# **SIEMENS**

## Data sheet

## 3VA2140-7JP42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU550, LSI, IN=40A OVERLOAD PROTECTION IR=16A ...40A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 160%) BUSBAR CONNECTION

Model	
product brand name	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Product variations	Selective Applications
Ground fault monitoring version	Without
Design of the auxiliary release	without auxiliaryrelease
Design of the auxiliary switch	Without
Design of the operating mechanism	toggle handle
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU550
General technical data	
Number of poles	4

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
circuit-breaker / Design	3VA
Mechanical service life (switching cycles) / typical	20 000

Voltage		
Insulation voltage / Rated value	V	800

#### Protection class

Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LSI
Switching capacity		
Switching capacity class of the circuit breaker		С
D: 1.0		
Dissipation Active power loss		
• maximum	W	1.6
- maximum		
Electricity		
Continuous current / Rated value / maximum	Α	160
Continuous current / Rated value	Α	40
Adjustable response value current / of the instantaneous short-circuit release / initial value	Α	1.5
instantaneous short-circuit release / linital value		
Main circuit		
Operating voltage		
• with AC / at 50/60 Hz / Rated value	V	690
Operating current		
• at 40 °C / Rated value	Α	40
• at 50 °C / Rated value	Α	40
• at 60 °C / Rated value	Α	40
• at 65 °C / Rated value	Α	40
● at 70 °C / Rated value	Α	40
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		
of I-trip / Full-scale value	Α	12
of the short-time delayed short-circuit release /	A	0.6
initial value		
of the short-time delayed short-circuit release / Full-scale value	Α	10
of S-trip / with standard characteristic / initial value	Α	0.6
of S-trip / with standard characteristic / Full-scale value	Α	10
Adjustable delay time		
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
of S-trip / with standard characteristic / initial value	S	0.05
of S-trip / with standard characteristic / Full- scale value	s	0.5
Adjustable response value current / of the current-	A	0.4
dependent overload release / initial value		
Product details		
Product component		
Trip indicator		No
• display		Yes
undervoltage release		No
Product property		
• for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and		
overload proof  Product expansion / optional / motor drive		Yes
1 Toduct expansion / Optional / motor drive		165
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		Yes
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic switch		3VA2140-7JP42-0AA0
Short circuit		
Short circuit  Operational short-circuit current breaking capacity		
Short circuit Operational short-circuit current breaking capacity (Ics)		
Operational short-circuit current breaking capacity	kA	150
Operational short-circuit current breaking capacity (Ics)	kA kA	150 110
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value		
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value  • at 415 V / Rated value	kA	110
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value	kA kA	110 110
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value  • at 415 V / Rated value  • at 440 V / Rated value  • at 500 V / Rated value	kA kA kA	110 110 85
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value  • at 415 V / Rated value  • at 440 V / Rated value  • at 500 V / Rated value  • at 690 V / Rated value	kA kA kA	110 110 85
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value • at 500 V / Rated value • at 690 V / Rated value  Maximum short-circuit current breaking capacity (Icu)	kA kA kA kA	110 110 85 2.5
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value • at 500 V / Rated value • at 690 V / Rated value  Maximum short-circuit current breaking capacity (Icu) • at 240 V / Rated value	kA kA kA kA	110 110 85 2.5
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value • at 500 V / Rated value • at 690 V / Rated value  Maximum short-circuit current breaking capacity (Icu) • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value • at 440 V / Rated value	kA kA kA kA	110 110 85 2.5 150 110
Operational short-circuit current breaking capacity (Ics)  • at 240 V / Rated value • at 415 V / Rated value • at 440 V / Rated value • at 500 V / Rated value • at 690 V / Rated value  Maximum short-circuit current breaking capacity (Icu) • at 240 V / Rated value • at 415 V / Rated value	kA kA kA kA kA	110 110 85 2.5 150 110

<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> <li>kA</li> <li>3.75</li> </ul>	• at 240 V / Rated value	kA	330
• at 500 V / Rated value kA 187	• at 415 V / Rated value	kA	242
	• at 440 V / Rated value	kA	242
at 690 V / Rated value	• at 500 V / Rated value	kA	187
	• at 690 V / Rated value	kA	3.75

Connections	
Arrangement of electrical connectors / for main current circuit	Front terminal
Type of connectable conductor cross-section	
• 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	mm	107
Mounting type		fixed mounting

Environmental conditions		
Ambient temperature		
<ul><li>during operation / minimum</li></ul>	°C	-25
<ul><li>during operation / maximum</li></ul>	°C	70
• during storage / minimum	°C	-40
<ul><li>during storage / maximum</li></ul>	°C	80

Certificates		
Equipment marking		
• acc. to DIN EN 61346-2	Q	
• acc. to DIN EN 81346-2	Q	

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)
<a href="https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21407JP420AA0">https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21407JP420AA0</a>

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

http://support.automation.siemens.com/WW/view/en/3VA21407JP420AA0/all

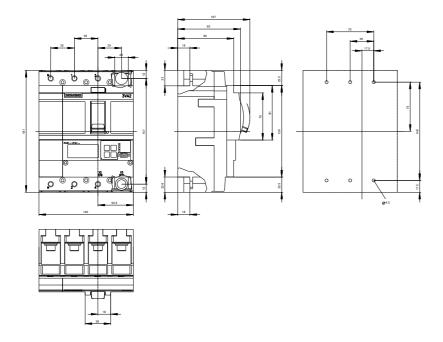
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21407JP420AA0

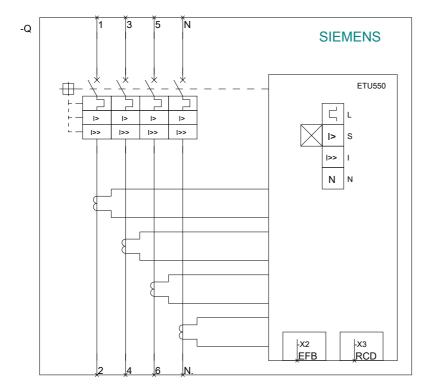
## **CAx-Online-Generator**

http://www.siemens.com/cax

#### **Tender specifications**

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015