SIEMENS

Data sheet

3VA2010-7HM32-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 100 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 3POLE, LINE PROTECTION ETU330, LIG, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION II=1,5...12 X IN 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-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		3			
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
Protection class		
Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release	-	LIG
Switching capacity		
Switching capacity class of the circuit breaker		С
Dissipation		
Active power loss		
• maximum	W	13.5
Electricity		
Continuous current / Rated value / maximum	A	100
Continuous current / Rated value	A	100
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	100
● at 50 °C / Rated value	А	100
● at 60 °C / Rated value	А	100
• at 65 °C / Rated value	А	100
• at 70 °C / Rated value	А	100
Auxiliary circuit	_	0
Number of NC contacts / for auxiliary contacts Number of NO 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		
 for G-tripping / with standard characteristic / 	А	0.2
initial value		
 for G-tripping / with standard characteristic / 	А	1
Full-scale value		
• of I-trip / Full-scale value	А	12
Adjustable response value current / of the current-	A	0.4
dependent overload release / initial value		

Operational short-circuit current breaking capacity (Ics)KA150• at 240 V / Rated valueKA150• at 415 V / Rated valueKA110• at 440 V / Rated valueKA110• at 440 V / Rated valueKA85• at 690 V / Rated valueKA85• at 690 V / Rated valueKA150• at 240 V / Rated valueKA110• at 240 V / Rated valueKA110• at 415 V / Rated valueKA110• at 690 V / Rated valueKA35• at 690 V / Rated valueKA2Short-circuit current making capacity (Icm)	Product details		
display display undervoltage releaseNoProduct property of the circuit breaker with tripping unit / Tripping othracteristic adjustableYesof the circuit breaker with tripping unit / Tripping upgradeable/retrofittable / Short-circuit and overload proofYesProduct expansion / optional / motor driveYesProduct functionYesProduct functionNo• Intrinsic device protectionYes• Intrinsic device protectionNo• Or neutral conductors / upgradeable/retrofittable / Short-circuit and overload proofYesProduct functionNo• Intrinsic device protectionNo• Intrinsic device protectionNo• other measurement functionNo• other measurement functionNoAccessoriesShort-circuit current breaking capacity (tes)• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 350 V / Rated valueKA150• at 3690 V / Rated valueKA150• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 3690 V / Rated valueKA150 </td <td>Product component</td> <td></td> <td></td>	Product component		
undervoltage releaseNoProduct property• of the circuit breaker with tripping unit / Tripping characteristic adjustableYes• of the circuit breaker with tripping unit / Tripping characteristic adjustableNo• or neutral conductors / upgradeable/retrofittable / Short-circuit and overload proofYesProduct spansion / optional / motor driveYesProduct functionYes• intrinsic device protectionNo• orther measurement functionNo• other measurement functionNo• other measurement functionNo• other measurement functionStructurer article number / of the supplied basic switchShort circuitYesCorcuitYesOperational short-circuit current breaking capacity (cs)Structurer article number / of the supplied basic solution* at 400 V / Rated valueKA150• at 415 V / Rated valueKA150• at 440 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA150• at 440 V / Rated valueKA150• at 450 V / Rated valueKA150• at 440 V / Rated valueKA150• at 440 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA150• at 450 V / Rated valueKA2Short-Grout current breaking capacity (torn)Image: structure </td <td>Trip indicator</td> <td></td> <td>No</td>	Trip indicator		No
Product progrey • of the circuit breaker with tripping unit / Tripping characteristic adjustable • for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proofYesProduct expansion / optional / motor driveYesProduct functionNo • Intrinsic device protectionNo• other measurement functionNo• other measurement functionNo• other measurement functionSt/A2010-7HM32-0AA0Short circuitCoreational short-circuit current breaking capacity ((cs)• at 240 V / Rated valueKA• at 240 V / Rated valueKA• at 415 V / Rated valueKA• at 690 V / Rated valueKA• at 690 V / Rated valueKA• at 690 V / Rated valueKA• at 415 V / Rated valueKA• at 240 V / Rated valueKA• at 690 V / Rated valueKA• at 690 V / Rated valueKA• at 690 V / Rated valueKA• at 640 V / Rated valueKA <tr< td=""><td>• display</td><td></td><td>No</td></tr<>	• display		No
• of the circuit breaker with tripping characteristic adjustableYes• for neutral conductors / upgradeable/introfitable/ Short-circuit and overload proofNoProduct expansion / optional / motor driveYesProduct expansion / optional / motor driveYesProduct functionVes• Intrinsic device protectionNo• Intrinsic device protectionNo• Other measurement functionNo• other measurement functionState State	 undervoltage release 		No
characteristic adjustable interference i for neutral conductors / No upgradeable/retrofitable / Short-circuit and Yes Product function Yes Product function Yes ecommunication function No ecommunication function No ecommunication function No other measurement function No other measurement function No other measurement function SNO other measurement function SNO other measurement function SNO switch SNO Short circuit SNO et at 20 V / Rated value KA i at 240 V / Rated value KA i at 240 V / Rated value KA i at 600 V	Product property	-	
InstructionImage: constraint of the second of t			Yes
Product function Product function Intrinsic device protection communication function Phase failure detection other measurement function No Accessories 3VA2010-7HM32-0AA0 Anufacturer article number / of the supplied basic switch 3VA2010-7HM32-0AA0 Short circuit Operational short-circuit current breaking capacity (los) at 240 V / Rated value kA 150 at 440 V / Rated value kA at 690 V / Rated value kA 150 at 440 V / Rated value kA at 690 V / Rated value kA 110 at 400 V / Rated value kA 150 at 690 V / Rated value kA 110 at 690 V / Rated value kA 110 at 690 V / Rated value kA 120 at 240 V / Rated value kA 130 at 500 V / Rated value kA 140 at 690 V / Rated value kA 120 at 440 V / Rated value kA 120 at 440 V / Rated value kA 120 at 440 V / Rated value kA<td>upgradeable/retrofittable / Short-circuit and</td><td></td><td>No</td>	upgradeable/retrofittable / Short-circuit and		No
Product function Intrinsic device protection Yes • communication function No • Phase failure detection No • other measurement function No • other measurement function No Accessories 3VA2010-7HM32-0AA0 Short circuit 3VA2010-7HM32-0AA0 Correstional short-circuit current breaking capacity (Ics) 3VA2010-7HM32-0AA0 • 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 2 Maximum short-circuit current breaking capacity (Icu)	Product expansion / optional / motor drive		Yes
Product function Intrinsic device protection Yes • communication function No • Phase failure detection No • other measurement function No • other measurement function No Accessories 3VA2010-7HM32-0AA0 Short circuit 3VA2010-7HM32-0AA0 Correstional short-circuit current breaking capacity (Ics) 3VA2010-7HM32-0AA0 • 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 2 Maximum short-circuit current breaking capacity (Icu)	Product function		
Phase failure detectionNo• other measurement functionNoAccessoriesManufacturer article number / of the supplied basic switch3VA2010-7HM32-0AA0Short circuitStream of the supplied basic switchStream of the supplied basic switchOperational short-circuit current breaking capacity (tcs)IStream of the supplied basic switchOperational short-circuit current breaking capacity (tcs)KA150• at 240 V / Rated valueKA150• at 415 V / Rated valueKA110• at 440 V / Rated valueKA150• at 690 V / Rated valueKA150• at 240 V / Rated valueKA150• at 690 V / Rated valueKA150• at 690 V / Rated valueKA150• at 690 V / Rated valueKA150• at 240 V / Rated valueKA330• at 240 V / Rated valueKA2• at 240 V / Rated valueKA2• at 240 V / Rated valueKA150• at 240 V / Rated valueKA2• at 240 V / Rated valueKA2• at 240 V / Rated valueKA2• at 240 V / Rated valueKA330 <th< td=""><td> Intrinsic device protection </td><td></td><td>Yes</td></th<>	 Intrinsic device protection 		Yes
• other measurement functionNoAncessoriesSVA2010-7HM32-0AA0Manufacturer article number / of the supplied basic switchSVA2010-7HM32-0AA0Short circuitSVA2010-7HM32-0AA0Operational short-circuit current breaking capacity (ics)SVA2010-7HM32-0AA0• at 240 V / Rated valueKA150• at 240 V / Rated valueKA150• at 415 V / Rated valueKA110• at 440 V / Rated valueKA110• at 690 V / Rated valueKA150• at 240 V / Rated valueKA150• at 690 V / Rated valueKA150• at 240 V / Rated valueKA150• at 415 V / Rated valueKA2• at 400 V / Rated valueKA2• at 690 V / Rated valueKA2• at 240 V / Rated valueKA330• at 240 V / Rated valueKA	 communication function 		No
Accessories 3VA2010-7HM32-0AA0 Manufacturer article number / of the supplied basic switch 3VA2010-7HM32-0AA0 Short circuit Short circuit current breaking capacity (ics) at 240 V / Rated value kA 150 • at 240 V / Rated value kA 150 at 415 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 110 • at 690 V / Rated value kA 150 at 440 V / Rated value kA 2 Maximum short-circuit current breaking capacity (Icu)	 Phase failure detection 		No
Manufacturer article number / of the supplied basic switch 3VA2010-7HM32-0AA0 Short circuit Operational short-circuit current breaking capacity (ics) Image: style="text-align: center;">	 other measurement function 		No
Manufacturer article number / of the supplied basic switch 3VA2010-7HM32-0AA0 Short circuit Operational short-circuit current breaking capacity (ics) Image: style="text-align: center;">	Access	_	
switchImage: Constraint of the set of the		_	3\/A2010.7HM32.0AA0
(ics) Icities • at 240 V / Rated value KA 150 • at 415 V / Rated value KA 110 • at 440 V / Rated value KA 110 • at 440 V / Rated value KA 85 • at 690 V / Rated value KA 2 Maximum short-circuit current breaking capacity (Icu) V V • at 240 V / Rated value KA 150 • at 240 V / Rated value KA 150 • at 240 V / Rated value KA 150 • at 240 V / Rated value KA 110 • at 240 V / Rated value KA 110 • at 415 V / Rated value KA 110 • at 400 V / Rated value KA 85 • at 690 V / Rated value KA 330 • at 240 V / Rated value KA 330 • at 415 V / Rated value KA 242 • at 415 V / Rated value KA 320 • at 415 V / Rated value KA 330 • at 415 V / Rated value KA 242	Short circuit Operational short-circuit current breaking capacity		
• 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• at 690 V / Rated valueKA150• at 240 V / Rated valueKA150• 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 valueKA30• at 690 V / Rated valueKA330• at 690 V / Rated valueKA330• at 415 V / Rated valueKA32• at 415 V / Rated valueKA330• at 415 V / Rated valueKA32• at 415 V / Rated valueKA330• at 440 V / Rated valueKA32• at 440 V / Rated valueKA330• at 440 V / Rated valueKA330• at 440 V / Rated valueKA342• at 440 V / Rated valu			
 at 440 V / Rated value at 440 V / Rated value kA 110 at 500 V / Rated value kA 85 at 690 V / Rated value kA 2 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 690 V / Rated value kA 855 at 690 V / Rated value kA 22 Short-circuit current making capacity (Icm) at 240 V / Rated value kA 855 at 690 V / Rated value kA 855 at 690 V / Rated value kA 855 at 690 V / Rated value kA 22 Short-circuit current making capacity (Icm) at 240 V / Rated value kA 242 at 415 V / Rated value kA 242 at 440 V / Rated value kA 242 at 440 V / Rated value kA 187 		kA	150
 at 100 V / Rated value at 500 V / Rated value kA 85 at 690 V / Rated value kA 2 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 440 V / Rated value kA 85 at 690 V / Rated value kA 110 at 440 V / Rated value kA 110 at 40 V / Rated value kA 85 at 690 V / Rated value kA 330 at 240 V / Rated value kA 330 at 415 V / Rated value kA 242 at 415 V / Rated value kA 320 xA <l< td=""><td>• at 415 V / Rated value</td><td>kA</td><td>110</td></l<>	• at 415 V / Rated value	kA	110
eat 500 V / Rated valuekA85• at 690 V / Rated valuekA2Maximum short-circuit current breaking capacity (Icu)• at 240 V / Rated valuekA150• at 415 V / Rated valuekA110• at 440 V / Rated valuekA110• at 440 V / Rated valuekA85• at 690 V / Rated valuekA85• at 690 V / Rated valuekA2• at 690 V / Rated valuekA330• at 240 V / Rated valuekA324• at 240 V / Rated valuekA242• at 415 V / Rated valuekA242• at 440 V / Rated valuekA242• at 440 V / Rated valuekA300• at 440 V / Rated valuekA300• at 440 V / Rated valuekA242• at 440 V / Rated valuekA242• at 440 V / Rated valuekA340• at 440 V / Rated valuekA342• at 440 V / Rated valuekA340• at 450 V / Rated valuekA340• at 500	• at 440 V / Rated value	kA	110
Maximum short-circuit current breaking capacity (Icu)KA• at 240 V / Rated valueKA150• at 415 V / Rated valueKA110• at 440 V / Rated valueKA110• at 500 V / Rated valueKA85• at 690 V / Rated valueKA2Short-circuit current making capacity (Icm)		kA	85
• at 240 V / Rated value kA 150 • at 415 V / Rated value kA 110 • at 440 V / Rated value kA 110 • at 440 V / Rated value kA 85 • at 690 V / Rated value kA 2 Short-circuit current making capacity (Icm)	• at 690 V / Rated value	kA	2
• at 240 V / Rated value kA 150 • at 415 V / Rated value kA 110 • at 440 V / Rated value kA 110 • at 440 V / Rated value kA 85 • at 690 V / Rated value kA 2 Short-circuit current making capacity (Icm)			
• at 415 V / Rated valuekA110• at 440 V / Rated valuekA110• at 500 V / Rated valuekA85• at 690 V / Rated valuekA2• at 240 V / Rated valuekA330• at 415 V / Rated valuekA242• at 440 V / Rated valuekA242• at 440 V / Rated valuekA187		kA	150
• at 440 V / Rated valuekA110• at 500 V / Rated valuekA85• at 690 V / Rated valuekA2Shot-circuit current making capacity (Icm)• at 240 V / Rated valuekA330• at 415 V / Rated valuekA242• at 440 V / Rated valuekA242• at 440 V / Rated valuekA187		kA	110
• at 500 V / Rated value kA 85 • at 690 V / Rated value kA 2 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 310		kA	110
• at 690 V / Rated valuekA2Short-circuit current making capacity (Icm)-• at 240 V / Rated valuekA330• at 415 V / Rated valuekA242• at 440 V / Rated valuekA242• at 500 V / Rated valuekA187		kA	85
• at 240 V / Rated valuekA330• at 415 V / Rated valuekA242• at 440 V / Rated valuekA242• at 500 V / Rated valuekA187	• at 690 V / Rated value	kA	2
• at 240 V / Rated valuekA330• at 415 V / Rated valuekA242• at 440 V / Rated valuekA242• at 500 V / Rated valuekA187			
• at 415 V / Rated valuekA242• at 440 V / Rated valuekA242• at 500 V / Rated valuekA187		kA	330
• at 500 V / Rated value kA 187		kA	242
• at 500 V / Rated value kA 187	• at 440 V / Rated value	kA	242
		kA	187
	at 690 V / Rated value	kA	

Connections					
Arrangement of electrical connectors / for main		Front termin	al		
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	105			
Depth	mm	107	107		
Mounting type	_	fixed mounti	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	E	MC	Declaration of Conformity	other	
		other	CE	other	
			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/3VA20107HM320AA0

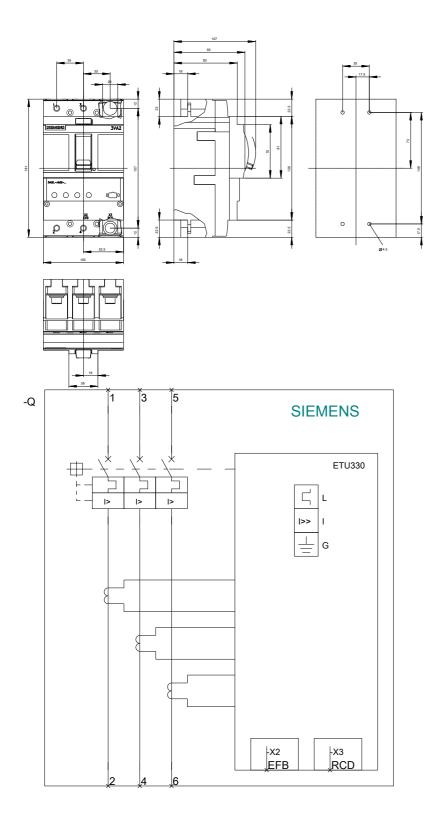
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA20107HM320AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA20107HM320AA0

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

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv



last modified:

11.03.2015