# **SIEMENS**

## Data sheet

# 3VA2225-5KP42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 250 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4POLE, LINE PROTECTION ETU850, LSI, IN=250A OVERLOAD PROTECTION IR=100A ...250A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..10X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 100%) 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		ETU850
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		10 000
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		Μ
Dissipation		
Active power loss		
• maximum	W	48
Electricity		
Continuous current / Rated value / maximum	А	250
Continuous current / Rated value	А	250
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	250
● at 50 °C / Rated value	А	250
● at 60 °C / Rated value	А	250
● at 65 °C / Rated value	А	245
• at 70 °C / Rated value	А	227
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	А	12
•	A	0.6
<ul> <li>of the short-time delayed short-circuit release / initial value</li> </ul>	A	0.0
<ul> <li>of the short-time delayed short-circuit release / Full-scale value</li> </ul>	A	10
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	A	0.6
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	A	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
<ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>	S	0.05
<ul> <li>of S-trip / with standard characteristic / Full- scale value</li> </ul>	S	0.5
Adjustable response value current / of the current- dependent overload release / initial value	A	0.4
Product details		
Product component		
Trip indicator		No
● display		Yes
<ul> <li>undervoltage release</li> </ul>		No
Product property		
<ul> <li>for neutral conductors /</li> </ul>		No
upgradeable/retrofittable / Short-circuit and overload proof		
Product expansion / optional / motor drive	, 	Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		Yes
<ul> <li>Phase failure detection</li> </ul>		No
<ul> <li>other measurement function</li> </ul>		Yes
Accessories		
Manufacturer article number / of the supplied basic		<u>3VA2225-5KP42-0AA0</u>
switch		
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
• 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	kA	3
Maximum short-circuit current breaking capacity (Icu)		
• 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	kA	3
Short-circuit current making capacity (Icm)		

• at 240 V / Rated value	kA	187
• at 415 V / Rated value	kA	121
• at 440 V / Rated value	kA	121
• at 500 V / Rated value	kA	79
• at 690 V / Rated value	kA	4.5

Connections		
Arrangement of electrical connectors / for main current circuit		Front terminal
Type of connectable conductor cross-section		
<ul> <li>for flat-bar terminal connection / minimum</li> </ul>		13 x 1 mm
<ul> <li>for flat-bar terminal connection / maximum</li> </ul>		25 x 8.5
Type of electrical connection / for main current circuit		Lug terminal
Mechanical Design		
Height	mm	181

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		

			Conformity	Approval
General Product Approval	EM	С	Declaration of	Shipping
• acc. to DIN EN 81346-2		Q		
• acc. to DIN EN 61346-2		Q		
Equipment marking				
Certificates				

	UDE VDE	EHC	other	EG-Konf.	DINV DNV
Shipping Approval	other				
GL	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/3VA22255KP420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA22255KP420AA0/all

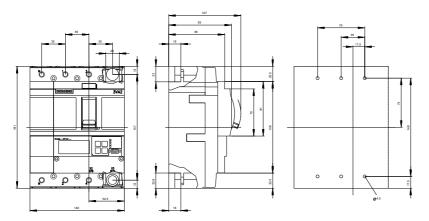
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA22255KP420AA0

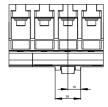
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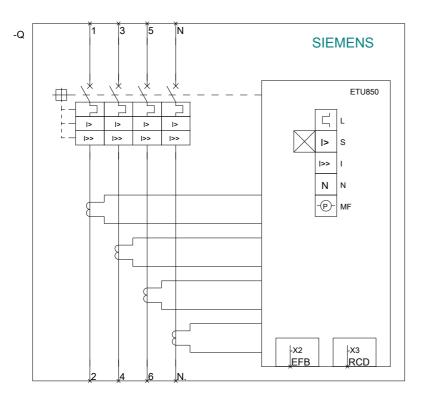
http://www.siemens.com/cax

#### **Tender specifications**

http://ausschreibungstexte.siemens.com/tiplv







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