



SENTRON, Fuse switch disconnecter 3NP1, 3-pole, NH1, 250 A, for Busbar system 8US 60 mm, Box terminal, Cover level 32/70 mm

Model	
product designation	Fuse switch disconnecter
busbar design	busbar thickness 5 or 10 mm
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 60 mm 8US busbar system
size of disconnecting link	1 and 0
size of fuse link	NH0, NH1
let-through current with closed switch maximum	32 kA
mechanical service life (operating cycles) typical	1 600
I ² t value with closed switch maximum	780 kA ² .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	250 A
• at 40 °C rated value	245 A
• at 45 °C rated value	240 A
• at 50 °C rated value	233 A
• at 55 °C rated value	233 A
• at AC-21 B at 240 V rated value	250 A
• at AC-21 B at 400 V rated value	250 A
• at AC-21 B at 500 V rated value	250 A
• at AC-21 B at 690 V rated value	250 A
• at AC-22 B at 240 V rated value	250 A
• at AC-22 B at 400 V rated value	250 A
• at AC-22 B at 500 V rated value	250 A

<ul style="list-style-type: none"> • at AC-22 B at 690 V rated value • at AC-23 B at 690 V rated value • at AC-23 B at 500 V rated value • at AC-23 B at 400 V rated value • at AC-23 B at 240 V rated value • at DC-21 B at 120 V rated value • at DC-21 B at 240 V rated value • at DC-21 B at 440 V rated value • at DC-22 B at 120 V rated value • at DC-22 B at 240 V rated value • at DC-22 B at 440 V rated value • at DC-23 B at 120 V rated value • at DC-23 B at 240 V rated value • at DC-23 B at 440 V rated value 	250 A 100 A 200 A 250 A 250 A 250 A 250 A 250 A 250 A 250 A 200 A 200 A 200 A 100 A
let-through current with high-speed activation maximum permissible	25 kA
operating voltage <ul style="list-style-type: none"> • at AC rated value maximum • at DC rated value • at DC rated value maximum 	690 V 440 V 440 V
Protection class	
protection class IP <ul style="list-style-type: none"> • with closed switch with cover or cable lug cover • with closed switch without cover or cable lug cover • open 	IP40 IP30 IP20
Dissipation	
power loss [W] <ul style="list-style-type: none"> • with conventional rated thermal current without fuse per pole • with conventional rated thermal current without fuse per device • for rated value of the current at AC in hot operating state per pole • of the fuse per fuse maximum 	8 W 24 W 31 W 23 W
Main circuit	
operational current <ul style="list-style-type: none"> • rated value • with capacitive load at 400 V rated value • with capacitive load at 500 V rated value 	250 A 72 A 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
suitability for use switch disconnecter	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	Yes
suitability for use maintenance/repair switch	Yes
Product details	
product function phase failure monitoring	No
product component <ul style="list-style-type: none"> • undervoltage release • undervoltage release with leading contact 	No No
product feature sealable	Yes
product extension auxiliary switch	Yes
product extension optional <ul style="list-style-type: none"> • locking capability • phase failure monitoring • fuse monitoring • voltage trigger • overvoltage protection monitoring 	Yes Yes Yes No Yes

Product function	
product function overvoltage protection monitoring	No
Short circuit	
conditional short-circuit current (I_q)	
• 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	70 mm ²
• solid or stranded maximum	185 mm ²
• finely stranded with core end processing minimum	70 mm ²
• finely stranded with core end processing maximum	120 mm ²
• stranded minimum	70 mm ²
• stranded maximum	185 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	20 x 10 mm
type of connection technology	Box terminal
Mechanical Design	
height	306 mm
width	183.7 mm
width of the busbar	
• minimum	12 mm
• maximum	30 mm
depth	142.2 mm
fastening method	busbar
fastening method	
• floor mounting	No
• rail mounting	Yes
mounting position	horizontal/vertical
busbar center-to-center spacing	60 mm
net weight	2.85 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](#)



General Product Approval	Test Certificates	Marine / Shipping
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other

Environment

[Confirmation](#)[Miscellaneous](#)[Environmental Confirmations](#)[Environmental Confirmations](#)

Further information

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=3NP1143-1BC20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3NP1143-1BC20>

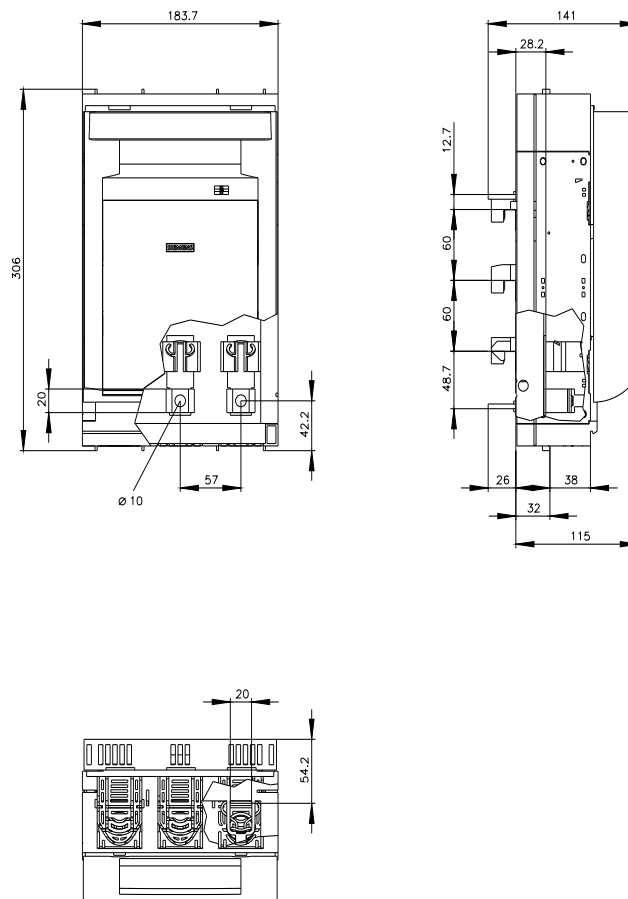
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1BC20

CAx-Online-Generator

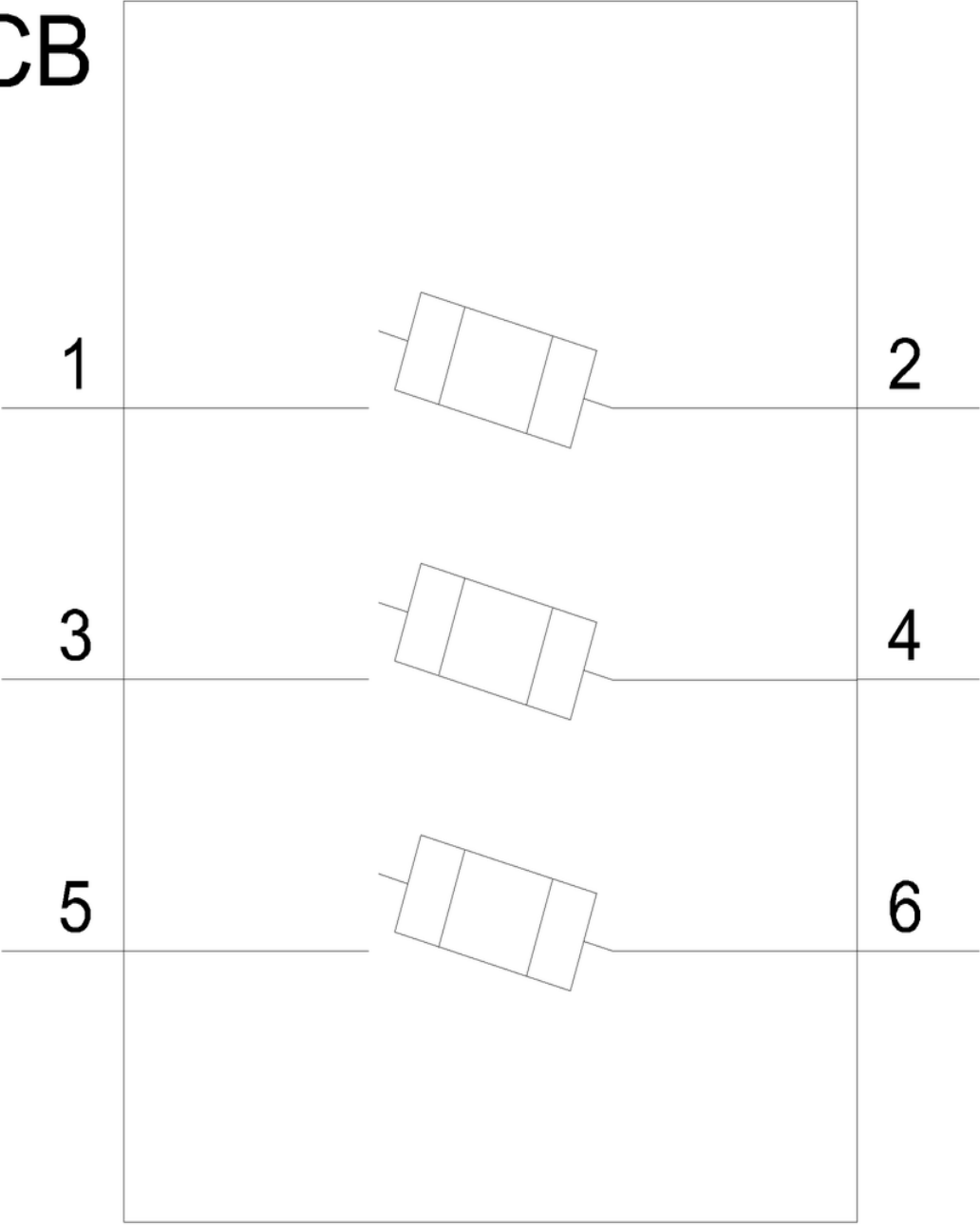
<http://www.siemens.com/cax>

Tender specifications

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




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