SIEMENS

Data sheet 3NP1133-1BB23

SENTRON, Fuse switch disconnector 3NP1, 3-pole, NH00, 160 A, for Busbar system 8US 40 mm, Box terminal, Fuse monitoring: electronic EFM20, 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
Design of the safety monitoring	electronic EFM 20
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	00 and 000
Size of fuse link	NH000, NH00
Continuous 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	158 000 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
Electricity	
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 /	15 kA
maximum permissible	
Let-through current / Ic / maximum permissible	
• 400 V	23 000 A
• 500V	23 000 A
cut-off value I**2t,max. / 400 V	158 000 A²-s
Main circuit	
Operating voltage	
at AC / rated value / minimum	230 V
at AC / rated value / maximum	690 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

Suitability Suitability for use • Main switch • switch disconnector • safety switch • safety switch • safety switch • maintenance/repair switch Product details Product feature / interlock Product gature / interlock Product gature / interlock • Phase failure monitoring • Trip indicator • Phase failure monitoring • undervoltage release • undervoltage release • undervoltage release with leading contact • No Product setsmison • Auxiliary switch • optional — locking capability — motor drive — voltage trigger No Product function • fuse monitoring • fuse monitoring • (see monitoring) • (see	Number of NO contacts / for auxiliary contacts	0	
Suitability for use (Main switch disconnector (Switch disconnector (Sw	Suitability		
Main switch Switch disconnector Switch disconnector EMERGENCY OFF switch Safety safet			
EMERGENCY OFF switch safety s		No	
safety switch maintenance/repair switch Yes Product details Product feature / interlock Yes Product feature / interlock Yes Product component Trip indicator Phase failure monitoring Yes • undervoltage release No • undervoltage release with leading contact Product feature / sealable Product extension • Auxiliary switch • optional — locking capability — motor drive — Voltage trigger Product function Product function Product function Product function Product function Product function • fuse monitoring • Overvoltage protection monitoring • Overvoltage protection monitoring • at AC / at 500 V / with high-speed activation / rated value • at AC / at 500 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value	switch disconnector	Yes	
• maintenance/repair switch Product details Product feature / interlock Product component • Trip indicator • Phase failure monitoring • undervoltage release • undervoltage release with leading contact Product feature / sealable Product extension • Auxiliary switch • optional — locking capability — motor drive — Voltage trigger Product function Product function Product function Product function • Suse monitoring • Overvoltage protection monitoring Yes Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • with closed switch / at AC / at 690 V / rated value	EMERGENCY OFF switch	No	
Product details Product feature / interlock Product component • Trip indicator • Phase failure monitoring • Uses • undervoltage release • undervoltage release with leading contact Product feature / sealable Product extension • Auxiliary switch • optional — locking capability — motor drive — Voltage trigger No Product function Product function • fuse monitoring • fuse monitoring • Overvoltage protection monitoring Yes Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 500 V / with high-speed activation / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value	safety switch	Yes	
Product feature / interlock Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release undervoltage release undervoltage release very ses Product feature / sealable Product extension Auxiliary switch ves product extension Auxiliary switch ves product direction Product direction Ves Ves Ves Product function Product function Product function Product function Product function Product function Product function Auxiliary switch Ves Ves No Product function Product function Product function Auxiliary switch Ves No No Product function Product function Product function Auxiliary switch Ves No No Product function Product function Auxiliary switch Ves No No Product function 1	• maintenance/repair switch	Yes	
Product component Trip indicator Phase failure monitoring undervoltage release undervoltage release undervoltage release with leading contact Product feature / sealable Product extension Auxiliary switch optional locking capability motor drive Voltage trigger No Product function Product function Product function Product function Product function Product function Auxiliary switch So define a sea sea sea sea sea sea sea sea sea	Product details		
Trip indicator Phase failure monitoring Undervoltage release Undervoltage release Undervoltage release with leading contact Ves Undervoltage release with leading contact No Product feature / sealable Product extension Auxiliary switch Undervoltage protection Undervoltage release with leading contact Ves Product extension Auxiliary switch Undervoltage protection Undervoltage trigger Undervoltage trigger Undervoltage protection monitoring Ves Short circuit Conditional short-circuit current (Iq) Undervoltage activation / Farated value Undervoltage activation / Farated value Undervoltage witch / at AC / at 500 V / rated value Undervoltage witch / at AC / at 690 V / rated value Undervoltage witch / at AC / at 690 V / rated value Undervoltage witch / at AC / at 690 V / rated value Undervoltage witch / at AC / at 690 V / rated value Undervoltage value Undervolta	Product feature / interlock	Yes	
Phase failure monitoring undervoltage release undervoltage release with leading contact No Product feature / sealable Product extension Auxiliary switch optional Locking capability Solution Ves No Voltage trigger No Product function Product function Product function Product function Four direction Outproduct function Product function Four direction Outproduct function In the monitoring Outproduct function Short circuit Conditional short-circuit current (Iq) In at AC / at 500 V / with high-speed activation / rated value In at AC / at 690 V / with high-speed activation / rated value With closed switch / at AC / at 690 V / rated value With closed switch / at AC / at 690 V / rated value With closed switch / at AC / at 690 V / rated value With closed switch / at AC / at 690 V / rated value With closed switch / at AC / at 690 V / rated value With closed switch / at AC / at 690 V / rated value With closed switch / at AC / at 690 V / rated value Outproductions Arrangement of electrical connectors / for main other	Product component		
undervoltage release undervoltage release with leading contact No Product feature / sealable Yes Product extension Auxiliary switch optional Locking capability Sea Toologe frager No Product function Product function Product function Product function Product function Short circuit Conditional short-circuit current (Iq) rated value at AC / at 500 V / with high-speed activation / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value Oconnections Arrangement of electrical connectors / for main other	Trip indicator	Yes	
undervoltage release with leading contact Product feature / sealable Product extension Auxiliary switch optional locking capability motor drive Ves No Product function Product function Product function fuse monitoring overvoltage protection monitoring Short circuit Conditional short-circuit current (Iq) rated value at AC / at 500 V / with high-speed activation / rated value with closed switch / at AC / at 500 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value overvoltage release with leading contact Ves No Product function Yes Short Connections Arrangement of electrical connectors / for main other	 Phase failure monitoring 	Yes	
Product feature / sealable Product extension • Auxiliary switch • optional — locking capability — motor drive — Voltage trigger No Product function Product function • fuse monitoring • Overvoltage protection monitoring Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value	 undervoltage release 	No	
Product extension Auxiliary switch optional - locking capability - motor drive - Voltage trigger No Product function Product function Product function • fuse monitoring • Overvoltage protection monitoring Yes Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value	 undervoltage release with leading contact 	No	
Auxiliary switch optional locking capability motor drive No Voltage trigger No Product function Product function fuse monitoring Overvoltage protection monitoring Short circuit Conditional short-circuit current (lq) rated value at AC / at 500 V / with high-speed activation / rated value at AC / at 690 V / with high-speed activation / rated value with closed switch / at AC / at 500 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value owith closed switch / at AC / at 690 V / rated value	Product feature / sealable	Yes	
optional — locking capability — motor drive — Woltage trigger Product function Product function • fuse monitoring • Overvoltage protection monitoring Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value	Product extension		
locking capability	 Auxiliary switch 	Yes	
— motor drive — Voltage trigger Product function Product function • fuse monitoring • fuse monitoring • Overvoltage protection monitoring Yes Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value	optional		
Product function Product function • fuse monitoring • Overvoltage protection monitoring Yes Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value	— locking capability	Yes	
Product function • fuse monitoring • fuse monitoring • Overvoltage protection monitoring Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value	— motor drive	No	
Product function • fuse monitoring • Overvoltage protection monitoring Short circuit Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other	— Voltage trigger	No	
fuse monitoring Overvoltage protection monitoring Short circuit Conditional short-circuit current (Iq) rated value at AC / at 500 V / with high-speed activation / rated value at AC / at 690 V / with high-speed activation / rated value with closed switch / at AC / at 500 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other			
Overvoltage protection monitoring Short circuit Conditional short-circuit current (Iq) rated value at AC / at 500 V / with high-speed activation / rated value at AC / at 690 V / with high-speed activation / rated value with closed switch / at AC / at 500 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other	Product function		
Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main	fuse monitoring	Yes	
Conditional short-circuit current (Iq) • rated value • at AC / at 500 V / with high-speed activation / 80 kA rated value • at AC / at 690 V / with high-speed activation / 80 kA rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other	 Overvoltage protection monitoring 	Yes	
rated value at AC / at 500 V / with high-speed activation / rated value at AC / at 690 V / with high-speed activation / rated value with closed switch / at AC / at 500 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other			
at AC / at 500 V / with high-speed activation / rated value at AC / at 690 V / with high-speed activation / rated value with closed switch / at AC / at 500 V / rated value with closed switch / at AC / at 690 V / rated value with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other			
rated value • at AC / at 690 V / with high-speed activation / rated value • with closed switch / at AC / at 500 V / rated value • with closed switch / at AC / at 690 V / rated value • with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other			
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value • with closed switch / at AC / at 690 V / rated value Connections Arrangement of electrical connectors / for main other		80 kA	
Connections Arrangement of electrical connectors / for main other		120 kA	
Arrangement of electrical connectors / for main other		120 kA	
Arrangement of electrical connectors / for main other	Connections		
	Arrangement of electrical connectors / for main	other	

Connectable conductor cross-section / for main contacts	
single or multi-stranded / minimum	6 mm²
single or multi-stranded / maximum	70 mm²
finely stranded / with core end processing /	6 mm²
minimum	
• finely stranded / with core end processing /	50 mm²
maximum	
• stranded / minimum	6 mm²
• stranded / maximum	70 mm ²
Tightening torque / with screw-type terminals	
• minimum	10 N·m
• maximum	10 N·m
Type of electrical connection / for main current circuit	box terminal
Mechanical Design	
Height	210.4 mm
Width	105.8 mm
Depth	177.2 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	1.12 kg
Environmental conditions	
Degree of pollution	2
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







Miscellaneous



Type Test Certificates/Test Report

Shipping Approval



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=3NP1133-1BB23

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

https://support.industry.siemens.com/cs/ww/en/ps/3NP1133-1BB23

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1133-1BB23

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications









