## **SIEMENS**

Data sheet 3NP1133-1JB23



FUSE-SWITCH-DISCONNECTOR 3-POLE, NH00, 160A 40MM BUSBAR SYSTEM COVERS FOR RITTAL BOX TERMINAL FUSE MONITORING ELECTRONIC, EFM 20

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 20
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 Rittal 40 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	kA	23		
permissible				
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		
<ul> <li>with capacitive load</li> </ul>		-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	Α	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
<ul><li>switch disconnector</li></ul>		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>		Yes
undervoltage release		No
<ul> <li>undervoltage release with leading contact</li> </ul>		No
Product property / sealable		Yes
Product expansion		
Auxiliary switch		Yes
• optional		
<ul><li>— locking capability</li></ul>		Yes
— motor drive		No
— Voltage trigger		No
Product function		
Product function		
• fuse monitoring		Yes
Overvoltage protection monitoring		Yes
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
• with closed switch / with AC / at 500 V / Rated value	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	6
<ul> <li>single or multi-stranded / maximum</li> </ul>	mm²	70
<ul> <li>finely stranded / with core end processing / minimum</li> </ul>	mm²	6
<ul> <li>finely stranded / with core end processing / maximum</li> </ul>	mm²	50
stranded / minimum	mm²	6
stranded / maximum	mm²	70
Tightening torque / with screw-type terminals		
• minimum	N·m	10
• maximum	N·m	10
Type of connectable conductor cross-section / of the laminated conductors / maximum		9 x 8 mm
Type of electrical connection / for main current circuit		box terminals

Mechanical Design				
Height	mm	215.1		
Width	mm	105.8		
Depth	mm	174.2		
mounting position		horizontally or vertically		
Mounting type		busbar mounting		
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	mm	40		

Environmental conditions				
Ambient temperature				
<ul> <li>during operation / minimum</li> </ul>	°C	-25		
<ul> <li>during operation / maximum</li> </ul>	°C	55		

during storage / minimum
 C -50
 during storage / maximum
 C 80

## Certificates Equipment marking Q ● acc. to DIN EN 61346-2 Q ● acc. to DIN EN 81346-2 Q

## **General Product Approval**















Declaration of	Test	Shipping Approval			
Conformity	Certificates				
CE	Type Test Certificates/Test Report	JÅ DNV	GL®	Lloyd's Register	
EG-Konf.		DNV	GL	LRS	

## 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/3NP11331JB23

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

http://support.automation.siemens.com/WW/view/en/3NP11331JB23/all

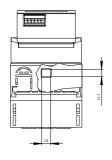
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP11331JB23

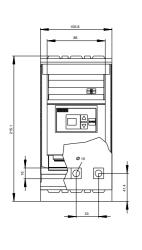
mtp://www.datomation.siemens.com/bildds/cdx\_ch.dspx:m

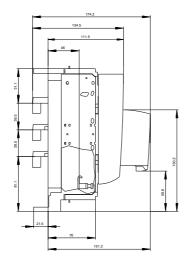
CAx-Online-Generator http://www.siemens.com/cax

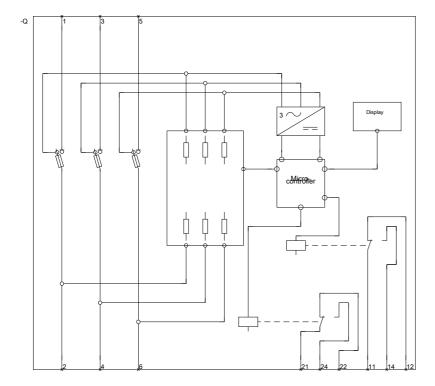
**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv









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