let-through current / lc / maximum permissible	• at 50 °C / Rated value	Α	140
maximum permissible  Let-through current / Ic / maximum permissible	• at 55 °C / Rated value	Α	133
		kA	15
• 400 V A 23 000	Let-through current / Ic / maximum permissible		
	• 400 V	Α	23 000
• 500V A 23 000	• 500V	Α	23 000
cut-off value I**2t,max. / 400 V A <sup>2</sup> ·s 158 000	cut-off value I**2t,max. / 400 V	A²·s	158 000
Main circuit	Main circuit		
Operating voltage	Operating voltage		
• with AC / Rated value / minimum V 230	<ul><li>with AC / Rated value / minimum</li></ul>	V	230
• with AC / Rated value / maximum V 690	<ul><li>with AC / Rated value / maximum</li></ul>	V	690
Operating current	Operating current		
• at AC-21 B / at 400 V / Rated value A 160	• at AC-21 B / at 400 V / Rated value	Α	160
• at AC-21 B / at 500 V / Rated value A 160	• at AC-21 B / at 500 V / Rated value	Α	160
• at AC-21 B / at 690 V / Rated value A 160	• at AC-21 B / at 690 V / Rated value	Α	160
• at AC-22 B / at 400 V / Rated value A 160	• at AC-22 B / at 400 V / Rated value	Α	160
• at AC-22 B / at 500 V / Rated value A 160	• at AC-22 B / at 500 V / Rated value	А	160
• at AC-22 B / at 690 V / Rated value A 125	• at AC-22 B / at 690 V / Rated value	Α	125

• at AC-23 B / at 400 V / Rated value	Α	160
• at AC-23 B / at 500 V / Rated value	Α	63
• at AC-23 B / at 690 V / Rated value	Α	35
<ul> <li>with capacitive load / at 400 V / maximum</li> </ul>	Α	72
• with capacitive load / at 500 V / maximum	Α	55
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
<ul> <li>EMERGENCY OFF switch</li> </ul>		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 property / sealable		Yes
Product expansion		
<ul><li>Auxiliary switch</li></ul>		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
Overvoltage protection monitoring		No
Short circuit		
Conditional short-circuit current (Iq)		
Rated value	kA	80

<ul> <li>with AC / at 500 V / with high-speed activation / Rated value</li> </ul>	kA	80
<ul> <li>with AC / at 690 V / with high-speed activation / Rated value</li> </ul>	kA	80
<ul> <li>with closed switch / with AC / at 500 V / Rated value</li> </ul>	kA	120
• with closed switch / with AC / at 690 V / Rated value	kA	120
Connections		
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>	mm²	2.5
• single or multi-stranded / maximum	mm²	95
• stranded / minimum	mm²	2.5
• stranded / maximum	mm²	95
Tightening torque / with screw-type terminals		
• minimum	N·m	10
• maximum	N·m	12
Type of electrical connection / for main current circuit		flat connector
Mechanical Design		
Mechanical Design  Height	mm	215.1
	mm mm	215.1 105.8
Height Width Depth		105.8 174.4
Height Width Depth mounting position	mm	105.8 174.4 horizontally or vertically
Height Width Depth mounting position Mounting type	mm	105.8 174.4
Height Width Depth mounting position Mounting type Mounting type	mm	105.8 174.4 horizontally or vertically busbar mounting
Height Width Depth mounting position Mounting type Mounting type  • floor mounting	mm	105.8 174.4 horizontally or vertically busbar mounting No
Height Width Depth mounting position Mounting type Mounting type	mm	105.8 174.4 horizontally or vertically busbar mounting  No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting	mm	105.8 174.4 horizontally or vertically busbar mounting No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting	mm	105.8 174.4 horizontally or vertically busbar mounting  No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting	mm	105.8 174.4 horizontally or vertically busbar mounting  No No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment	mm	105.8 174.4 horizontally or vertically busbar mounting  No No No No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions	mm	105.8 174.4 horizontally or vertically busbar mounting  No No No No No Yes
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing	mm	105.8 174.4 horizontally or vertically busbar mounting  No No No No No O No O No O No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions	mm mm	105.8 174.4 horizontally or vertically busbar mounting  No No No No No Yes
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions Ambient temperature	mm mm	105.8 174.4 horizontally or vertically busbar mounting  No No No No No O No O No O No
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions Ambient temperature • during operation / minimum	mm mm °C °C °C	105.8 174.4 horizontally or vertically busbar mounting  No No No No Yes 60
Height Width Depth mounting position Mounting type Mounting type  • floor mounting • front mounting • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting Busbar center-to-center spacing  Environmental conditions Ambient temperature • during operation / minimum • during operation / maximum	mm mm	105.8 174.4 horizontally or vertically busbar mounting  No No No No Yes 60  -25 55

## **Equipment marking**

• acc. to DIN EN 61346-2

• acc. to DIN EN 81346-2

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## **General Product Approval**



СВ











Declaration	of
Conformity	

Test
Certificates

Type Test



**Shipping Approval** 





CE EG-Konf. Type Test
Certificates/Test
Report

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3NP11331JC12

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

http://support.automation.siemens.com/WW/view/en/3NP11331JC12/all

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

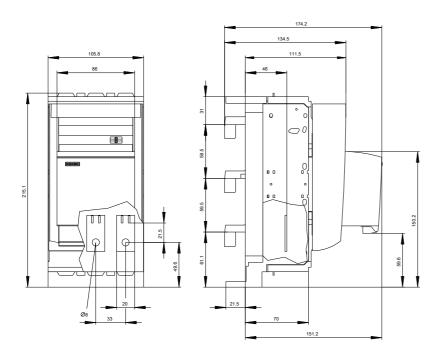
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP11331JC12

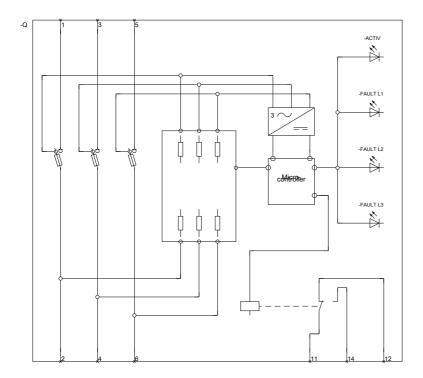
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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