# **SIEMENS**

## Data sheet

# 3VA2163-7KP42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU850, LSI, IN=63A OVERLOAD PROTECTION IR=25A ...63A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 160%) 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		12 000			
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		C
Dissipation		
Active power loss		
• maximum	W	4
Electricity		
Continuous current / Rated value / maximum	А	160
Continuous current / Rated value	А	63
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	63
● at 50 °C / Rated value	А	63
● at 60 °C / Rated value	А	63
● at 65 °C / Rated value	А	63
• at 70 °C / Rated value	А	63
Auxiliary circuit	_	
Number of NC contacts / for auxiliary contacts	_	0
Number of NO contacts / for auxiliary contacts		0
Suitability Suitability for use		system protection
		system protection
Adjustable parameters		
Adjustable response value current		
<ul> <li>of I-trip / Full-scale value</li> </ul>	А	12
<ul> <li>of the short-time delayed short-circuit release / initial value</li> </ul>	A	0.6
<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>	А	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	
undervoltage release		No	
Product property	-		
<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		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		3VA2163-7KP42-0AA0	
switch			
Short circuit			
Operational short-circuit current breaking capacity (Ics)			
• 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	2.5	
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	2.5	
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
• at 690 V / Rated value	kA	3.75

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
Width	mm	140

wiath	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 Product Approval	EMC		Declaration of	Shipping
			Conformity	Approval

CCC	VDE	EHC	other	EG-Konf.	ĴÅ Dinv div
Shipping Approval	other				
GL	other				

GL

#### 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/3VA21637KP420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21637KP420AA0/all

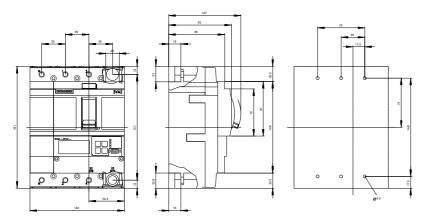
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21637KP420AA0

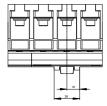
### **CAx-Online-Generator**

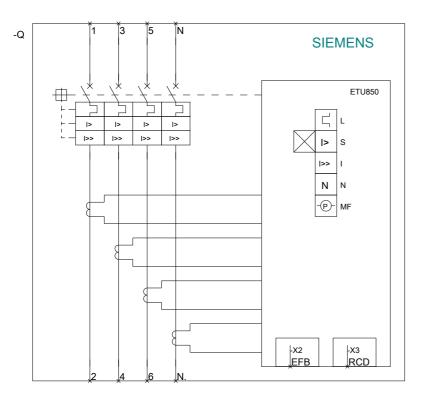
http://www.siemens.com/cax

#### **Tender specifications**

http://ausschreibungstexte.siemens.com/tiplv







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