# **SIEMENS**

#### Data sheet

### 3VA2216-7HM42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 250 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU330, LIG, IN=160A OVERLOAD PROTECTION IR=64A ...160A 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		10 000
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
Switching capacity		
Switching capacity class of the circuit breaker		C
Dissipation		
Active power loss		
● maximum	W	19.7
Electricity		
Continuous current / Rated value / maximum	A	250
Continuous current / Rated value	A	160
Adjustable response value current / of the	A	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	А	160
• at 50 °C / Rated value	А	160
• at 60 °C / Rated value	А	160
• at 65 °C / Rated value	А	160
• at 70 °C / Rated value	А	160
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		
<ul> <li>for G-tripping / with standard characteristic / initial value</li> </ul>	А	0.2
<ul> <li>for G-tripping / with standard characteristic / Full-scale value</li> </ul>	А	1
• of I-trip / Full-scale value	А	12
Adjustable response value current / of the current- dependent overload release / initial value	А	0.394
acpendent ovendau reiease / initial value		

Product details		
Product component		
Trip indicator		No
• display		No
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>		No
<ul> <li>Phase failure detection</li> </ul>		No
<ul> <li>other measurement function</li> </ul>		No
Accessories	_	
Manufacturer article number / of the supplied basic	_	3VA2216-7HM42-0AA0
Short circuit Operational short-circuit current breaking capacity		
(lcs)		
• 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	3
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	3
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	330
• at 415 V / Rated value	kA	242
● at 440 V / Rated value	kA	242
	ĿΛ	407
<ul> <li>at 500 V / Rated value</li> </ul>	kA	187
<ul> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul>	кА kA	4.5

<ul><li>Equipment marking</li><li>acc. to DIN EN 61346-2</li><li>acc. to DIN EN 81346-2</li></ul>		Q				
Certificates	-	_				
	U	00				
<ul> <li>during storage / minimum</li> <li>during storage / maximum</li> </ul>	°C		80			
during operation / maximum	°C °C		70 -40			
during operation / minimum	°C	-25				
Ambient temperature						
Environmental conditions	-					
Mounting type		fixed moun	fixed mounting			
Depth	mm	107				
Width	mm	140	140			
Height	mm	181				
Mechanical Design						
Type of electrical connection / for main current circuit		Lug termin	Lug terminal			
• for flat-bar terminal connection / maximum		25 x 8.5	25 x 8.5			
• for flat-bar terminal connection / minimum		13 x 1 mm				
Type of connectable conductor cross-section	-					
current circuit		Front termi				

#### 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/3VA22167HM420AA0

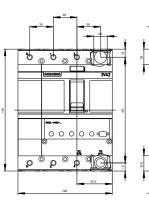
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA22167HM420AA0/all

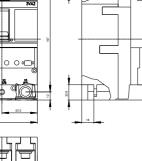
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA22167HM420AA0

CAx-Online-Generator http://www.siemens.com/cax

## Tender specifications

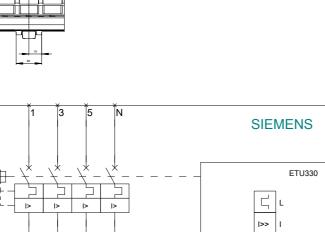
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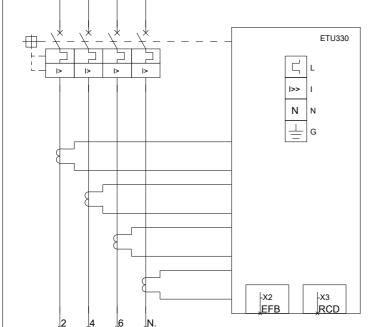




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