SIEMENS

Data sheet

3VA1120-3GD42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 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% 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	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		
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		Ц
Switching capacity		
Switching capacity class of the circuit breaker		N
Dissipation		
Active power loss		
• maximum	W	12
Electricity		
Continuous current / Rated value / maximum	А	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	Α	1
Product details		
Product component		
. roude compensit		

		NI
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		3VA1120-3GD42-0AA0
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	75.6
• at 415 V / Rated value	kA	52.5
• at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		
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
Type of electrical connection / for main current circuit	Lug terminal

Mechanical Design			
Height	mm	130	
Width	mm	101.6	
Depth	mm	70	
Mounting type		fixed mounting	

Environmental conditions	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

Equipment marking

acc. to DIN EN 61346-2
 acc. to DIN EN 81346-2
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General Product Approval	EMC	Declaration of	Shipping Approval
		Conformity	





other







GL

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/3VA11203GD420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3VA11203GD420AA0/all

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

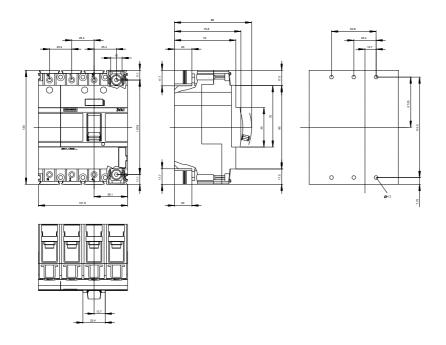
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11203GD420AA0

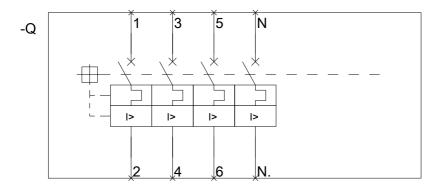
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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