SIEMENS

Data sheet 3VA1220-5GF42-0AA0

Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 250 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=200A OVERLOAD PROTECTION IR=140A ...200A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL PROTECTION 1 BUSBAR CONNECTION

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 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
Total disconnection time / for G-tripping / with standard characteristic / initial value	s	0
Total disconnection time / for G-tripping / with standard characteristic / Full-scale value	s	0
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		LI
Switching capacity		
Switching capacity class of the circuit breaker		M
Dissipation		
Active power loss		
• maximum	W	42
Electricity		
Continuous current / Rated value / maximum	A	250
Continuous current / Rated value	A	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	200
• at 50 °C / Rated value	A	200
• at 55 °C / Rated value	A	194
• at 60 °C / Rated value	A	188
• at 65 °C / Rated value	A	182
• at 70 °C / Rated value	A	176
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
• for G-tripping / with I2t characteristic / initial value	A	0
• for G-tripping / with I2t characteristic / Full-scale value	A	0
Adjustable delay time		
• for G-tripping / with I2t characteristic / initial value	s	0
• for G-tripping / with I2t characteristic / Full-scale value	s	0
Adjustable response value current / of the current-dependent overload release / initial value	A	200
Product details		
Product component		
• Trip indicator		No

• display		No
• undervoltage release		No
Product property		
• of the circuit breaker with tripping unit / Tripping characteristic adjustable		No
• 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
• other measurement function		No

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	36
• 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	36
• at 690 V / Rated value	kA	10
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	187
• at 415 V / Rated value	kA	121
• at 440 V / Rated value	kA	75.6
• at 690 V / Rated value	kA	17

Connections

Arrangement of electrical connectors / for main current circuit		Front terminal
Type of electrical connection / for main current circuit		Lug terminal

Mechanical Design

Height	mm	158
Width	mm	140
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	Declaration of Conformity	Test Certificates	other
VDE EAC	EG-Konf.	Typprüfbescheinigung/Werkszeugnis	sonstig

Further information

Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/lowvoltage/catalogs

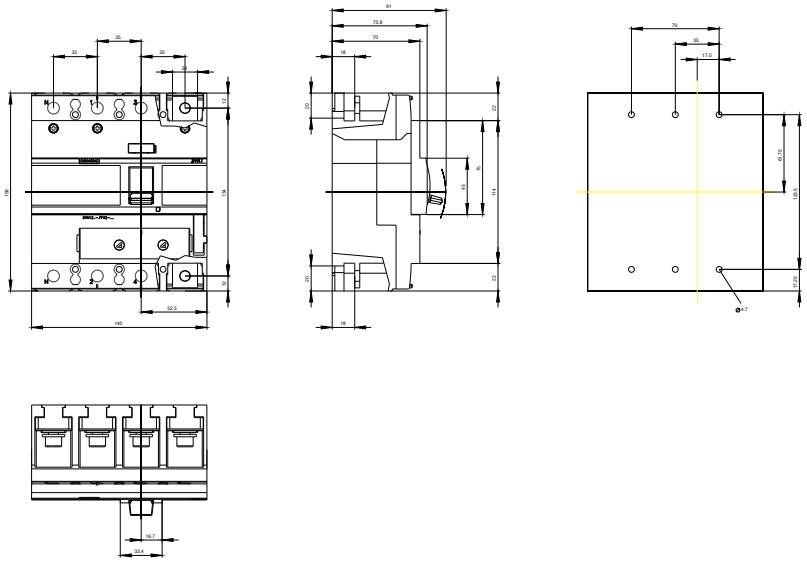
Industry Mall (Online ordering system)
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA12205GF420AA0

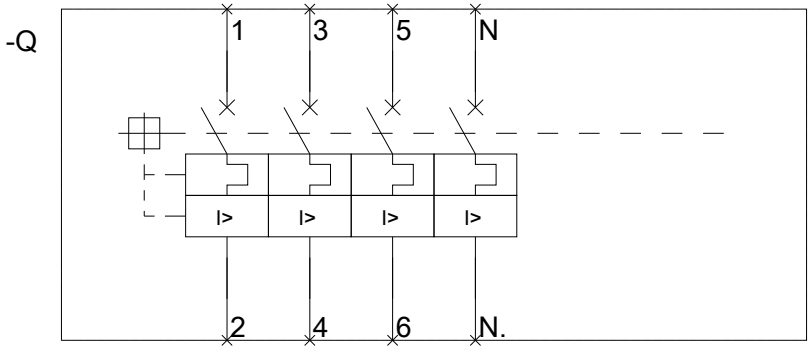
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3VA12205GF420AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA12205GF420AA0

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

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





last modified: 04.06.2015