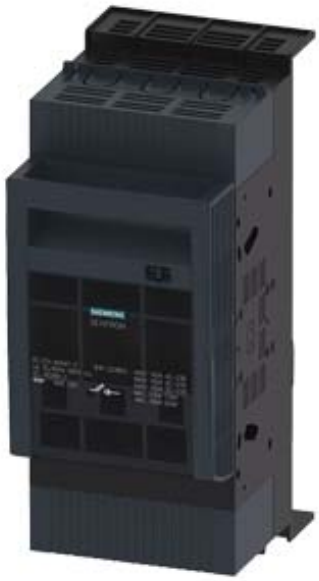
SIEMENS

Data sheet 3NP1123-1BB20

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH000, 160 A, for 8US busbar system 40 mm, box terminal, Cover level 32/70 mm



Model	
Product brand name	SENTRON
Product designation	3NP1 fuse switch disconnector
Design of the product	cover level 32/70 mm
Busbar design	busbar thickness 5 or 10 mm
Version of fuse monitoring	Without
Design of the operating mechanism	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 40 mm 8US busbar system
Size of disconnecting link	000
Size of fuse link	NH000
Continuous current / at 35 °C / rated value	160 A
Let-through current / with closed switch / maximum permissible	15 kA
cut-off value I**2t,max. / 500 V	223 000 A²·s
Power factor	

• at AC-22 B	0.65
• at AC-23 B	0.45
• with capacitive load	-0.25
circuit-breaker / Design	3NP11
Mechanical service life (switching cycles) / typical	2 000
Fuse system	LV HRC fuse

Voltage	
Insulation voltage / rated value	690 V
Power factor / at AC-21 B	0.95
Surge voltage resistance / rated value	8 kV

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
• on the front	IP40
• open	IP20

Dissipation	
Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	14 W

Electricity	
Continuous current	
• rated value	100 A
• at 40 °C / rated value	150 A
• at 45 °C / rated value	140 A
• at 50 °C / rated value	130 A
• at 55 °C / rated value	120 A
Let-through current / with high-speed activation / maximum permissible	10 kA
Let-through current / Ic / maximum permissible	
• 400 V	15 000 A
• 500V	15 000 A
cut-off value I**2t,max. / 400 V	166 000 A²·s

Main circuit	
Operating voltage	
• at AC / rated value / maximum	690 V
• at DC / rated value	440 V
• at DC / rated value / maximum	440 V
Operating current / with capacitive load	
• at 400 V / maximum	72 A

• at 500 V / maximum	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
• Phase failure monitoring	No
• undervoltage release	No
• undervoltage release with leading contact	No
Product feature / sealable	Yes
Product extension	
• Auxiliary switch	Yes
• 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 (Iq)	
• 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 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	
• single or multi-stranded / minimum	1.5 mm²
• single or multi-stranded / maximum	50 mm²
• finely stranded / with core end processing / minimum	1.5 mm²
• finely stranded / with core end processing / maximum	35 mm²
• stranded / minimum	1.5 mm²
• stranded / maximum	50 mm²
Tightening torque / with screw-type terminals	
• minimum	3.5 N·m
• maximum	4 N·m
Type of connectable conductor cross-sections / of the laminated conductors / maximum	8 x 8 mm
Type of electrical connection / for main current circuit	box terminal

Mechanical Design

Height	211.4 mm
Width	88.8 mm
Depth	127.6 mm
Mounting position	horizontal/vertical
Mounting type	busbar
Mounting type	
• floor mounting	No
• front mounting	No
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	Yes
Busbar center-to-center spacing	40 mm
Net weight	0.82 kg

Environmental conditions

Degree of pollution	3
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	55 °C

• during storage / minimum	-50 °C
• during storage / maximum	80 °C

Certificates

Reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval				Declaration of Conformity	Test Certificates
CCC	UR	VDE	Miscellaneous	EG-Konf.	Special Test Certificate

Test Certificates	Shipping Approval
Type Test Certificates/Test Report	LRS

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=3NP1123-1BB20

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3NP1123-1BB20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1123-1BB20

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications