SIEMENS

Data sheet 3NP1123-1CA20



FUSE-SWITCH-DISCONNECTOR 3-POLE, NH000, 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		000
Size of fuse link		NH000
Continuous current / at 35 °C / Rated value	A	160
Let-through current / with closed switch / maximum permissible	kA	15
cut-off value I**2t,max. / 500 V	$A^2 \cdot s$	56 000
I2t value / with closed switch / maximum permissible	kA2.s	56
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

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Insulation voltage / Rated value	V	690
Power factor / at AC-21 B		0.95
Surge voltage resistance / Rated value	kV	8

Protection class

Protection class IP		
• with closed switch / with cover or cable lug cover		IP40
• with closed switch / without cover or cable lug cover		IP30
• on the front		IP40
• open		IP20

Dissipation

Active power loss		
• maximum	W	9

Electricity

Continuous current		
• Rated value	A	100
• at 40 °C / Rated value	A	150
• at 45 °C / Rated value	A	140
• at 50 °C / Rated value	A	130
• at 55 °C / Rated value	A	120
Let-through current / with high-speed activation / maximum permissible	kA	10
Let-through current / Ic / maximum permissible		
• 400 V	A	15 000
• 500V	A	15 000
cut-off value I2t,max. / 400 V**	$A^2 \cdot s$	56 000

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	A	160
• at AC-21 B / at 500 V / Rated value	A	160
• at AC-21 B / at 690 V / Rated value	A	160
• at AC-22 B / at 400 V / Rated value	A	160
• at AC-22 B / at 500 V / Rated value	A	125
• at AC-22 B / at 690 V / Rated value	A	50
• at AC-23 B / at 400 V / Rated value	A	160
• at AC-23 B / at 500 V / Rated value	A	40

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• at AC-23 B / at 690 V / Rated value	A	25
• at DC-21 B / at 240 V / Rated value / maximum	A	160
• at DC-21 B / at 440 V / Rated value / maximum	A	100
• at DC-22 B / at 240 V / Rated value / maximum	A	100
• at DC-22 B / at 440 V / Rated value / maximum	A	50
• at DC-23 B / at 240 V / Rated value / maximum	A	80
• at DC-23 B / at 440 V / Rated value / maximum	A	25
• with capacitive load / at 400 V / maximum	A	72
• with capacitive load / at 500 V / maximum	A	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 component		
• Trip indicator		No
• Phase failure monitoring		No
• undervoltage release		No
• undervoltage release with leading contact		No
Product property / sealable		Yes
Product expansion		
• Auxiliary switch		Yes
• optional		
— locking capability		Yes
— motor drive		No
— Phase failure monitoring		Yes
— fuse monitoring		Yes
— Voltage trigger		No
— Overvoltage protection monitoring		Yes

Product function

Product function		
• fuse monitoring		No

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• Overvoltage protection monitoring		No

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 current circuit		other
Connectable conductor cross-section / for main contacts		
• single or multi-stranded / minimum	mm²	1.5
• single or multi-stranded / maximum	mm²	50
• finely stranded / with core end processing / minimum	mm²	1.5
• finely stranded / with core end processing / maximum	mm²	35
• stranded / minimum	mm²	1.5
• stranded / maximum	mm²	50
Tightening torque / with screw-type terminals		
• minimum	N·m	3.5
• maximum	N·m	4
Type of connectable conductor cross-section / of the laminated conductors / maximum		8 x 8 mm
Type of electrical connection / for main current circuit		box terminals

Mechanical Design

Height	mm	141.7
Width	mm	88.8
Depth	mm	76.6
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

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• rail mounting		No
Net weight	kg	0.47

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

Certificates

Equipment marking		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

General Product Approval	Declaration of Conformity
CB, CCC, GOST, UL, EAC	CE

CB CCC GOST UL EG-Konf.

Test Certificates		Shipping Approval		
Type Test Certificates/Test Report	Special Test Certificate	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/3NP11231CA20

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3NP11231CA20/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP11231CA20

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

Tender specifications
http://ausschreibungstexte.siemens.com/tiplv

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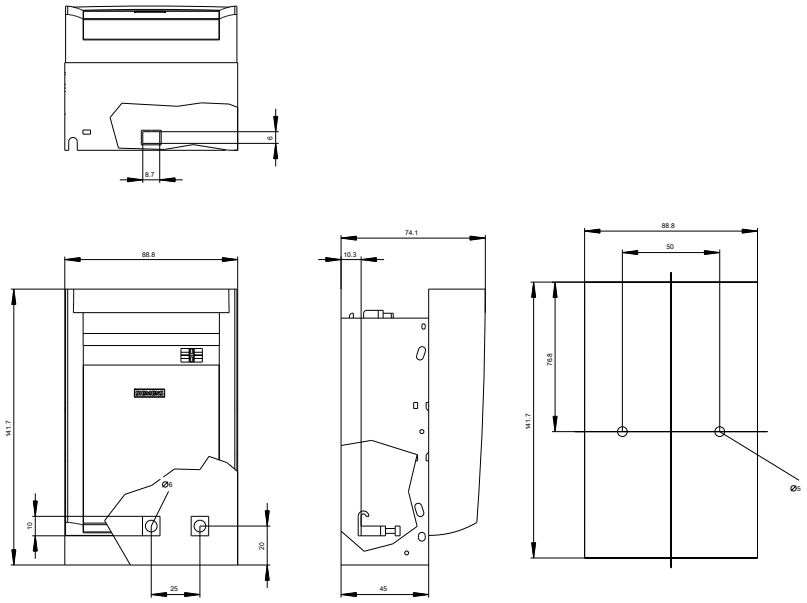

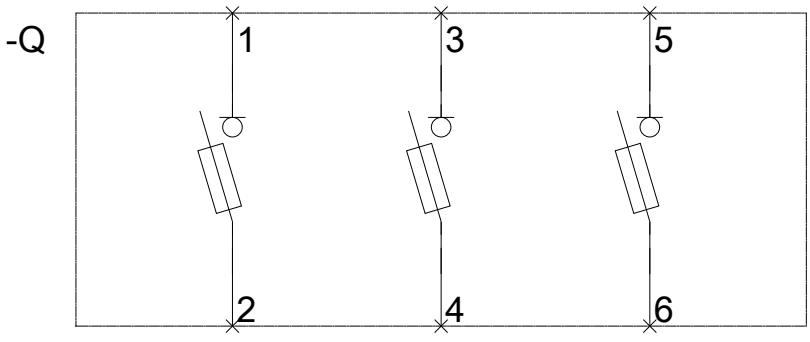

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