SIEMENS

Data sheet

3NP1143-1DA11

SENTRON, fuse switch disconnector 3NP1, 3-pole, NH1, 250 A, for assembly and installation on mounting plate, Flachanschluss, Fuse monitoring: electromechanical, cover level 70mm



Model	
product brandname	SENTRON
Product designation	3NP1 fuse switch disconnector
Design of the product	cover level 70 mm
Design of the safety monitoring	electro mechanical
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 assembly and installation on mounting plate
Size of disconnecting link	1 and 0
Size of fuse link	NH0, NH1
Continuous current / at 35 °C / rated value	250 A
Let-through current / with closed switch / maximum permissible	32 kA
cut-off value I**2t,max. / 500 V	780 000 A ² ·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	1 600
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	7.66 W
operating state / per pole	00.144
• maximum	23 W
Electricity	
Continuous current	
• 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
Let-through current / with high-speed activation / maximum permissible	25 kA
Let-through current / Ic / maximum permissible	
• 400 V	32 000 A
• 500V	32 000 A
cut-off value I**2t,max. / 400 V	780 000 A ^{2.} s
Main circuit	
Operating voltage	
• at AC / rated value / minimum	24 V
 at AC / rated value / maximum 	690 V
• at DC / rated value	250 V
• at DC / rated value / minimum	24 V

Operating current / with capacitive load 72 A • at 400 V / maximum 55 A • at 500 V / maximum 55 A 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 • Trip indicator Yes • Phase failure monitoring No • undervoltage release No • undervoltage release with leading contact No Product desture / sealable Yes Product systich Yes • optional - - locking capability Yes • optional - - locking capability Yes • Overvoltage protection monitoring Yes • Voltage trigger No • Overvoltage protection monitoring Yes	 at DC / rated value / maximum 	250 V
• at 400 V / maximum 72 Å • at 500 V / maximum 55 Å Sultability 55 Å Sultability for use No • Main switch No • switch disconnector Yes • EMERGENCY OFF switch No • safety switch Yes • maintenance/repair switch Yes Product details Yes Product faature / interlock Yes Product details Yes • Phase failure monitoring No • undervoltage release No • undervoltage release with leading contact No • Product faature / seatable Yes Product setension Yes • optional - • looking capability Yes • optional - • optional Yes • optoralure rolitoring Yes • optoral - • optoral Yes • optoroltage protection monitoring Y		
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Suitability for use No • Main switch No • switch disconnector Yes • EMERGENCY OFF switch No • safety switch Yes • maintenance/repair switch Yes Product details Yes Product component Yes • Trip indicator Yes • Phase failure monitoring No • undervoltage release No • undervoltage release with leading contact No Product feature / sealable Yes Product setension Yes • optional Yes - locking capability Yes - motor drive No - Phase failure monitoring Yes - overvoltage protection monitoring Yes - Overvoltage protection monitoring Yes - Overvoltage protection monitoring Yes	● at 500 V / maximum	55 A
Suitability for use No • Main switch No • switch disconnector Yes • EMERGENCY OFF switch No • safety switch Yes • maintenance/repair switch Yes Product details Yes Product component Yes • Trip indicator Yes • Phase failure monitoring No • undervoltage release No • undervoltage release with leading contact No Product feature / sealable Yes Product setension Yes • optional Yes - locking capability Yes - motor drive No - Phase failure monitoring Yes - overvoltage protection monitoring Yes - Overvoltage protection monitoring Yes - Overvoltage protection monitoring Yes		
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Product details Product feature / interlock Yes Product component - • Trip indicator Yes • Phase failure monitoring No • undervoltage release No • undervoltage release with leading contact No Product feature / sealable Yes Product extension Yes • Auxiliary switch Yes • optional - - locking capability Yes - motor drive No - Voltage trigger No - Overvoltage protection monitoring Yes	 safety switch 	Yes
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• undervoltage release with leading contact No Product feature / sealable Yes Product extension Yes • Auxiliary switch Yes • optional - — locking capability Yes — motor drive No — Phase failure monitoring Yes — Voltage trigger No — Overvoltage protection monitoring Yes	 Phase failure monitoring 	No
Product feature / sealable Yes Product extension Yes • Auxiliary switch Yes • optional Yes - locking capability Yes - motor drive No - Phase failure monitoring Yes - Overvoltage protection monitoring Yes	undervoltage release	No
Product extension Yes • Auxiliary switch Yes • optional Yes - locking capability Yes - motor drive No - Phase failure monitoring Yes - Voltage trigger No - Overvoltage protection monitoring Yes Product function Yes • fuse monitoring Yes	 undervoltage release with leading contact 	No
• Auxiliary switchYes• optional- locking capabilityYes- motor driveNo- Phase failure monitoringYes- Voltage triggerNo- Overvoltage protection monitoringYesProduct functionYesProduct function• fuse monitoringYes	Product feature / sealable	Yes
• optional- locking capability- locking capabilityYes- motor driveNo- Phase failure monitoringYes- Voltage triggerNo- Overvoltage protection monitoringYesProduct functionYes• fuse monitoringYes	Product extension	
- locking capabilityYes- motor driveNo- Phase failure monitoringYes- Voltage triggerNo- Overvoltage protection monitoringYesProduct functionYes• fuse monitoringYes	Auxiliary switch	Yes
motor drive No Phase failure monitoring Yes Voltage trigger No Overvoltage protection monitoring Yes	optional	
motor driveNo Phase failure monitoringYes Voltage triggerNo Overvoltage protection monitoringYesProduct function• fuse monitoringYes	— locking capability	Yes
Voltage trigger No Overvoltage protection monitoring Yes Product function • fuse monitoring Yes	— motor drive	No
	— Phase failure monitoring	Yes
— Overvoltage protection monitoring Yes Product function Yes • fuse monitoring Yes	— Voltage trigger	No
Product function Yes		Yes
Product function Yes	Draduct function	
• fuse monitoring Yes		
		Yes
	Overvoltage protection monitoring	No
	· · ·	
Short circuit		
Conditional short-circuit current (Iq)		
rated value 80 kA		
• at AC / at 500 V / with high-speed activation / 80 kA rated value		80 kA
• at AC / at 690 V / with high-speed activation / 50 kA rated value		50 kA
• with closed switch / at AC / at 500 V / rated 120 kA value		120 kA

• with closed switch / at AC / at 690 V / rated value

Connections	
Arrangement of electrical connectors / for main	other
current circuit	
Connectable conductor cross-section / for main	
contacts	
 single or multi-stranded / minimum 	16 mm ²
 single or multi-stranded / maximum 	150 mm ²
 stranded / minimum 	16 mm ²
 stranded / maximum 	150 mm ²
Tightening torque / with screw-type terminals	
• minimum	10 N·m
• maximum	12 N·m
Type of electrical connection / for main current circuit	busbar connection
Mechanical Design	

Height	306 mm	
Width	183.7 mm	
Depth	192.8 mm	
Mounting position	horizontal/vertical	
Mounting type	mounting plate	
Mounting type		
 floor mounting 	Yes	
• front mounting	No	
 front mounting with 4-hole attachment 	No	
 front mounting with central attachment 	No	
• rail mounting	No	
Net weight	2.63 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	
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Prod	uct Approval	Declaration of Conformity	Test Certificates	Shipping Approval
		EG-Konf.	Typprüfbescheinigu ng/Werkszeugnis	Lloyd's Register LRS

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=3NP1143-1DA11

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3NP1143-1DA11/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3NP1143-1DA11

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







