# **SIEMENS**

### Data sheet

# 3VA2225-7HM42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 250 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU330, LIG, IN=250A OVERLOAD PROTECTION IR=100A ...250A SHORT CIRCUIT PROTECTION II=1,5...10 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	_	<u>^</u>
Switching capacity class of the circuit breaker		C
Dissipation		
Active power loss		
• maximum	W	48
Electricity		
Continuous current / Rated value / maximum	A	250
Continuous current / Rated value	A	250
Adjustable response value current / of the	А	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	250
● at 50 °C / Rated value	А	250
● at 60 °C / Rated value	А	250
● at 65 °C / Rated value	А	250
● at 70 °C / Rated value	А	250
	_	
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>	A	0.2
<ul> <li>for G-tripping / with standard characteristic / Full-scale value</li> </ul>	A	1
• of I-trip / Full-scale value	А	10
Adjustable response value current / of the current- dependent overload release / initial value	A	0.4

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
communication function		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	_	3VA2225-7HM42-0AA0
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
• at 500 V / Rated value	kA	187
<ul> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul>	kA kA	187 4.5

Connections					
Arrangement of electrical connectors / for main		Front termin	nal		
current circuit					
Type of connectable conductor cross-section					
<ul> <li>for flat-bar terminal connection / minimum</li> </ul>		13 x 1 mm	13 x 1 mm		
<ul> <li>for flat-bar terminal connection / maximum</li> </ul>		25 x 8.5	25 x 8.5		
Type of electrical connection / for main current circuit		Lug termina	Lug terminal		
Mechanical Design					
Height	mm	181			
Width	mm	140	140		
Depth	mm	107	107		
Mounting type		fixed mount	fixed mounting		
Environmental conditions					
Ambient temperature					
<ul> <li>during operation / minimum</li> </ul>	°C	-25	-25		
<ul> <li>during operation / maximum</li> </ul>	°C	70	70		
<ul> <li>during storage / minimum</li> </ul>	°C	-40	-40		
<ul> <li>during storage / maximum</li> </ul>	°C	80	80		
Certificates					
Equipment marking					
• acc. to DIN EN 61346-2		Q			
• acc. to DIN EN 81346-2		Q			
General Product Approval		EMC	Declaration of	other	
			Conformity		
С ЛА ГПГ		other	"	other	
			して		
			EG-Konf.		

#### 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/3VA22257HM420AA0

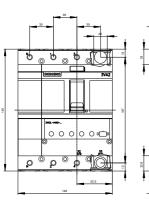
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA22257HM420AA0/all

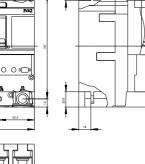
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA22257HM420AA0

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

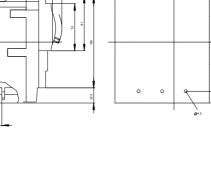
## Tender specifications

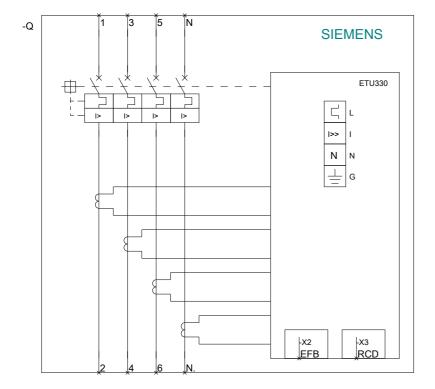
http://ausschreibungstexte.siemens.com/tiplv











last modified:

11.03.2015