



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH00, 160 A, for Busbar system 8US 40 mm, Box terminal, Fuse monitoring: electromechanical, Cover level 32/70 mm

Model	
product designation	Fuse switch disconnecter
busbar design	busbar thickness 5 or 10 mm
design of the safety monitoring	electro mechanical
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 40 mm 8US busbar system
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
I <sup>2</sup> t value with closed switch maximum	223 kA <sup>2</sup> ·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
Voltage	
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
• 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
• operational current	
— 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 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 240 V rated value	160 A
— at DC-22 B at 440 V rated value	125 A
— at DC-23 B at 120 V rated value	100 A
— at DC-23 B at 240 V rated value	100 A
— at DC-23 B at 440 V rated value	63 A
<b>let-through current with high-speed activation maximum permissible</b>	15 kA
<b>operating voltage</b>	
• at AC rated value minimum	24 V
• at AC rated value maximum	690 V
• at DC rated value	240 V
• at DC rated value minimum	24 V
• at DC rated value maximum	250 V
<b>Protection class</b>	
<b>protection class IP</b>	
• with closed switch with cover or cable lug cover	IP40
• with closed switch without cover or cable lug cover	IP30
• open	IP20
<b>Dissipation</b>	
<b>power loss [W]</b>	
• with conventional rated thermal current without fuse per pole	5 W
• with conventional rated thermal current without fuse per device	15 W
• for rated value of the current at AC in hot operating state per pole	5.7 W
• of the fuse per fuse maximum	12 W
<b>Main circuit</b>	
<b>operational current</b>	
• rated value	160 A
• with capacitive load at 400 V rated value	72 A
• with capacitive load at 500 V rated value	55 A
<b>Auxiliary circuit</b>	
<b>number of CO contacts for auxiliary contacts</b>	0
<b>number of NC contacts for auxiliary contacts</b>	0
<b>number of NO contacts for auxiliary contacts</b>	0
<b>Suitability</b>	
<b>suitability for use main switch</b>	No
<b>suitability for use switch disconnecter</b>	Yes
<b>suitability for use EMERGENCY OFF switch</b>	No
<b>suitability for use safety switch</b>	Yes
<b>suitability for use maintenance/repair switch</b>	Yes
<b>Product details</b>	
<b>product function phase failure monitoring</b>	No
<b>product component</b>	
• undervoltage release	No
• undervoltage release with leading contact	No
<b>product feature sealable</b>	Yes

product extension auxiliary switch	Yes
product extension optional locking capability	Yes
product extension optional phase failure monitoring	Yes
product extension optional voltage trigger	No
product extension optional overvoltage protection monitoring	Yes
<b>Product function</b>	
product function overvoltage protection monitoring	No
<b>Short circuit</b>	
<b>conditional short-circuit current (I<sub>q</sub>)</b>	
• 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
<b>Connections</b>	
arrangement of electrical connectors for main current circuit	other
<b>connectable conductor cross-section for main contacts</b>	
• solid or stranded minimum	6 mm <sup>2</sup>
• solid or stranded maximum	70 mm <sup>2</sup>
• finely stranded with core end processing minimum	6 mm <sup>2</sup>
• finely stranded with core end processing maximum	50 mm <sup>2</sup>
• stranded minimum	6 mm <sup>2</sup>
• stranded maximum	70 mm <sup>2</sup>
<b>tightening torque with screw-type terminals</b>	
• minimum	10 N·m
• maximum	10 N·m
type of connectable conductor cross-sections of the laminated conductors maximum	9 x 12 mm
<b>type of connection technology</b>	Box terminal
<b>Mechanical Design</b>	
<b>height</b>	210.4 mm
<b>width</b>	105.8 mm
<b>width of the busbar</b>	
• minimum	12 mm
• maximum	15 mm
<b>depth</b>	214.5 mm
<b>fastening method</b>	busbar
<b>fastening method</b>	
• floor mounting	No
• rail mounting	Yes
<b>mounting position</b>	horizontal/vertical
<b>busbar center-to-center spacing</b>	40 mm
<b>Net Weight</b>	1.678 kg
<b>Environmental conditions</b>	
<b>ambient temperature during operation</b>	
• minimum	-25 °C
• maximum	55 °C
<b>ambient temperature during storage</b>	
• minimum	-50 °C
• maximum	80 °C
<b>Certificates</b>	
<b>reference code according to IEC 81346-2</b>	Q
<b>Approvals Certificates</b>	
<b>Environment</b>	<b>General Product Approval</b>



General Product Ap-  
proval

Maritime application



Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3NP1133-1BB21>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1BB21>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3NP1133-1BB21](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1BB21)

CAX-Online-Generator

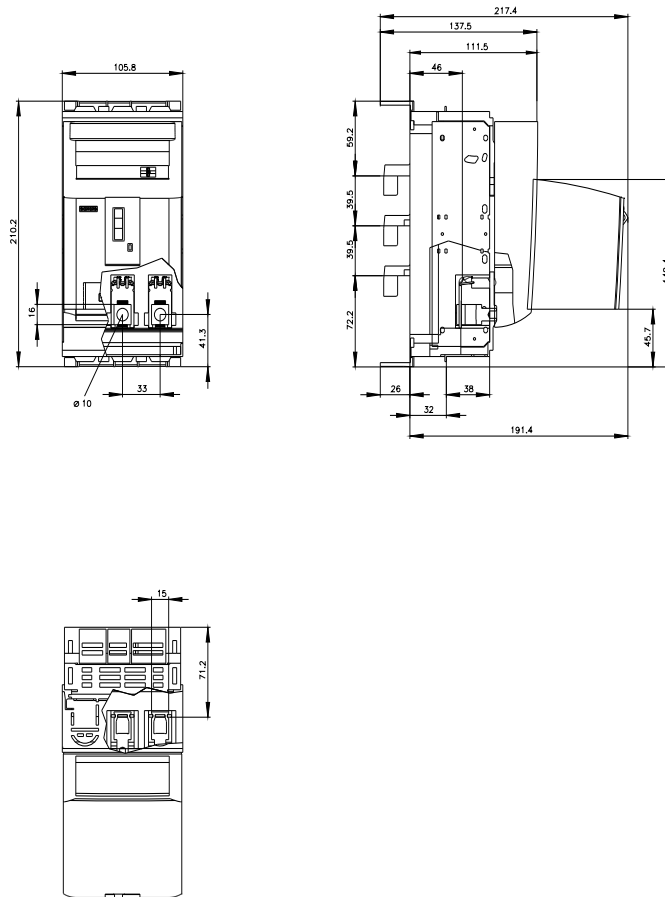
<https://www.siemens.com/cax>

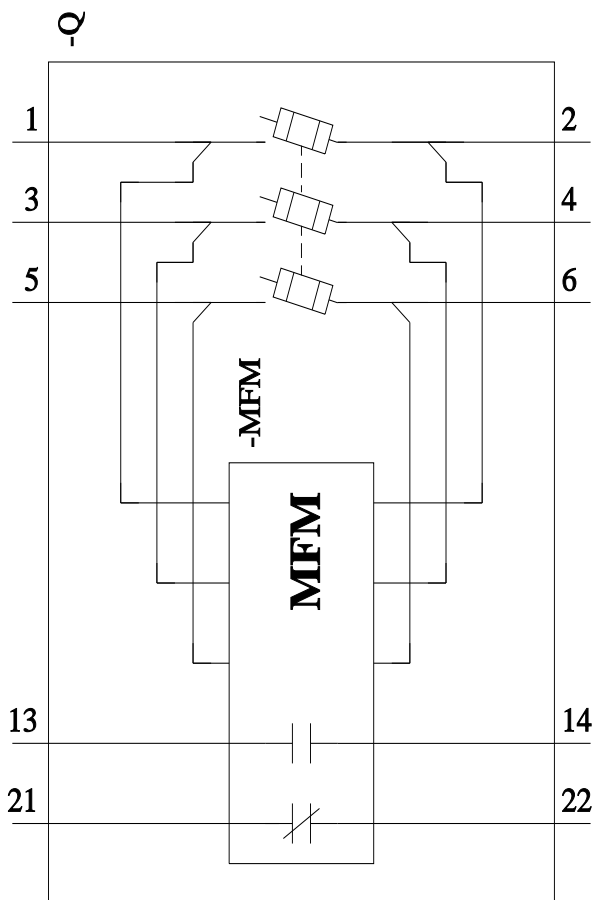
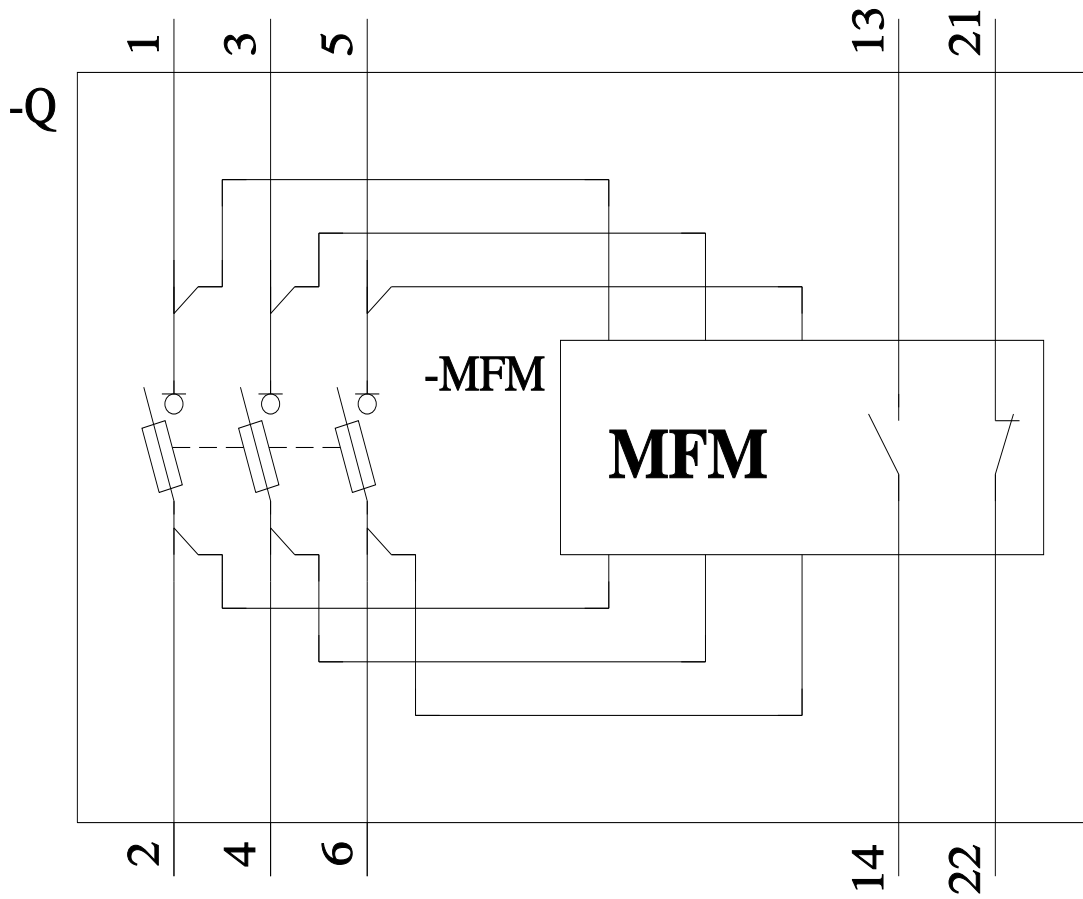
Tender specifications

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)





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