

SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH00, 160 A, for assembly and installation on mounting plate, flat terminal, Cover level 45 mm



Model	
product brand name	SENTRON
product designation	3NP1 fuse switch disconnecter
design of the product	cover level 45 mm
design of the safety monitoring	Without
design of the actuating element	Cover handle
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
operational current / at 35 °C / rated value	160 A
let-through current / with closed switch / maximum permissible	23 kA
cut-off value $I^{**2t,max.}$ / 500 V	223 000 A ² ·s
mechanical service life (switching cycles) / typical	2 000
power factor	

<ul style="list-style-type: none"> • at AC-22 B 	0.65
<ul style="list-style-type: none"> • at AC-23 B 	0.45
<ul style="list-style-type: none"> • with capacitive load 	-0.25
circuit-breaker / Design	3NP11
fuse system	LV HRC fuse
degree of pollution	3

Voltage

insulation voltage	
<ul style="list-style-type: none"> • rated value 	690 V
<ul style="list-style-type: none"> • with degree of pollution 3 / at AC / rated value 	690 V
<ul style="list-style-type: none"> • 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
operational current / at AC / rated value	160 A
operating voltage	
<ul style="list-style-type: none"> • at AC / rated value / maximum 	690 V
<ul style="list-style-type: none"> • at DC / rated value 	440 V
<ul style="list-style-type: none"> • at DC / rated value / maximum 	440 V

Protection class

protection class IP	
<ul style="list-style-type: none"> • with closed switch / with cover or cable lug cover 	IP40
<ul style="list-style-type: none"> • with closed switch / without cover or cable lug cover 	IP30
<ul style="list-style-type: none"> • on the front 	IP40
<ul style="list-style-type: none"> • open 	IP20

Dissipation

power loss [W]	
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per pole 	5 W
<ul style="list-style-type: none"> • with conventional rated thermal current / without fuse / per device 	15 W
<ul style="list-style-type: none"> • for rated value of the current / at AC / in hot operating state / per pole 	17 W
<ul style="list-style-type: none"> • of the fuse / per fuse / maximum 	12 W

Current

operational current	
<ul style="list-style-type: none"> • at AC-23 B / at 690 V / rated value 	35 A
<ul style="list-style-type: none"> • at AC-23 B / at 500 V / rated value 	63 A
<ul style="list-style-type: none"> • at AC-23 B / at 400 V / rated value 	160 A
<ul style="list-style-type: none"> • at AC-23 B / at 240 V / rated value 	160 A

• at AC-22 B / at 690 V / rated value	125 A
• at AC-22 B / at 500 V / rated value	160 A
• at AC-22 B / at 400 V / rated value	160 A
• at AC-22 B / at 240 V / rated value	160 A
• at AC-21 B / at 690 V / rated value	160 A
• at AC-21 B / at 500 V / rated value	160 A
• at AC-21 B / at 400 V / rated value	160 A
• at AC-21 B / at 240 V / rated value	160 A
• at DC-23 B / at 440 V / rated value	63 A
• at DC-23 B / at 240 V / rated value	100 A
• at DC-23 B / at 120 V / rated value	100 A
• at DC-22 B / at 440 V / rated value	125 A
• at DC-22 B / at 240 V / rated value	160 A
• at DC-22 B / at 120 V / rated value	160 A
• at DC-21 B / at 440 V / rated value	160 A
• at DC-21 B / at 240 V / rated value	160 A
• at DC-21 B / at 120 V / rated value	160 A
continuous current	
• 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
let-through current / with high-speed activation / maximum permissible	15 kA
Let-through current / I _c / maximum permissible	
• 400 V	23 000 A
• 500V	23 000 A
cut-off value I ² t _{max.} / 400 V	158 000 A ² ·s

Main circuit

operational current	
• rated value	160 A
• with capacitive load / at 400 V / rated value	72 A
• with capacitive load / at 500 V / rated value	55 A

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
• product function / phase failure monitoring	No
• product component / undervoltage release	No
• product component / undervoltage release with leading contact	No
product feature / sealable	Yes
product extension / auxiliary switch	Yes
product extension / 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
• overvoltage protection monitoring	No

Short circuit

conditional short-circuit current (I _q)	
• rated value	80 kA
• at AC / at 240 V / with high-speed activation / rated value	80 kA
• at AC / at 500 V / with high-speed activation / rated value	80 kA
• at AC / at 690 V / with high-speed activation / rated value	50 kA
• with closed switch / at AC / at 240 V / rated value	120 kA
• with closed switch / at AC / at 500 V / rated value	120 kA
• with closed switch / at AC / at 690 V / rated value	100 kA

Connections

arrangement of electrical connectors / for main current circuit	other
connectable conductor cross-section / for main contacts	
• solid or stranded / minimum	2.5 mm ²
• solid or stranded / maximum	95 mm ²
• stranded / minimum	2.5 mm ²
• stranded / maximum	95 mm ²
tightening torque / with screw-type terminals	
• minimum	10 N·m
• maximum	12 N·m
type of connectable conductor cross-sections / of the laminated conductors / maximum	24 x 12 mm
type of connection technology	Flat terminal
type of electrical connection / for main current circuit	busbar connection

Mechanical Design





height	202 mm
width	105.8 mm
depth	86.5 mm
fastening method	mounting plate
fastening method	
• floor mounting	Yes
• front mounting	No
• 4-hole front mounting	No
• front mounting with central attachment	No
• 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	
• acc. to DIN EN 61346-2	Q
• acc. to IEC 81346-2	Q

General Product Approval			Declaration of Conformity	Test Certificates
 CCC	 UR	 VDE	Miscellaneous	 EG-Konf.
				Type Test Certificates/Test Report

Test Certificates	Shipping Approval
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[Special Test Certificate](#)



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Further information

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=3NP1133-1CA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1CA10>

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

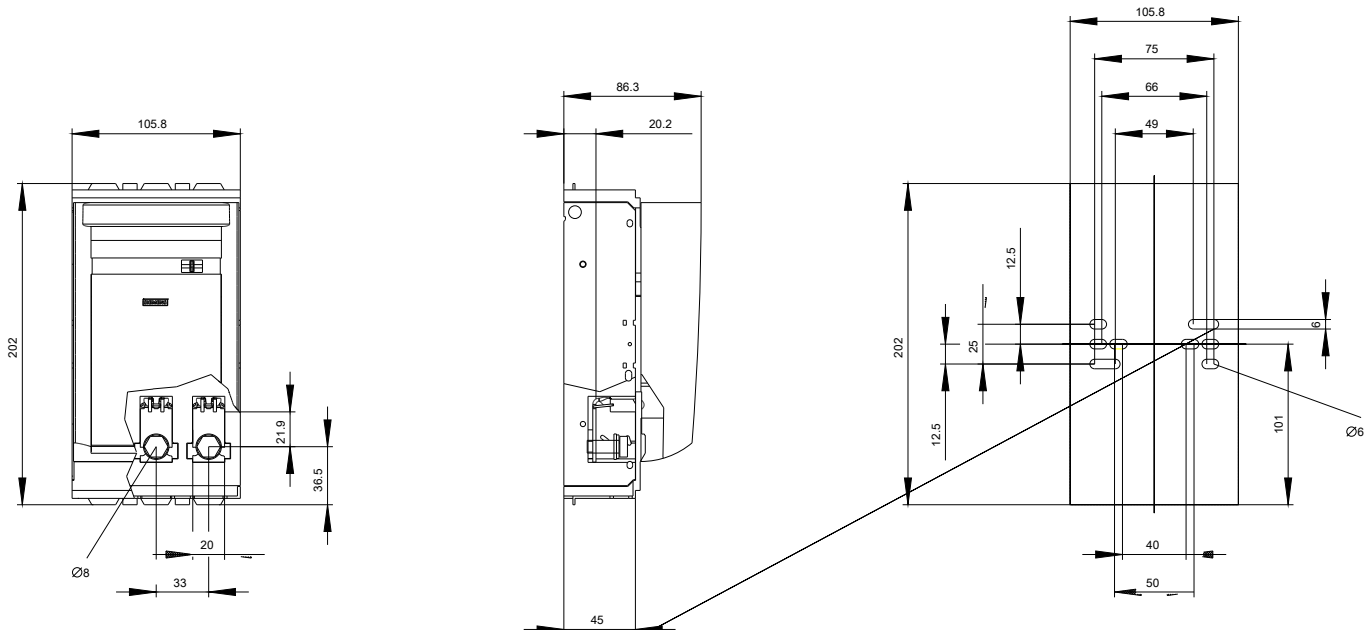
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1CA10

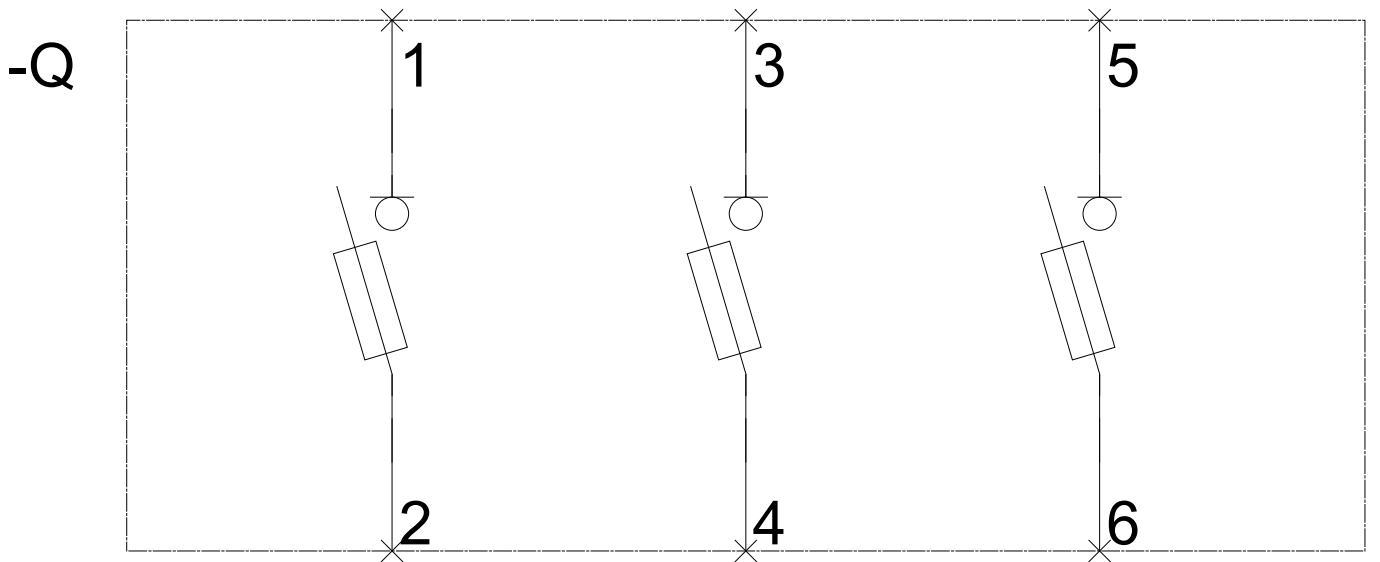
CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>





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