# **SIEMENS**

### Data sheet

### 3VA2010-7JQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 100 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU560, LSIG, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 100%) GROUNDFAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,050,8MS BUSBAR CONNECTION

Model		
product brand name	SEI	NTRON
Product designation	Mol	lded case circuit breaker
Design of the product	Line	e protection
Product variations	Sel	ective Applications
Ground fault monitoring version	Sur	mmation current formation L + N conductor
Design of the auxiliary release	with	nout auxiliaryrelease
Design of the auxiliary switch	Wit	hout
Design of the operating mechanism	tog	gle handle
Type of the driving mechanism / motor drive	No	
Design of the overcurrent release	ETI	U560

General technical data		
Number of poles		4
Trip class / of the L-trip / with I2t characteristic / initial value		0.5
Trip class / of the L-trip / with I2t characteristic / Full-scale value		25
Electrical endurance (switching cycles)		
● at AC-1 / at 380/415 V / at 50/60 Hz		12 000
Total disconnection time / for G-tripping / with standard characteristic / initial value	S	0.05
Total disconnection time / for G-tripping / with standard characteristic / Full-scale value	S	0.8
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		20 000

Voltage				
Insulation voltage / Rated value	V	800		
Duesto stiem store				
Protection class IP		IP40		
Protection class IP / on the front		IP40		
Protective function of the overcurrent release		LSIG		
Switching capacity Switching capacity class of the circuit breaker		C		
Switching capacity class of the circuit breaker		C		
Dissipation				
Active power loss				
• maximum	W	13.5		
Electricity				
Continuous current / Rated value / maximum	Α	100		
Continuous current / Rated value	Α	100		
Adjustable response value current / of the	Α	1.5		
instantaneous short-circuit release / initial value				
Main circuit				
Operating voltage				
• with AC / at 50/60 Hz / Rated value	V	690		
Operating current				
• at 40 °C / Rated value	Α	100		
• at 50 °C / Rated value	Α	100		
• at 60 °C / Rated value	Α	100		
• at 65 °C / Rated value	Α	100		
• at 70 °C / Rated value	Α	100		
Auxiliary circuit				
Number of NC contacts / for auxiliary contacts		0		
Number of NO contacts / for auxiliary contacts		0		
Suitability				
Suitability for use		system protection		
Adjustable parameters				
Adjustable response value current				
for G-tripping / with I2t characteristic / initial	Α	0.2		
value				
• for G-tripping / with I2t characteristic / Full-scale	Α	1		
value				
• for G-tripping / with standard characteristic /	Α	0.2		
initial value				
for G-tripping / with standard characteristic /	Α	1		
Full-scale value				

● of I-trip / Full-scale value	Α	12
<ul> <li>of the short-time delayed short-circuit release / initial value</li> </ul>	Α	0.6
<ul> <li>of the short-time delayed short-circuit release / Full-scale value</li> </ul>	Α	10
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	Α	0.6
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	Α	10
Adjustable delay time		
<ul> <li>for G-tripping / with I2t characteristic / initial value</li> </ul>	S	0.05
<ul> <li>for G-tripping / with I2t characteristic / Full-scale value</li> </ul>	S	0.8
• of S-trip / with I2t characteristic / initial value	s	0.05
<ul> <li>of S-trip / with I2t characteristic / Full-scale value</li> </ul>	S	0.5
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	S	0.05
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	S	0.5
Adjustable response value current / of the current- dependent overload release / initial value	Α	0.4
Product details		
Product component		
Trip indicator		No
• display		Yes
undervoltage release		No
Product property		
<ul> <li>of the circuit breaker with tripping unit / Tripping characteristic adjustable</li> </ul>		Yes
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof</li> </ul>		No
Product expansion / optional / motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		Yes

Accessories

• Phase failure detection

• other measurement function

No No

Manufacturer article number / of the supplied basic switch		3VA2010-7JQ42-0AA0
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
at 240 V / Rated value	kA	150
at 415 V / Rated value	kA	110
at 440 V / Rated value	kA	110
at 500 V / Rated value	kA	85
• at 690 V / Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	150
• at 415 V / Rated value	kA	110
• at 440 V / Rated value	kA	110
• at 500 V / Rated value	kA	85
• at 690 V / Rated value	kA	2
Short-circuit current making capacity (lcm)		
• at 240 V / Rated value	kA	330
• at 415 V / Rated value	kA	242
• at 440 V / Rated value	kA	242
• at 500 V / Rated value	kA	187
• at 690 V / Rated value	kA	3
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		404
• for flat-bar terminal connection / minimum		13 x 1 mm
• for flat-bar terminal connection / maximum		25 x 8.5
Type of electrical connection / for main current circuit		Lug terminal
Mechanical Design		
Height	mm	181
Width	mm	140
Depth  Mounting type	mm	107 fixed mounting
		inco mounting
Environmental conditions		
Ambient temperature	°C	-25
during operation / minimum	°C	-25 70
during operation / maximum	°C	-40
during storage / minimum	°C	-40 80
during storage / maximum		00

#### Certificates **Equipment marking** • acc. to DIN EN 61346-2 Q Q • acc. to DIN EN 81346-2 **General Product Approval EMC Declaration of Shipping** Conformity **Approval** other

**Shipping** other **Approval** 



other

GL

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA20107JQ420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA20107JQ420AA0/all

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

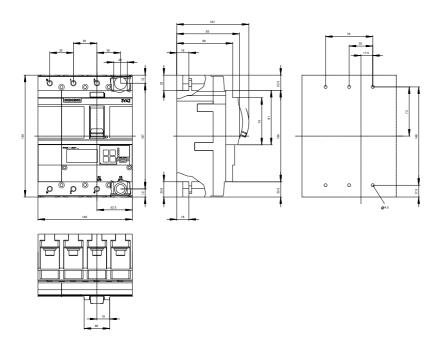
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA20107JQ420AA0

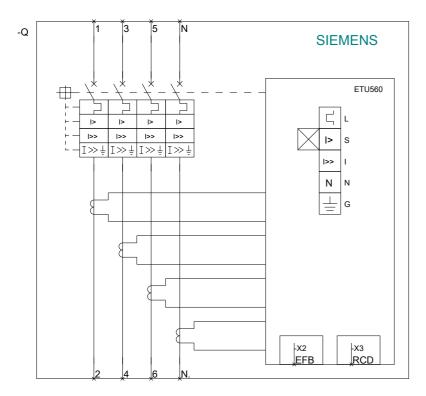
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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