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 $\,\mathrm{mm}$

lodel	
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
 with capacitive load 	-0.25
fuse system	LV HRC fuse
degree of pollution	3
'oltage	
insulation voltage	
rated value	690 V
 with degree of pollution 3 at AC rated value 	690 V
 with degree of pollution 2 at AC rated value 	1 000 V
power factor at AC-21 B	0.95
surge voltage resistance rated value	8 kV
operating voltage	
at AC rated value maximum	690 V
at DC rated value	440 V
at DC rated value maximum	440 V
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
• open	IP20
dissipation	
power loss [W]	
with conventional rated thermal current without fuse per pole	5 W
 with conventional rated thermal current without fuse per 	15 W

• for rated value of the current at AC in hot operating state	14 W
per pole	
of the fuse per fuse maximum	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
• at AC-22 B at 240 V rated value	160 A
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-22 B at 690 V rated value 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
at DC-21 B at 120 V rated value	160 A
 at DC-21 B at 240 V rated value 	160 A
 at DC-21 B at 440 V rated value 	100 A
 at DC-22 B at 120 V rated value 	100 A
 at DC-22 B at 240 V rated value 	100 A
 at DC-22 B at 440 V rated value 	50 A
 at DC-23 B at 120 V rated value 	80 A
 at DC-23 B at 240 V rated value 	80 A
 at DC-23 B at 440 V rated value 	25 A
the state of the s	40 kA
let-through current with high-speed activation maximum permissible	10 kA
	10 KA
permissible Main circuit	10 KA
permissible Main circuit operational current	
permissible Main circuit operational current • rated value	125 A
permissible Main circuit operational current • rated value • with capacitive load at 400 V rated value	125 A 72 A
permissible Main circuit operational current • rated value • with capacitive load at 400 V rated value • with capacitive load at 500 V rated value	125 A
permissible Main circuit operational current • rated value • with capacitive load at 400 V rated value • with capacitive load at 500 V rated value Auxiliary circuit	125 A 72 A 55 A
permissible 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	125 A 72 A 55 A
permissible 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	125 A 72 A 55 A
permissible 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 NO contacts for auxiliary contacts number of NO contacts for auxiliary contacts	125 A 72 A 55 A
permissible 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	125 A 72 A 55 A
permissible 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	125 A 72 A 55 A 0 0 0
permissible 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 main switch	125 A 72 A 55 A 0 0 0 No
permissible 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	125 A 72 A 55 A 0 0 0 No Yes
permissible 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 main switch	125 A 72 A 55 A 0 0 0 No
permissible 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	125 A 72 A 55 A 0 0 0 No Yes
permissible 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	125 A 72 A 55 A 0 0 0 No Yes No
permissible 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 • safety switch	125 A 72 A 55 A 0 0 0 No Yes No Yes
permissible 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	125 A 72 A 55 A 0 0 0 No Yes No Yes
permissible 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	125 A 72 A 55 A 0 0 0 No Yes No Yes
permissible 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	125 A 72 A 55 A 0 0 0 Ves No Yes Yes Yes
permissible 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 • safety switch • maintenance/repair switch Product details product component • undervoltage release	125 A 72 A 55 A 0 0 0 No Yes No Yes Yes
permissible 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	125 A 72 A 55 A 0 0 0 Ves No Yes Yes Yes
permissible 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 feature sealable	125 A 72 A 55 A 0 0 0 0 No Yes No Yes Yes Yes
permissible 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	125 A 72 A 55 A 0 0 0 0 No Yes No Yes Yes Yes
permissible 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 feature sealable product extension auxiliary switch product extension optional • locking capability	125 A 72 A 55 A 0 0 0 0 No Yes No Yes Yes Yes Yes Yes
permissible 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 • 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 • phase failure monitoring	125 A 72 A 55 A 0 0 0 0 0 No Yes No Yes Yes Yes Yes Yes
permissible 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 feature sealable product extension auxiliary switch product extension optional • locking capability • phase failure monitoring • fuse monitoring	125 A 72 A 55 A 0 0 0 0 0 No Yes No Yes Yes Yes Yes Yes Yes
permissible 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 feature sealable product extension auxiliary switch product extension optional • locking capability • phase failure monitoring • fuse monitoring • fuse monitoring • voltage trigger	125 A 72 A 55 A 0 0 0 0 No Yes No Yes
permissible 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 feature sealable product extension auxiliary switch product extension optional • locking capability • phase failure monitoring • fuse monitoring	125 A 72 A 55 A 0 0 0 0 0 No Yes No Yes Yes Yes Yes Yes Yes

product function overvoltage protection monitoring	No
Connections	
arrangement of electrical connectors for main current circuit	other
connectable conductor cross-section for main contacts	
solid or stranded minimum	1.5 mm²
solid or stranded maximum	50 mm ²
finely stranded with core end processing minimum	1.5 mm²
finely stranded with core end processing maximum	35 mm²
stranded minimum	1.5 mm²
stranded maximum	50 mm²
tightening torque with screw-type terminals	
• minimum	3.5 N·m
• maximum	4 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	8 x 8 mm
type of connection technology	Box terminal
Mechanical Design	
height	141.7 mm
width	88.8 mm
depth	74.1 mm
fastening method	mounting plate
fastening method	
 floor mounting 	Yes
rail mounting	No
mounting position	horizontal/vertical
net weight	0.47 kg
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
maximum	55 °C
ambient temperature during storage	
• minimum	-50 °C
• maximum	80 °C
Certificates	
reference code according to IEC 81346-2	Q
General Product Approval	



Confirmation





Miscellaneous



Declaration of Conformity

Test Certificates

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





other

Environment

Confirmation

Miscellaneous

Environmental Confirmations

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

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,...)

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1123-1CA20

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

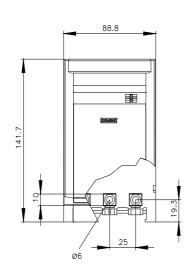
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1123-1CA20

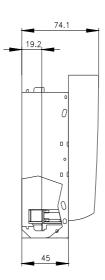
CAx-Online-Generator

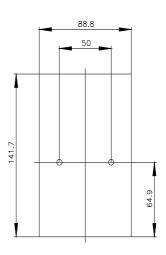
http://www.siemens.com/cax

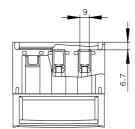
Tender specifications

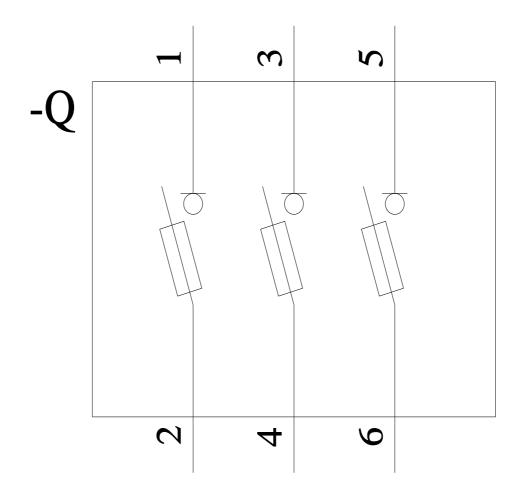
http://www.siemens.com/specifications

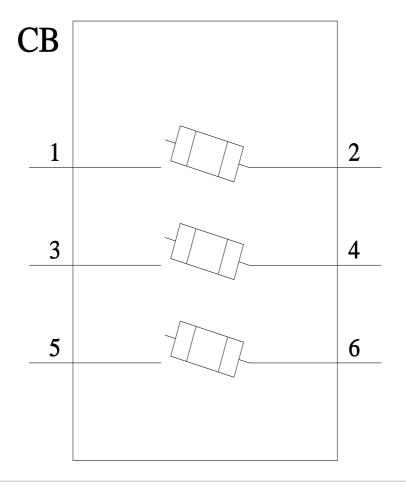












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