SIEMENS

Data sheet 3NP1143-1BC20



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

Model	
product designation	3NP1 fuse switch disconnector
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
I2t value with closed switch maximum	780 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	8 W
pole	

with conventional rated thermal current without fuse per	24 W
device	
 for rated value of the current at AC in hot operating state per pole 	31 W
of the fuse per fuse maximum	23 W
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 250 A
at AC-21 B at 240 V rated value at AC-21 B at 400 V rated value	
at AC-21 B at 400 V rated value at AC-21 B at 500 V rated value	250 A
at AC-21 B at 500 V rated valueat AC-21 B at 690 V rated value	250 A 250 A
at AC-21 B at 690 V rated value 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
• at AC-22 B at 690 V rated value	250 A
at AC-23 B at 690 V rated value	100 A
at AC-23 B at 500 V rated value	200 A
• at AC-23 B at 400 V rated value	250 A
at AC-23 B at 240 V rated value	250 A
at DC-21 B at 120 V rated value	250 A
at DC-21 B at 240 V rated value	250 A
• at DC-21 B at 440 V rated value	250 A
• at DC-22 B at 120 V rated value	250 A
• at DC-22 B at 240 V rated value	250 A
• at DC-22 B at 440 V rated value	200 A
• at DC-23 B at 120 V rated value	200 A
 at DC-23 B at 240 V rated value 	200 A
• at DC-23 B at 440 V rated value	100 A
let-through current with high-speed activation maximum permissible	25 kA
Main circuit	
operational current	
• rated value	250 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 component	
undervoltage release	No
undervoltage release with leading contact	No
product feature sealable	Yes
product extension auxiliary switch	Yes
product extension optional	
 locking capability 	Yes
 phase failure monitoring 	Yes
• fuse monitoring	Yes
voltage trigger	No

overvoltage protection monitoring	Yes
Product function	
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 	70 mm²
 solid or stranded maximum 	185 mm²
 finely stranded with core end processing minimum 	70 mm²
finely stranded with core end processing maximum	120 mm²
stranded minimum	70 mm²
stranded maximum	185 mm²
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	

General Product Approval

Confirmation







Miscellaneous



Declaration of Conformity

Test Certificates

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





other Environment

<u>Confirmation</u> <u>Miscellaneous</u> <u>Environmental Confirmations</u>

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,...)

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

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

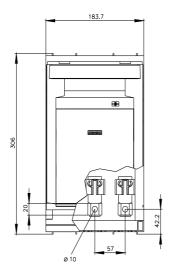
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1BC20

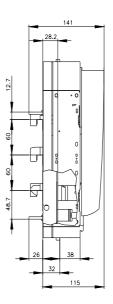
CAx-Online-Generator

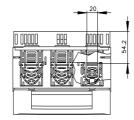
http://www.siemens.com/cax

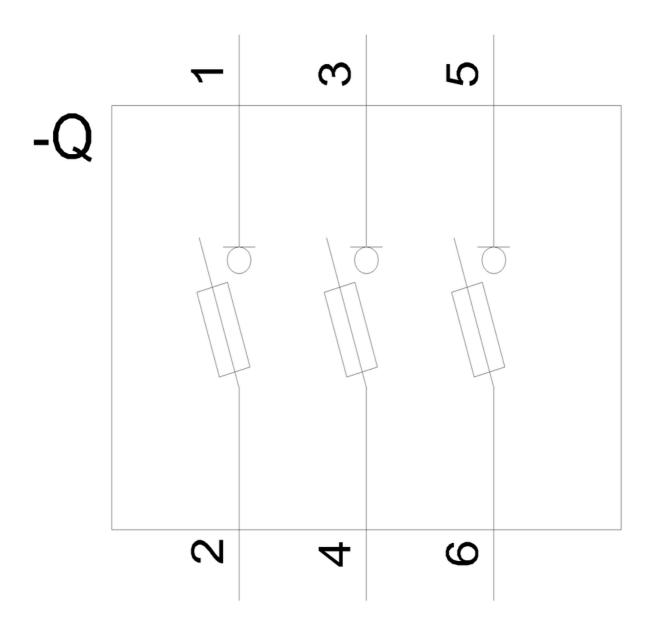
Tender specifications

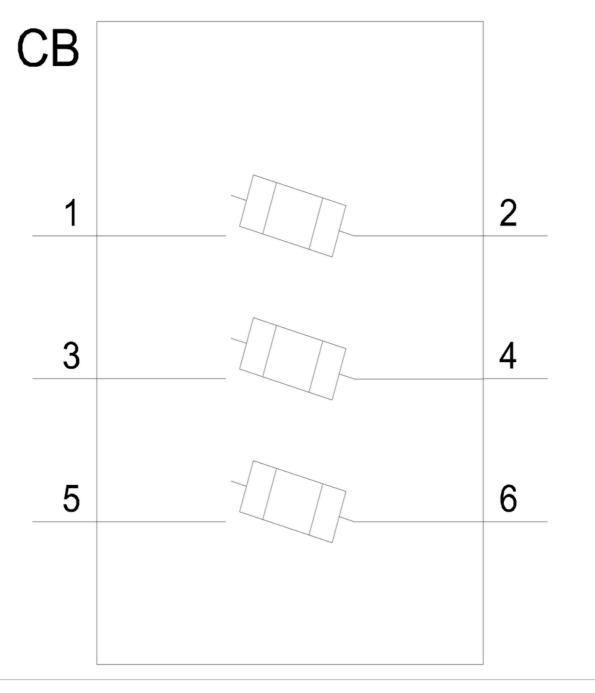
http://www.siemens.com/specifications











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