## **SIEMENS**

## Data sheet

## 3VA2110-7HM42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU330, LIG, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION II=1,5...12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,50%,100%) GROUNDFAULTPROTECTION IG=0,2... 1 X IN, TG=0,1/0,3MS 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	Summation current formation L + N conductor
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	ETU330

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		17		
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	0.1		
Total disconnection time / for G-tripping / with standard characteristic / Full-scale value	S	0.3		
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		LIG
		1
Switching capacity		
Switching capacity class of the circuit breaker		С
Dissipation		
Active power loss		
• maximum	W	10
Electricity		
Continuous current / Rated value / maximum	A	160
Continuous current / Rated value	A	100
Adjustable response value current / of the	Α	1.5
instantaneous short-circuit release / initial value		
A4		
Main circuit Operating voltage		
with AC / at 50/60 Hz / Rated value	V	690
Operating current		000
• at 40 °C / Rated value	Α	100
	A	100
• at 50 °C / Rated value		
• at 60 °C / Rated value	A	100
● at 65 °C / Rated value	A	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	۸	0.2
<ul> <li>for G-tripping / with standard characteristic / initial value</li> </ul>	Α	0.2
<ul> <li>for G-tripping / with standard characteristic / Full-scale value</li> </ul>	Α	1
• of I-trip / Full-scale value	Α	12
Adjustable response value current / of the current- dependent overload release / initial value	А	0.4
,		

Product details		
Product component		
Trip indicator		No
• display		No
undervoltage release		No
Product property	_	
• of the circuit breaker with tripping unit / Tripping		Yes
characteristic adjustable		
• for neutral conductors /		No
upgradeable/retrofittable / Short-circuit and overload proof		
Product expansion / optional / motor drive		Yes
Troduct expansion / optional / motor drive		163
Product function		
Product function		
Intrinsic device protection		Yes
communication function		No
Phase failure detection		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Short circuit		
Operational short-circuit current breaking capacity		
(Ics)	kA	150
• at 240 V / Rated value	kA	110
at 415 V / Rated value	kA	110
at 440 V / Rated value     at 500 V / Rated value	kA	85
<ul><li>at 500 V / Rated value</li><li>at 690 V / Rated value</li></ul>	kA	2.5
Maximum short-circuit current breaking capacity (Icu)	- 10-1	2.0
• 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      at 690 V / Rated value	kA	2.5
Short-circuit current making capacity (Icm)	10.1	
at 240 V / Rated value	kA	330
at 415 V / Rated value		
· at Tio v / Italica value	KA	242
	kA kA	242
• at 440 V / Rated value	kA	242

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		
<ul><li>during storage / minimum</li></ul>	°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 Prod	uct Approval	EMC	Declaration of Conformity	other
	^	 other		other







## 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/3VA21107HM420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21107HM420AA0/all

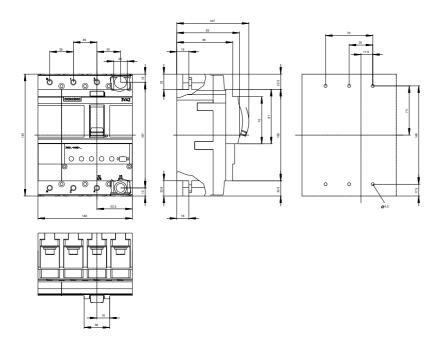
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21107HM420AA0

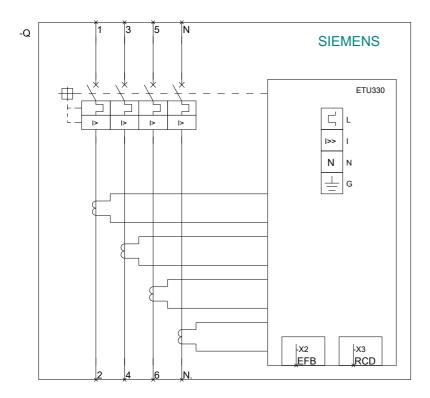
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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