SIEMENS

Data sheet

3VA1120-5GD46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION TM210, FTFM, IN=20A OVERLOAD PROTECTION IR=20A FIXED SHORT CIRCUIT PROTECTION II=10 X IN NEUTRAL PROTECTION 100% CABLE 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	TM210

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		
	tage	
Insulation voltage / Rated value V 800	sulation voltage / Rated value	V

Protection class

Protection class IP		IP40			
Protection class IP / on the front		IP40			
Protective function of the overcurrent release		Ц			
Cuitabing appails.					
Switching capacity Switching capacity class of the circuit breaker		M			
Dissipation Active power loss					
• maximum	W	12			
• maximum	•	12			
Electricity					
Continuous current / Rated value / maximum	Α	160			
Continuous current / Rated value	Α	20			
Adjustable response value current	_				
 of the current-dependent overload release / Full-scale value 	Α	1			
 of the instantaneous short-circuit release / initial value 	Α	10			
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	Α	20			
• at 50 °C / Rated value	Α	20			
• at 55 °C / Rated value	Α	20			
• at 60 °C / Rated value	Α	19			
● at 65 °C / Rated value	Α	19			
• at 70 °C / Rated value	Α	19			
Auxiliary circuit					
Number of CO contacts / for auxiliary contacts		0			
Suitability					
Suitability for use		system protection			
Adjustable parameters					
Adjustable response value current					
• of I-trip / Full-scale value	Α	10			
• for N-conductor protection / initial value	Α	100			
• for N-conductor protection / Full-scale value	Α	100			
Adjustable response value current / of the current- dependent overload release / initial value	A	1			
Product details					
Product component					

		Ne
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		3VA1120-5GD46-0AA0
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	30
● at 500 V / Rated value	kA	15
• at 690 V / Rated value	kA	5
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	30
• at 500 V / Rated value	kA	20
• at 690 V / Rated value	kA	10
Short-circuit current making capacity (lcm)		
• at 240 V / Rated value	kA	187
• at 415 V / Rated value	kA	121
• at 690 V / Rated value	kA	17
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
Type of connectable conductor cross-section		

 of the round conductor terminal / stranded 		1 x (1.5 - 70 mm²)	
Type of electrical connection / for main current circuit		Box terminal	
Mechanical Design			
Height	mm	130	
Width	mm	101.6	
Depth	mm	70	
Mounting type		fixed mounting	
Environmental conditions			
Ambient temperature			
during operation / minimum	°C	-25	
during operation / maximum	°C	70	
during storage / minimum	°C	-40	
during storage / maximum	°C	80	
Certificates			
Equipment marking			
• acc. to DIN EN 61346-2		Q	
• acc. to DIN EN 81346-2		Q	

General

Product

Approval

other

EMC



Declaration of

Conformity



Shipping Approval



other

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/3VA11205GD460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11205GD460AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

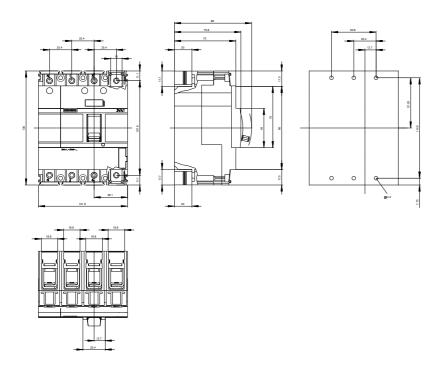
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11205GD460AA0

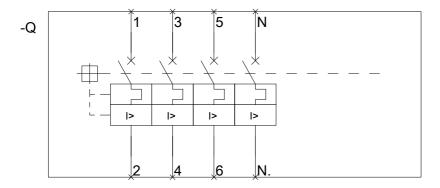
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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