## **SIEMENS**

## Data sheet

## 3VA2225-5HM42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 250 BREAKING CAPACITY CLASS M ICU=55KA @ 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
Drotaction class		
Protection class Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LIG
. 101001110 1111011011 01 1110 010 10111111		
Switching capacity		
Switching capacity class of the circuit breaker		M
Dissipation		
Active power loss		
• maximum	W	48
Floatricity		
Electricity  Continuous current / Rated value / maximum	A	250
Continuous current / Rated value	A	250
Adjustable response value current / of the		1.5
instantaneous short-circuit release / initial value	, ,	
Main circuit		
Operating voltage	V	000
• with AC / at 50/60 Hz / Rated value	V	690
Operating current	•	0.50
• at 40 °C / Rated value	A	250
● at 50 °C / Rated value	Α	250
• at 60 °C / Rated value	Α	250
● at 65 °C / Rated value	Α	250
• at 70 °C / Rated value	Α	250
Auxiliary circuit		
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
0.75.177		
Suitability Suitability for use		system protection
Cultability for use		System protection
Adjustable parameters		
Adjustable response value current		
<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	10
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	85
at 240 V / Rated value	kA	55
at 415 V / Rated value	kA	55
at 440 V / Rated value     at 500 V / Rated value	kA	36
<ul><li>at 500 V / Rated value</li><li>at 690 V / Rated value</li></ul>	kA	3
Maximum short-circuit current breaking capacity (Icu)	- 10-1	
• at 240 V / Rated value	kA	85
at 415 V / Rated value	kA	55
at 440 V / Rated value	kA	55
at 500 V / Rated value	kA	36
• at 690 V / Rated value		
at 690 V / Rated value  Short-circuit current making capacity (Icm)	kA	3
Short-circuit current making capacity (lcm)	kA	3
Short-circuit current making capacity (lcm)  • at 240 V / Rated value	kA kA	3 187
Short-circuit current making capacity (Icm)  • at 240 V / Rated value  • at 415 V / Rated value	kA kA kA	3 187 121
Short-circuit current making capacity (Icm)  • at 240 V / Rated value  • at 415 V / Rated value  • at 440 V / Rated value	kA kA kA	3 187 121 121
Short-circuit current making capacity (Icm)  • at 240 V / Rated value  • at 415 V / Rated value	kA kA kA	3 187 121

Connections			
Front terminal			
13 x 1 mm			
25 x 8.5			
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 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/3VA22255HM420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA22255HM420AA0/all

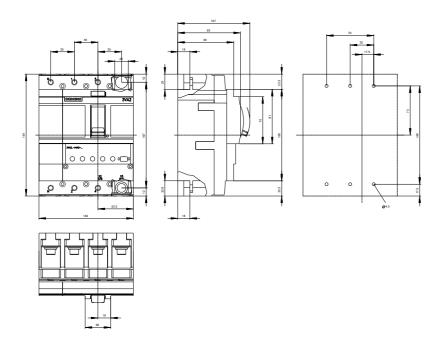
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA22255HM420AA0

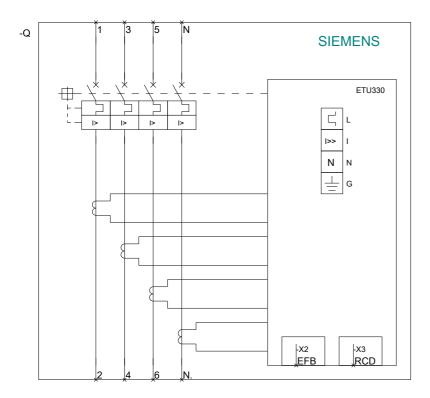
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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