SIEMENS

Data sheet

3VA2163-7HM42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU330, LIG, IN=63A OVERLOAD PROTECTION IR=25A ...63A SHORT CIRCUIT PROTECTION II=1,5...12 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,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		12 000
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
Desta dian dala	_	
Protection class Protection class IP	-	IP40
Protection class IP / on the front	_	IP40
Protective function of the overcurrent release	_	LIG
Protective function of the overcurrent release		LIG
Switching capacity		
Switching capacity class of the circuit breaker		C
Dissipation		
Active power loss		
• maximum	W	4
Electricity		
Continuous current / Rated value / maximum	A	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
A sufficient stress th	_	
Auxiliary circuit Number of NC contacts / for auxiliary contacts	-	0
Number of NO contacts / for auxiliary contacts	-	0
		Ĵ
Suitability	_	
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
 for G-tripping / with standard characteristic / initial value 	A	0.25
 for G-tripping / with standard characteristic / Full-scale value 	A	1
● of I-trip / Full-scale value	А	12
Adjustable response value current / of the current- dependent overload release / initial value	A	0.397

Product component No • Trip indicator No • display No • underwitage release No Product property • of the circuit breaker with tripping unit / Tripping characteristic adjustable Yes • for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof No Product truncion Yes • Intrinsic device protection Yes • Intrinsic device protection Yes • ormunication function No • Product truncion No • Intrinsic device protection Yes • Intrinsic device protection Yes • Communication function No • Orneutry No • Other measurement function No Accessories State value Short circuit State value (cs) • at 240 V / Rated value • at 240 V / Rated value KA • at 690 V / Rated value KA • at 240 V / Rated value KA • at 690 V / Rated value KA	Product details		
• display No • undervoltage release No Product property • of the circuit breaker with tripping unit / Tripping characteristic adjustable Yes • for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof No Product function Yes Product function Yes • intrinsic device protection Yes • ormmunication function No • other measurement function No • other measurement function No • at 240 V / Rated value KA 150 • at 690 V / Rated value KA 110 • at 690 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 415 V / Rated value KA 150 • at 500 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 690 V / Rated value KA 150 • a			
undervoltage releaseNoProduct property • of the circuit breaker with tripping unit / Tripping characteristic adjustableYes• of the circuit adjustable / Short-circuit and overhaad proofNoProduct expansion / optional / motor driveYesProduct functionYesProduct functionYes• Intrinsic device protectionYes• Intrinsic device protectionNo• Other measurement functionNo• other measurement functionNo• other measurement functionNo• other device protectionStrategic Strategic Strategi	Trip indicator		No
Product property of the circuit breaker with tripping unit / Tripping characteristic adjustable for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof No Product proble/etrofitable / Short-circuit and overload proof Yes Product function Yes Product function Yes Initiation of protection Yes Initiation of protection Yes Initiation of the reasurement function No Accessories State and the supplied basic switch Short circuit State and the supplied basic switch Short circuit KA Operational short-circuit current breaking capacity (tox) Into and the supplied basic switch Short circuit KA 150 I at 240 V / Rated value KA 110 I at 450 V / Rated value KA 150 I at 900 V / Rated value KA 150 I at 450 V / Rated value KA 150 I at 450 V / Rated value KA 150 I at 690 V / Rated value KA 150 I at 690 V / Rated value	● display		No
• of the circuit breaker with tripping unit / Tripping characteristic adjustableYes• of neutral conductors / upgradeable/retrofittable / Short-circuit and overload proofNo• Product expansion / optional / motor driveYesProduct function • Intrinsic device protection • communication functionYes• other measurement function • other measurement functionNo• other measurement function 	 undervoltage release 		No
characteristic adjustableImage: second s	Product property	-	
• for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proofNoProduct expansion / optional / motor driveYesProduct functionYes• Intrinsic device protectionNo• Intrinsic device protectionNo• communication functionNo• other measurement functionNo• other measurement functionStructure article number / of the supplied basic switchShort-circuitStructure article number / of the supplied basic switchOperational short-circuit surrent breaking capacity (Ics)Structure article number / of the supplied basic switchShort circuitStructure article number / of the supplied basic switchOperational short-circuit current breaking capacity (Ics)Structure article number / of the supplied basic switch• at 240 V / Rated valueKA150• at 240 V / Rated valueKA110• at 440 V / Rated valueKA110• at 440 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA150• at 415 V / Rated valueKA150• at 415 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA15	 of the circuit breaker with tripping unit / Tripping 		Yes
Instruction Yes Product expansion / optional / motor drive Yes Product function Yes Product function Yes e. Intrinsic device protection No e. Intrinsic device protection No e. communication function No Phase failure detection No e. other measurement function No Accessories 3VA2163-7HM42-0AA0 Short circuit Operational short-circuit current breaking capacity (cs) et at 240 V / Rated value KA 150 et at 415 V / Rated value KA 110 et at 600 V / Rated value KA 25 Maximum short-circuit current breaking capacity (cu) Image: Capacity (cu) et at 600 V / Rated value KA 150 et at 600 V / Rated value KA 150 et at 600 V / Rated value KA 150 et at 600 V / Rated value KA 150 et at 600 V / Rated value KA 150 et at 600 V / Rated value KA 150 et at 600 V / Rated value KA 150 et at 600 V / Rated	characteristic adjustable		
overload proofImage: constraint of the supplied basic switchYesProduct functionYesIntrinsic device protectionNo• Intrinsic device protectionNo• Communication functionNo• Phase failure detectionNo• other measurement functionNo• other measurement functionKA• other measurement functionSi• other measurement functionKA• other measurement functionSi• other measurement functionSi• other measurement functionSi• other measurement functionSi• other mea			No
Product expansion / optional / motor drive Yes Product function Ves Product function No • Intrinsic device protection No • communication function No • other measurement function State value Manufacturer article number / of the supplied basic switch 3VA2163-7HM42-0AA0 Short circuit Operational short-circuit current breaking capacity (los) • at 240 V / Rated value KA 150 • at 415 V / Rated value KA 110 • at 600 V / Rated value KA 150 • at 600 V / Rated value KA 150 • at 415 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 415 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 415 V / Rated value KA 150			
Product function Yes • Intrinsic device protection No • communication function No • other measurement function No • other measurement function No Accessories 3VA2163-7HM42-0AA0 Short circuit 3VA2163-7HM42-0AA0 Operational short-circuit current breaking capacity (Ics) Iso • at 240 V / Rated value KA 150 • at 440 V / Rated value KA 110 • at 440 V / Rated value KA 110 • at 450 V / Rated value KA 110 • at 440 V / Rated value KA 110 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 10 • at 400 V / Rated value KA 10 • at 400 V / Rated value KA 2.5 Maximum short-circuit current breaking capacity (Icu) Image: Communication (Communication (Communic			Vac
Product function Intrinsic device protection Yes • communication function No • Phase failure detection No • other measurement function No Accessories 3VA2163-7HIM42-0AA0 Manufacturer article number / of the supplied basic switch 3VA2163-7HIM42-0AA0 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 400 V / Rated value KA 110 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 110 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150 • at 400 V / Rated value KA 150	Froduct expansion / optional / motor drive		res
Intrinsic device protectionYes. communication functionNo. Phase failure detectionNo. other measurement functionNoAccessoriesManufacturer article number / of the supplied basic3VA2163.7HIM42-0AA0switchSVA2163.7HIM42-0AA0Short circuitOperational short-circuit current breaking capacity (ics)Image: Communication of the supplied basic• at 240 V / Rated valueKA150• at 240 V / Rated valueKA110• at 415 V / Rated valueKA110• at 400 V / Rated valueKA2.5Maximum short-circuit current breaking capacity (icu)Image: Communication of the supplied basic• at 240 V / Rated valueKA150• at 400 V / Rated valueKA110• at 400 V / Rated valueKA2.5Maximum short-circuit current breaking capacity (icu)Image: Communication of the supplied basic• at 240 V / Rated valueKA150• at 415 V / Rated valueKA150• at 415 V / Rated valueKA150• at 415 V / Rated valueKA110• at 410 V / Rated valueKA110• at 400 V / Rated valueKA2.5Short-circuit current making capacity (icm)Image: Communication of the supplied basic• at 690 V / Rated valueKA2.5Short-circuit current making capacity (icm)Image: Communicate• at 240 V / Rated valueKA3.0• at 240 V / Rated valueKA3.0 <td></td> <td></td> <td></td>			
communication functionNoPhase failure detectionNoother measurement functionNoAccessoriesManufacturer article number / of the supplied basic switch3VA2163-7HM42-0AA0Short circuitOperational short-circuit current breaking capacity (ics)3VA2163-7HM42-0AA0• at 240 V / Rated valueKA150• at 240 V / Rated valueKA110• at 415 V / Rated valueKA110• at 440 V / Rated valueKA110• at 450 V / Rated valueKA85• at 690 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA2.5Maximum short-circuit current breaking capacity (lcu)•• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 415 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA330• at 240 V / Rated valueKA330	Product function		
Phase failure detectionNo• other measurement functionNoAccessoriesManufacturer article number / of the supplied basic switch3VA2163-7HIM42-0AA0Short circuitState and a state and	 Intrinsic device protection 		
• other measurement functionNoAccessoriesManufacturer article number / of the supplied basic switch3VA2163-7HIM42-0AA0Short circuitSVA2163-7HIM42-0AA0Short circuitSupplied basic switchOperational short-circuit current breaking capacity (tcs)I• at 240 V / Rated valueKA150• at 415 V / Rated valueKA110• at 440 V / Rated valueKA110• at 690 V / Rated valueKA85• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 440 V / Rated valueKA150• at 690 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 440 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 440 V / Rated valueKA150• at 440 V / Rated valueKA150• at 690 V / Rated valueKA2.5Short-circuit current making capacity (locn)•• at 240 V / Rated valueKA330	 communication function 		No
Accessories Manufacturer article number / of the supplied basic switch 3VA2163-7HIM42-0AA0 Short circuit Operational short-circuit current breaking capacity (Ics) 4 • at 240 V / Rated value KA 150 • at 415 V / Rated value KA 110 • at 440 V / Rated value KA 110 • at 460 V / Rated value KA 110 • at 440 V / Rated value KA 110 • at 440 V / Rated value KA 110 • at 440 V / Rated value KA 110 • at 440 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 440 V / Rated value KA 150 • at 440 V / Rated value KA 150 • at 690 V / Rated value KA 150 • at 440 V / Rated value KA 110 • at 440 V / Rated value KA 150 • at 450 V / Rated value KA 110 • at 690 V / Rated value KA 2.5 Short-circuit current making capacity (Icm) 2.5 Short-circuit current making capacity (Icm) 330	 Phase failure detection 		No
Manufacturer article number / of the supplied basic switch 3VA2163-7HIM42-0AA0 Short circuit Operational short-circuit current breaking capacity (lcs) Image: style="text-align: center;">	 other measurement function 		No
Manufacturer article number / of the supplied basic switch 3VA2163-7HIM42-0AA0 Short circuit Operational short-circuit current breaking capacity (lcs) Image: style="text-align: center;">	Accessories		
Short circuitOperational short-circuit current breaking capacity (lcs)Image: Constraint of the state	Manufacturer article number / of the supplied basic		<u>3VA2163-7HM42-0AA0</u>
Operational short-circuit current breaking capacity (Ics)KA150• at 240 V / Rated valueKA110• at 240 V / Rated valueKA110• at 415 V / Rated valueKA110• at 440 V / Rated valueKA110• at 500 V / Rated valueKA85• at 690 V / Rated valueKA2.5Maximum short-circuit current breaking capacity (Icu)V• at 240 V / Rated valueKA150• at 240 V / Rated valueKA110• at 240 V / Rated valueKA110• at 415 V / Rated valueKA110• at 440 V / Rated valueKA110• at 440 V / Rated valueKA330• at 240 V / Rated valueKA330	switch		
(lcs)Image: Non-State State S	Short circuit		
• at 240 V / Rated valuekA150• at 415 V / Rated valuekA110• at 440 V / Rated valuekA110• at 440 V / Rated valuekA85• at 500 V / Rated valuekA2.5Maximum short-circuit current breaking capacity (Icu)-• at 240 V / Rated valuekA150• at 240 V / Rated valuekA110• at 415 V / Rated valuekA110• at 440 V / Rated valuekA110• at 440 V / Rated valuekA2.5Short-circuit current making capacity (Icm)-• at 240 V / Rated valuekA330			
 at 415 V / Rated value 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 150 at 415 V / Rated value kA 110 at 410 V / Rated value kA 110 at 440 V / Rated value kA 110 at 440 V / Rated value kA 110 at 400 V / Rated value kA 330 at 240 V / Rated value kA 330 	(Ics)		
 at 440 V / Rated value at 440 V / Rated value kA 110 ka 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 150 at 440 V / Rated value kA 110 at 440 V / Rated value kA 110 at 440 V / Rated value kA 110 at 440 V / Rated value kA 120 at 440 V / Rated value kA 330 	• at 240 V / Rated value	kA	150
• at Yoo Y / Rated valuekA85• at 500 V / Rated valuekA2.5Maximum short-circuit current breaking capacity (Icu)v• at 240 V / Rated valuekA150• at 240 V / Rated valuekA110• at 415 V / Rated valuekA110• at 440 V / Rated valuekA85• at 500 V / Rated valuekA85• at 690 V / Rated valuekA85• at 690 V / Rated valuekA330	• at 415 V / Rated value	kA	110
• at 690 V / Rated valuekA2.5Maximum short-circuit current breaking capacity (lou)• at 240 V / Rated valuekA150• at 415 V / Rated valuekA110• at 440 V / Rated valuekA110• at 500 V / Rated valuekA85• at 690 V / Rated valuekA2.5Short-circuit current making capacity (lom)• at 240 V / Rated valuekA330	• at 440 V / Rated value	kA	110
Maximum short-circuit current breaking capacity (Icu)kA150• at 240 V / Rated valuekA110• at 415 V / Rated valuekA110• at 440 V / Rated valuekA110• at 500 V / Rated valuekA85• at 690 V / Rated valuekA2.5Short-circuit current making capacity (Icm)KA330• at 240 V / Rated valuekA140	• at 500 V / Rated value	kA	85
• at 240 V / Rated valuekA150• at 415 V / Rated valuekA110• at 440 V / Rated valuekA110• at 500 V / Rated valuekA85• at 690 V / Rated valuekA2.5Short-circuit current making capacity (Icm)	• at 690 V / Rated value	kA	2.5
 at 415 V / Rated value at 440 V / Rated value kA 110 kA 110 kA 85 at 500 V / Rated value kA 2.5 Short-circuit current making capacity (Icm) at 240 V / Rated value kA 330 	Maximum short-circuit current breaking capacity (Icu)		
 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 240 V / Rated value	kA	150
 at 500 V / Rated value kA 85 kA 2.5 Short-circuit current making capacity (Icm) at 240 V / Rated value kA 330 	• at 415 V / Rated value	kA	110
 at 690 V / Rated value kA 2.5 Short-circuit current making capacity (Icm) at 240 V / Rated value kA 330 	• at 440 V / Rated value	kA	110
Short-circuit current making capacity (Icm) kA 330 • at 240 V / Rated value kA 330	• at 500 V / Rated value	kA	85
at 240 V / Rated value kA 330	• at 690 V / Rated value	kA	2.5
	Short-circuit current making capacity (Icm)		
• at 415 V / Rated value kA 242	• at 240 V / Rated value	kA	330
	• at 415 V / Rated value	kA	242
• at 440 V / Rated value kA 242	• at 440 V / Rated value	kA	242
• at 500 V / Rated value kA 187	• at 500 V / Rated value	kA	187
• at 690 V / Rated value kA 3.75	• at 690 V / Rated value	kA	3.75

Connections					
Arrangement of electrical connectors / for main		Front termin	nal		
current circuit					
Type of connectable conductor cross-section					
 for flat-bar terminal connection / minimum 		13 x 1 mm	13 x 1 mm		
 for flat-bar terminal connection / maximum 		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					
 during operation / minimum 	°C	-25			
 during operation / maximum 	°C	70	70		
 during storage / minimum 	°C	-40	-40		
 during storage / maximum 	°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/3VA21637HM420AA0

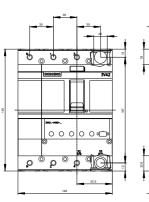
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21637HM420AA0/all

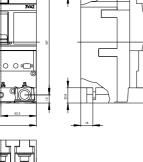
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21637HM420AA0

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

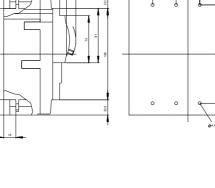
Tender specifications

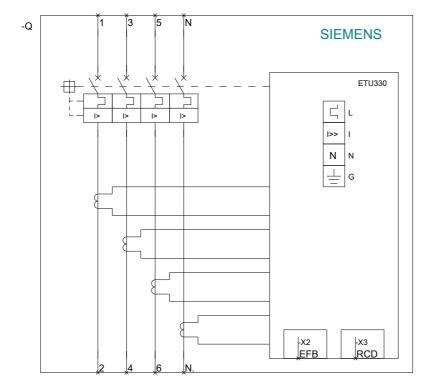
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