SIEMENS

Data sheet 3NP1133-1CA20



SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH00, 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	00 and 000
size of fuse link	NH000, NH00
let-through current with closed switch maximum	23 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
rotection 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	17 W
per pole	
 of the fuse per fuse maximum 	12 W
operational current	
• at 35 °C rated value	160 A
 at 40 °C rated value 	155 A
• at 45 °C rated value	145 A
• at 50 °C rated value	140 A
• at 55 °C rated value	133 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	160 A
• at AC-22 B at 690 V rated value	125 A
• at AC-23 B at 690 V rated value	35 A
at AC-23 B at 500 V rated value	63 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 120 V rated value at DC-21 B at 240 V rated value	160 A
at DC-21 B at 440 V rated value	160 A
• at DC-22 B at 120 V rated value	160 A
at DC-22 B at 120 V rated value at DC-22 B at 240 V rated value	160 A
• at DC-22 B at 240 V rated value	125 A
• at DC-23 B at 120 V rated value	100 A
at DC-23 B at 120 V rated value at DC-23 B at 240 V rated value	100 A
	63 A
at DC-23 B at 440 V rated value let-through current with high-speed activation maximum	15 kA
ICI-IIII OUQII CUITCIII WIIII IIIOII-SOEEO ACIIVAIIIII IIIAXIIIIIIII	13 KA
permissible	
permissible	
permissible Main circuit	160 A
permissible Main circuit operational current	160 A 72 A
permissible Main circuit operational current • rated value	
permissible Main circuit operational current • rated value • with capacitive load at 400 V rated value	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	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 Auxiliary circuit number of CO contacts for auxiliary contacts	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	72 A 55 A 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	72 A 55 A 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 NO contacts for auxiliary contacts number of NO contacts for auxiliary contacts	72 A 55 A 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 suitability	72 A 55 A 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 for use	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 suitability for use • main switch	72 A 55 A 0 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 for use • main switch • switch disconnector • EMERGENCY OFF switch	72 A 55 A 0 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 • safety switch	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	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 for use • main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch	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	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 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 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	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 product feature sealable	72 A 55 A 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	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	72 A 55 A 0 0 0 No Yes No 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	72 A 55 A 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	72 A 55 A 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	72 A 55 A 0 0 0 0 No Yes No Yes 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 stension auxiliary switch product extension auxiliary switch product extension optional • locking capability • phase failure monitoring • fuse monitoring • voltage trigger	72 A 55 A 0 0 0 0 No Yes No Yes Yes 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	72 A 55 A 0 0 0 0 No Yes No Yes 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 	6 mm²
 solid or stranded maximum 	70 mm ²
 finely stranded with core end processing minimum 	6 mm²
 finely stranded with core end processing maximum 	50 mm ²
stranded minimum	6 mm²
stranded maximum	70 mm ²
tightening torque with screw-type terminals	
• minimum	10 N·m
maximum	10 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	9 x 12 mm
type of connection technology	Box terminal
Mechanical Design	
height	202 mm
width	105.8 mm
depth	86.5 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
rail mounting	No
mounting position	horizontal/vertical
net weight	0.73 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
Approvals Certificates	

General Product Approval



Confirmation





Miscellaneous



Declaration of Conformity

Test Certificates

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





other

<u>Miscellaneous</u> <u>Confirmation</u>

Environmental Confirmations

Environment

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,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1133-1CA20

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

https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1CA20

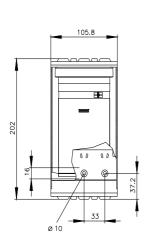
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1CA20

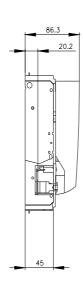
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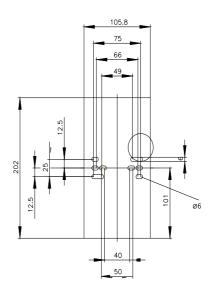
http://www.siemens.com/cax

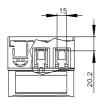
Tender specifications

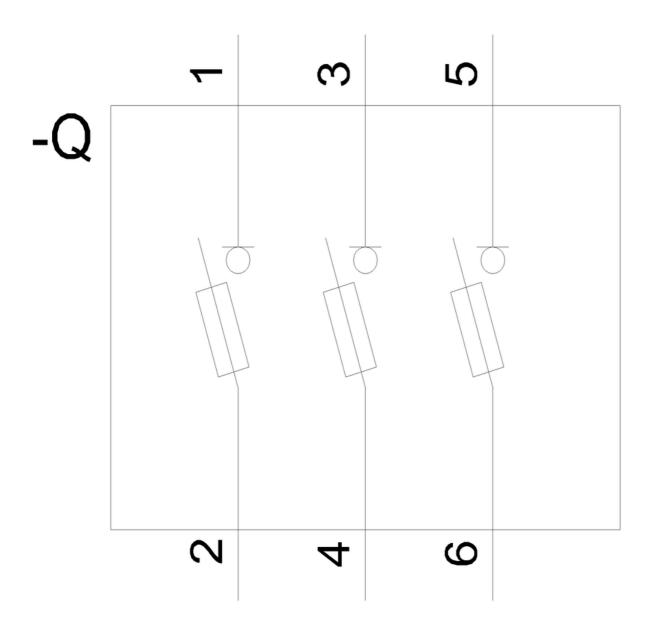
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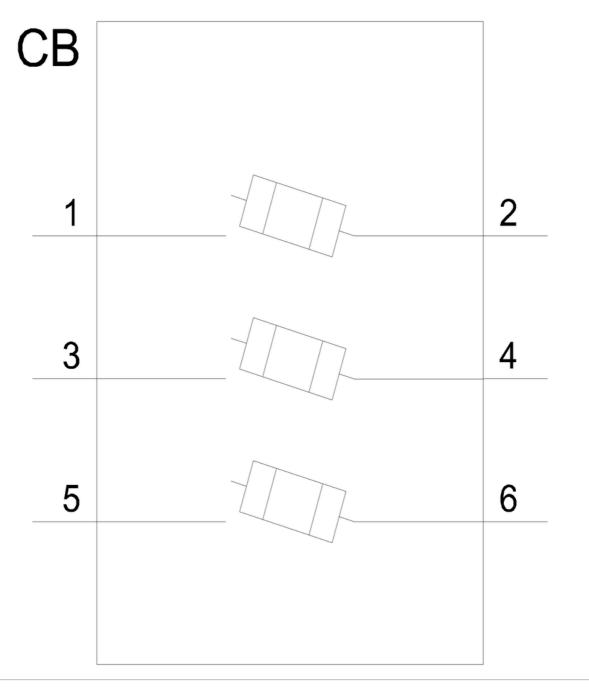












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