SIEMENS

Data sheet 3NP1133-1CA20



FUSE-SWITCH-DISCONNECTOR 3-POLE, NH00, 160A MOUNTING PLATE CONSTRUCTION COVER LEVEL 45 MM BOX TERMINAL

Model	
product brand name	SENTRON
Product designation	Fuse switch disconnector
Design of the product	3-pole
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		Construction and installation		
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	A ² ·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		
Fuse system		LV HRC fuse		

Voltage

Insulation voltage / Rated value	V	690 0.95	
Power factor / at AC-21 B			
Surge voltage resistance / Rated value	kV	8	
Protection class			
Protection class IP			
 with closed switch / with cover or cable lug 		IP40	
cover			
 with closed switch / without cover or cable lug 		IP30	
cover			
• on the front		IP40	
• open		IP20	
Dissipation			
Active power loss			
• maximum	W	12	
Electricity			
Continuous current			
Rated value	Α	160	
• at 40 °C / Rated value	Α	155	
• at 45 °C / Rated value	Α	145	
• at 50 °C / Rated value	Α	140	
• at 55 °C / Rated value	Α	133	
Let-through current / with high-speed activation / maximum permissible	kA	15	
Let-through current / Ic / maximum permissible			
• 400 V	Α	23 000	
• 500V	Α	23 000	
cut-off value I**2t,max. / 400 V	A ² ·s	158 000	
Main circuit			
Operating voltage			
with AC / Rated value / maximum	V	690	
• for DC / Rated value	V	440	
for DC / Rated value / maximum	V	440	
Operating current			
• at AC-21 B / at 400 V / Rated value	Α	160	
• at AC-21 B / at 500 V / Rated value	Α	160	
• at AC-21 B / at 690 V / Rated value	Α	160	
• at AC-22 B / at 400 V / Rated value	Α	160	
• at AC-22 B / at 500 V / Rated value	Α	160	
• at AC-22 B / at 690 V / Rated value	Α	125	
• at AC-23 B / at 400 V / Rated value	Α	160	
■ at AC-25 b / at 400 v / Rated value			

• at AC-23 B / at 690 V / Rated value	Α	35
• at DC-21 B / at 240 V / Rated value / maximum	Α	160
• at DC-21 B / at 440 V / Rated value / maximum	Α	160
• at DC-22 B / at 240 V / Rated value / maximum	Α	160
• at DC-22 B / at 440 V / Rated value / maximum	Α	125
• at DC-23 B / at 240 V / Rated value / maximum	Α	100
• at DC-23 B / at 440 V / Rated value / maximum	Α	63
• with capacitive load / at 400 V / maximum	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
 EMERGENCY OFF switch 		No
safety switch		Yes
 maintenance/repair switch 		Yes
Product details		
Product feature / interlock		Yes
Product feature / interlock Product component		
Product feature / interlock Product component • Trip indicator		No
Product feature / interlock Product component Trip indicator Phase failure monitoring		No No
Product feature / interlock Product component Trip indicator Phase failure monitoring undervoltage release		No No No
Product feature / interlock Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact		No No No
Product feature / interlock Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable		No No No
Product feature / interlock Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion		No No No Yes
Product feature / interlock Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch		No No No
Product feature / interlock Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional		No No No Yes
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional — locking capability		No No No No Yes Yes
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional locking capability motor drive		No No No No Yes Yes Yes No
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional locking capability motor drive Phase failure monitoring		No No No No Yes Yes Yes Yes
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional — locking capability — motor drive — Phase failure monitoring — fuse monitoring		No No No No Yes Yes Yes Yes Yes Yes
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional — locking capability — motor drive — Phase failure monitoring — fuse monitoring — Voltage trigger		No No No No Yes Yes Yes No Yes Yos No Yes Yos No
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional — locking capability — motor drive — Phase failure monitoring — fuse monitoring		No No No No Yes Yes Yes Yes Yes Yes
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional — locking capability — motor drive — Phase failure monitoring — fuse monitoring — Voltage trigger — Overvoltage protection monitoring		No No No No Yes Yes Yes No Yes You No Yes Yes No
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release with leading contact Product property / sealable Product expansion Auxiliary switch optional — locking capability — motor drive — Phase failure monitoring — fuse monitoring — Voltage trigger — Overvoltage protection monitoring		No No No No Yes Yes Yes No Yes You No Yes Yes No

Overvoltage protection monitoring	No		
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Short circuit				
Conditional short-circuit current (Iq)				
Rated value	kA	80		
 with AC / at 500 V / with high-speed activation / Rated value 	kA	80		
 with AC / at 690 V / with high-speed activation / Rated value 	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		other
current circuit		
Connectable conductor cross-section / for main		
contacts		
single or multi-stranded / minimum	mm²	6
single or multi-stranded / maximum	mm²	70
finely stranded / with core end processing /	mm²	6
minimum		
finely stranded / with core end processing /	mm²	50
maximum		
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		9 x 8 mm
laminated conductors / maximum		
Type of electrical connection / for main current circuit		box terminals

Mechanical Design			
Height	mm	202	
Width	mm	105.8	
Depth	mm	86.5	
mounting position		horizontally or vertically	
Mounting type		floor mounting	
Mounting type			
• floor mounting		Yes	
• front mounting		No	
 front mounting with 4-hole attachment 		No	
 front mounting with central attachment 		No	

● rail mounting		No
Net weight	kg	0.73

Environmental conditions			
Degree of pollution		3	
Ambient temperature			
during operation / minimum	°C	-25	
during operation / maximum	°C	55	
during storage / minimum	°C	-50	
during storage / maximum	°C	80	

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Equipment marking

• acc. to DIN EN 61346-2

• acc. to DIN EN 81346-2

Q Q

General Product Approval

Declaration of Conformity



CB











Test Certificates

Shipping Approval

Special Test Certificate

Type Test Certificates/Test Report





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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/3NP11331CA20

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

http://support.automation.siemens.com/WW/view/en/3NP11331CA20/all

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

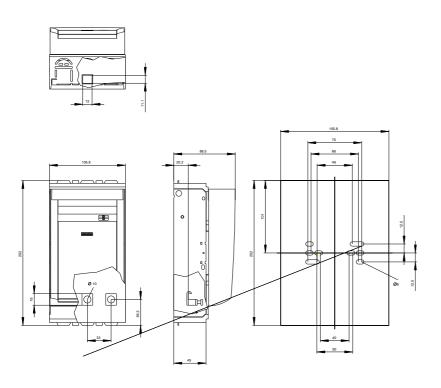
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP11331CA20

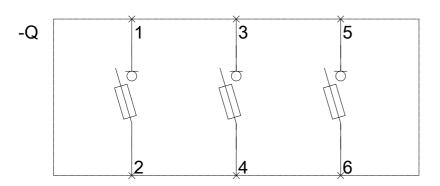
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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