SIEMENS

Datasheet

3VA1150-5GF42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=50A OVERLOAD PROTECTION IR=35A ...50A SHORT CIRCUIT PROTECTION II=5 X IN NEUTRAL PROTECTION 100% BUSBAR CONNECTION

Figure similar

Model		
product brand name		SENTRON
Product designation	-	Molded case circuit breaker
Design of the product		Line protection
Product variations		General Applications
Ground fault monitoring version		Without
Design of the auxiliary release		Without auxiliary release
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		TM240
General technical data		·
Number of poles		4
Trip class / of the L-trip / with I2t characteristic / initial value		1
Trip class / of the L-trip / with I2t characteristic / Full- scale value		1
Electrical endurance (switching cycles)		
• at AC-1 / at 380/415 V / at 50/60 Hz		8 000
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		15 000
Voltage		
Insulation voltage		
Rated value	V	800

Protective function of the overcurrent release LI Switching capacity Switching capacity class of the circuit breaker M Switching capacity class of the circuit breaker M Dissipation Active power loss N 4xtive power loss + maximum W 14.6 Electricity Continuous current / af 45 °C / Rated value A 50 Continuous current / acted value / maximum A 160 Continuous current A 50 • of the current-dependent overload release / Full-Scale value A 5 • of the instantaneous short-circuit release / initial value A 5 Net weight g 1 200 Main circuit Querant A 50 • of the instantaneous short-circuit release / initial value V 690 • of the instantaneous short-circuit release / initial value V 690 • of the instantaneous short-circuit release / initial value V 690 • of the or DC / Rated value A 50 Continuous current • at 40 °C / Rated value A 50 Context and and active and	Protection class		
Switching capacity class of the circuit breaker M Dissipation M Active power loss Imaximum • maximum W 14.6 Continuous current / at 45 °C / Rated value A Continuous current / Rated value / maximum A • Rated value A • Continuous current • Rated value / maximum • Rated value A • Of the current-dependent overload release / Full-scale value A • of the instantaneous short-circuit release / initial value A • of the instantaneous short-circuit release / initial value A • of the current-dependent overload release / Full-scale value A • of the instantaneous short-circuit release / initial value A • of the instantaneous short-circuit release / initial value A • of the current-dependent overload release / Full-scale value Y • of the current-dependent overload release / value G • of the current-dependent overload release / Full-scale value A • of the instantaneous short-circuit release / initial value A • of the current G • of the C / Rated value A • of the C / Rated value A • at 60 °C / Rated value A • at 60 °C / Rated value A	Protective function of the overcurrent release		LI
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Adjustable response value current A 1 • of the current-dependent overload release / Full-scale value A 1 • of the instantaneous short-circuit release / initial value A 5 Net weight g 1 200 Main circuit A 5 Operating voltage V 690 • or DC / Rated value V 600 Operating current V 600 • at 40 °C / Rated value A 50 • at 50 °C / Rated value A 50 • at 60 °C / Rated value A 48 • at 60 °C / Rated value A 48 • at 65 °C / Rated value A 45 Auxiliary circuit A 45 Number of CO contacts 0 0 • for auxiliary contacts 0 0 Suitability for use system protection A • for I-trip / Full-scale value A 10 • for N-conductor protection / initial value A 100	Continuous current		
• of the current-dependent overload release / A 1 Full-scale value • of the instantaneous short-circuit release / initial value A 5 Net weight g 1 200 Main circuit - - - Operating voltage - - - • with AC / at 50/60 Hz / Rated value V 690 - • for DC / Rated value V 600 - Operating current - - - • at 40 °C / Rated value A 50 - • at 60 °C / Rated value A 49 - • at 60 °C / Rated value A 48 - • at 60 °C / Rated value A 45 - Auxiliary circuit A 45 - Auxiliary contacts 0 - - Suitability for use system protection - - • for Auxiliary contacts 0 - - Auxiliary contacts 0 - - - Algustable response value current - - - - <	Rated value	А	50
Full-scale value A 5 Net weight g 1 200 Main circuit g 1 200 Main circuit V 690 • with AC / at 50/60 Hz / Rated value V 690 • for DC / Rated value V 600 Operating current - - • at 40 °C / Rated value A 50 • at 40 °C / Rated value A 50 • at 50 °C / Rated value A 50 • at 60 °C / Rated value A 48 • at 65 °C / Rated value A 46 • at 65 °C / Rated value A 45 Auxiliary circuit A 45 Auxiliary contacts 0 0 Suitability system protection • for auxiliary contacts system protection Adjustable response value current A 10 • for N-conductor protection / initial value A 100	Adjustable response value current		
• of the instantaneous short-circuit release / initial value A 5 Net weight g 1 200 Main circuit Operating voltage Image: Circuit AC / at 50/60 Hz / Rated value V 690 • with AC / at 50/60 Hz / Rated value V 690 600 Operating current V 600 • at 40 °C / Rated value A 50 • at 40 °C / Rated value A 50 • at 50 °C / Rated value A 50 • at 50 °C / Rated value A 49 • at 60 °C / Rated value A 46 • at 65 °C / Rated value A 45 Auxiliary circuit A 45 Number of CO contacts 0 0 • for auxiliary contacts 0 0 Suitability system protection 5 Adjustable response value current A 10 • of 1-trip / Full-scale value A 100		А	1
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Main circuit V 690 • with AC / at 50/60 Hz / Rated value V 690 • for DC / Rated value V 600 Operating current		_	
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• for DC / Rated value V 600 Operating current - - • at 40 °C / Rated value A 50 • at 50 °C / Rated value A 50 • at 55 °C / Rated value A 49 • at 60 °C / Rated value A 48 • at 65 °C / Rated value A 46 • at 65 °C / Rated value A 45 • at 65 °C / Rated value A 45 • at 65 °C / Rated value A 45 • at 70 °C / Rated value A 45 • at 70 °C / Rated value O O Suitability O O Suitability O O Suitability for use System protection Adjustable parameters System protection • of I-trip / Full-scale value A 10 • for N-conductor protection / initial value A 100	Operating voltage		
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• at 40 °C / Rated valueA50• at 50 °C / Rated valueA50• at 55 °C / Rated valueA49• at 60 °C / Rated valueA48• at 65 °C / Rated valueA46• at 70 °C / Rated valueA45• at 70 °C / Rated valueA45• for auxiliary contacts0Suitabilityo• Suitability for usesystem protectionAdjustable parametersA10• of I-trip / Full-scale valueA100	 for DC / Rated value 	V	600
at 50 °C / Rated valueA50• at 50 °C / Rated valueA49• at 55 °C / Rated valueA48• at 60 °C / Rated valueA48• at 65 °C / Rated valueA46• at 70 °C / Rated valueA45Auxiliary circuitNumber of CO contacts • for auxiliary contacts• for auxiliary contacts0Suitability for useAdjustable parametersAdjustable response value current • of I-trip / Full-scale valueA10• for N-conductor protection / initial valueA100	Operating current	_	
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e at 60 °C / Rated value A 48 • at 65 °C / Rated value A 46 • at 70 °C / Rated value A 45 Auxiliary circuit Number of CO contacts • for auxiliary contacts 0 Suitability 0 Adjustable parameters Adjustable response value current A 10 • for N-conductor protection / initial value A 100	• at 50 °C / Rated value	А	50
• at 65 °C / Rated valueA46• at 70 °C / Rated valueA45Auxiliary circuitA45Auxiliary circuit0Suitability0Suitability0Suitability for usesystem protectionAdjustable parametersAdjustable response value current • of I-trip / Full-scale valueAAdjustable response valueA10• for N-conductor protection / initial valueA100	• at 55 °C / Rated value	А	49
• at 70 °C / Rated valueA45Auxiliary circuitImage: Auxiliary circuitNumber of CO contacts0• for auxiliary contacts0Suitability9• Suitability for usesystem protectionAdjustable parameters10Adjustable response value currentA• of I-trip / Full-scale valueA• for N-conductor protection / initial valueAImage: Auxiliary contacts100	● at 60 °C / Rated value	А	48
Auxiliary circuit Number of CO contacts 0 • for auxiliary contacts 0 Suitability • • Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A • for N-conductor protection / initial value A	● at 65 °C / Rated value	А	46
Number of CO contacts 0 • for auxiliary contacts 0 Suitability 0 • Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A • for N-conductor protection / initial value A	• at 70 °C / Rated value	А	45
Number of CO contacts 0 • for auxiliary contacts 0 Suitability 0 • Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A • for N-conductor protection / initial value A	Auviliant aircuit	_	
• for auxiliary contacts0SuitabilitySuitability for usesystem protection• Suitable parameterssystem protectionAdjustable parametersImage: Content of I-trip / Full-scale valueA• of I-trip / Full-scale valueA10• for N-conductor protection / initial valueA100			
Suitability system protection • Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A • for N-conductor protection / initial value A			0
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Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 10 • for N-conductor protection / initial value A			
Adjustable response value current A • of I-trip / Full-scale value A 10 • for N-conductor protection / initial value A 100	Suitability for use		system protection
• of I-trip / Full-scale valueA10• for N-conductor protection / initial valueA100	Adjustable parameters		
for N-conductor protection / initial value A 100	Adjustable response value current		
	 of I-trip / Full-scale value 	А	10
for N-conductor protection / Full-scale value A 100	 for N-conductor protection / initial value 	А	100
	 for N-conductor protection / Full-scale value 	А	100

Adjustable response value current / of the current-	А	0.7
dependent overload release / initial value		
Appearance		
Product details	-	
Product component		
Trip indicator		No
● display		No
 Voltage trigger 		No
 undervoltage release 		No
 undervoltage release with leading contact 		No
Product property	-	
 for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof 		No
Product expansion		
• optional		
— motor drive		Yes
Product function		
Product function		
 Intrinsic device protection 		Yes
 communication function 		No
 Phase failure detection 		No
 other measurement function 		No
Accessories	-	
Manufacturer article number / of the supplied basic switch		3VA1150-5GF42-0AA0
Short circuit	_	
Operational short-circuit current breaking capacity		
(Ics)	LΔ	95
• at 240 V / Rated value	kA	85
 at 240 V / Rated value at 415 V / Rated value 	kA	55
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value 	kA kA	55 30
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value 	kA kA kA	55 30 15
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value 	kA kA	55 30
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu)	kA kA kA kA	55 30 15 5
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value 	kA kA kA kA kA	55 30 15 5 85
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu)	kA kA kA kA kA	55 30 15 5 85 55
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value 	kA kA kA kA kA	55 30 15 5 85
 at 240 V / Rated value at 415 V / Rated value at 440 V / Rated value at 500 V / Rated value at 690 V / Rated value Maximum short-circuit current breaking capacity (Icu) at 240 V / Rated value at 415 V / Rated value 	kA kA kA kA kA	55 30 15 5 85 55

• at 240 V / Rated value	kA	187			
• at 415 V / Rated value	kA	121			
• at 690 V / Rated value	kA	11.9			
Connections					
Arrangement of electrical connectors					
 for main current circuit 		Front termin	al		
Type of connectable conductor cross-section					
 for flat-bar terminal connection / minimum 		12 x 0			
 for flat-bar terminal connection / maximum 		17 x 6.5	17 x 6.5		
Design of the electrical connection					
• for main current circuit		Lug terminal			
lechanical Design					
Height	mm	130			
Width	mm	101.6			
Depth	mm	70			
Mounting type		fixed mount	fixed mounting		
nvironmental conditions					
Ambient temperature					
 during operation / minimum 	°C	-25			
 during operation / maximum 	°C	70			
 during storage / minimum 	°C	-40			
 during storage / maximum 	°C	80			
Certificates					
Reference code					
• acc. to DIN EN 61346-2		Q			
• acc. to DIN EN 81346-2		Q			
General Product Approval EMC		eclaration of conformity	Shipping Approval	other	
	ther			other	
		t	GL		

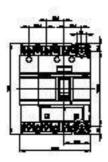
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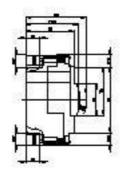
Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11505GF420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11505GF420AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11505GF420AA0

Tender specifications http://ausschreibungstexte.siemens.com/tiplv





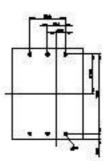




Figure similar

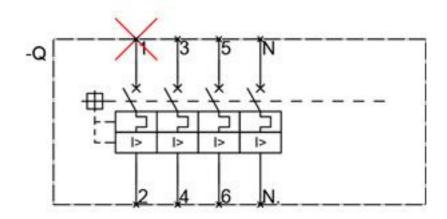


Figure similar

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