## SIEMENS

## Data sheet

## 3NP1123-1CA20



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH000, 160 A, for assembly and installation on Mounting plate, box terminal, Cover level 45 mm

Model	
product designation	3NP1 fuse switch disconnector
design of the safety monitoring	Without
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	000
size of fuse link	NH000
let-through current with closed switch maximum	15 kA
mechanical service life (operating cycles) typical	2 000
I2t value with closed switch maximum	223 kA2.s
power factor	
• at AC-22 B	0.65
• at AC-23 B	0.45
<ul> <li>with capacitive load</li> </ul>	-0.25
fuse system	LV HRC fuse
degree of pollution	3
Voltage	
insulation voltage	
rated value	690 V
<ul> <li>with degree of pollution 3 at AC rated value</li> </ul>	690 V
<ul> <li>with degree of pollution 2 at AC rated value</li> </ul>	1 000 V
power factor at AC-21 B	0.95
surge voltage resistance rated value	8 kV
operating voltage	
<ul> <li>at AC rated value maximum</li> </ul>	690 V
• at DC rated value	440 V
at DC rated value maximum	440 V
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
• open	IP20
Dissipation	
power loss [W]	
<ul> <li>with conventional rated thermal current without fuse per pole</li> </ul>	5 W
<ul> <li>with conventional rated thermal current without fuse per device</li> </ul>	15 W

<ul> <li>for rated value of the current at AC in hot operating state per pole</li> </ul>	14 W
<ul> <li>of the fuse per fuse maximum</li> </ul>	9 W
operational current	
at 35 °C rated value	160 A
at 40 °C rated value	150 A
• at 45 °C rated value	140 A
• at 50 °C rated value	130 A
• at 55 °C rated value	120 A
• at AC-21 B at 240 V rated value	160 A
• at AC-21 B at 400 V rated value	160 A
• at AC-21 B at 500 V rated value	160 A
• at AC-21 B at 690 V rated value	160 A
	160 A
at AC-22 B at 240 V rated value	
at AC-22 B at 400 V rated value	160 A
• at AC-22 B at 500 V rated value	125 A
at AC-22 B at 690 V rated value	50 A
• at AC-23 B at 690 V rated value	25 A
• at AC-23 B at 500 V rated value	40 A
• at AC-23 B at 400 V rated value	160 A
at AC-23 B at 240 V rated value	160 A
<ul> <li>at DC-21 B at 120 V rated value</li> </ul>	160 A
<ul> <li>at DC-21 B at 240 V rated value</li> </ul>	160 A
<ul> <li>at DC-21 B at 440 V rated value</li> </ul>	100 A
• at DC-22 B at 120 V rated value	100 A
<ul> <li>at DC-22 B at 240 V rated value</li> </ul>	100 A
<ul> <li>at DC-22 B at 440 V rated value</li> </ul>	50 A
<ul> <li>at DC-23 B at 120 V rated value</li> </ul>	80 A
<ul> <li>at DC-23 B at 240 V rated value</li> </ul>	80 A
<ul> <li>at DC-23 B at 440 V rated value</li> </ul>	25 A
let-through current with high-speed activation maximum	10 kA
permissible	
permissible Main circuit	
•	
Main circuit	125 A
Main circuit operational current	125 A 72 A
Main circuit operational current • rated value	
Main circuit operational current • rated value • with capacitive load at 400 V rated value	72 A
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value	72 A
Main circuit operational current • rated value • with capacitive load at 400 V rated value • with capacitive load at 500 V rated value Auxiliary circuit	72 A 55 A
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts	72 A 55 A 0
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts	72 A 55 A 0 0
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability	72 A 55 A 0 0
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use	72 A 55 A 0 0 0
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch	72 A 55 A 0 0 0 0
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector	72 A 55 A 0 0 0 0
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch	72 A 55 A 0 0 0 0 V Ves No
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch	72 A 55 A 0 0 0 0 V Ves No Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch	72 A 55 A 0 0 0 0 V Ves No
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details	72 A 55 A 0 0 0 0 V Ves No Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component	72 A 55 A 0 0 0 0 V Ves No Yes Yes Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release	72 A 55 A 0 0 0 V Ves No Yes Yes Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release         • undervoltage release with leading contact	72 A 55 A 0 0 0 0 Ves No Yes Yes Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release         • undervoltage release with leading contact         product feature sealable	72 A 55 A 0 0 0 0 0 0 Ves No Yes Yes Yes Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release	72 A 55 A 0 0 0 0 Ves No Yes Yes Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         • undervoltage release         • undervoltage release         • undervoltage release         • undervoltage release with leading contact         product feature sealable         product extension auxiliary switch         product extension optional	72 A         55 A         0         0         0         0         0         Value         No         Yes         Yes         No         Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release         • undervoltage release with leading contact         product feature sealable         product extension auxiliary switch         product extension optional         • locking capability	72 A 55 A 0 0 0 0 0 0 0 1 No Yes Yes Yes Yes Yes Yes Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release         • undervoltage release         • undervoltage release         • undervoltage release         • product extension auxiliary switch         product extension auxiliary switch         product extension optional         • locking capability         • phase failure monitoring	72 A         55 A         0         0         0         0         0         No         Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release         • undervoltage release with leading contact         product extension auxiliary switch         product extension optional         • locking capability         • phase failure monitoring         • fuse monitoring	72 A         55 A         0         0         0         0         0         No         Yes
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release         • undervoltage release with leading contact         product extension auxiliary switch         product extension optional         • locking capability         • phase failure monitoring         • fuse monitoring         • voltage trigger	72 A         55 A         0         0         0         0         0         No         Yes         No
Main circuit         operational current         • rated value         • with capacitive load at 400 V rated value         • with capacitive load at 500 V rated value         Auxiliary circuit         number of CO contacts for auxiliary contacts         number of NC contacts for auxiliary contacts         number of NO contacts for auxiliary contacts         suitability         suitability         suitability for use         • main switch         • switch disconnector         • EMERGENCY OFF switch         • safety switch         • maintenance/repair switch         Product details         product component         • undervoltage release         • undervoltage release with leading contact         product extension auxiliary switch         product extension optional         • locking capability         • phase failure monitoring         • fuse monitoring	72 A         55 A         0         0         0         0         0         No         Yes

product function overvo	Itage protection monitori	ng	No			
Connections						
arrangement of electrica	al connectors for main cu	irrent circuit	other			
connectable conductor	cross-section for main co	ontacts				
<ul> <li>solid or stranded</li> </ul>	minimum		1.5 m	m²		
<ul> <li>solid or stranded</li> </ul>	maximum		50 mr	m²		
<ul> <li>finely stranded w</li> </ul>	ith core end processing r	ninimum	1.5 m	m²		
<ul> <li>finely stranded with core end processing maximum</li> </ul>		35 mm²				
stranded minimum		1.5 mm <sup>2</sup>				
<ul> <li>stranded maximum</li> </ul>		50 mm²				
tightening torque with se	crew-type terminals					
• minimum			3.5 N	·m		
<ul> <li>maximum</li> </ul>			4 N·m			
type of connectable con conductors maximum	nductor cross-sections of	the laminated	8 x 8	mm		
type of connection tech	nology		Box te	erminal		
Mechanical Design						
height			141.7	mm		
width			88.8 r	nm		
depth			74.1 mm			
fastening method			mounting plate			
fastening method						
floor mounting			Yes			
<ul> <li>rail mounting</li> </ul>	-		No			
mounting position			horizontal/vertical			
net weight			0.47 kg			
Environmental condition	ns			.9		
ambient temperature du			_			
minimum			-25 °(	2		
maximum			55 °C			
ambient temperature du	uring storage		55 0			
minimum	aning storage		-50 °C			
maximum			-30°C			
Certificates			00 0			
reference code accordir	an to IEC 91246 2		Q			
	•		Q			
General Product App	ovai					
	<u>Confirmation</u>	<b>SAU</b> UR		DE	<u>Miscellaneous</u>	EHC
Declaration of Conformity Test Certificate		es		Marine / Shipping		
	1.112	Special Test O	rtific	Type Test Certific-		
CE EG-Konf.	UK CA	<u>Special Test Ce</u> <u>ate</u>	annic-	ates/Test Report	Lloyd's Register us	DNV-GL
other		Environment				
<u>Confirmation</u>	<u>Miscellaneous</u>	Environmental firmations				
Further information						

## Further information

Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an

Subject to change without notice © Copyright Siemens EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3NP1123-1CA20

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

https://supp ort.industry.siemens.com/cs/ww/en/ps/3NP1123-1CA20

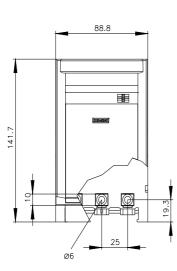
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3NP1123-1CA20

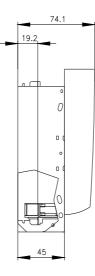
**CAx-Online-Generator** 

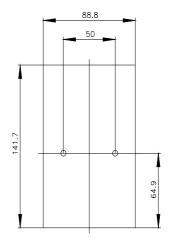
http://www.siemens.com/cax

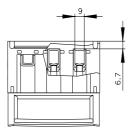
**Tender specifications** 

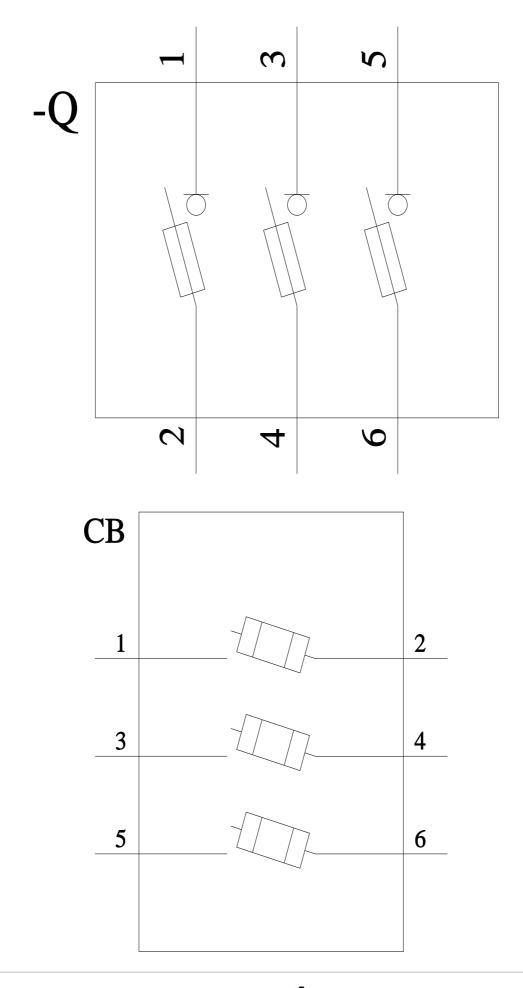
http://www.siemens.com/specifications











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