# **SIEMENS**

## Data sheet

## 3VA1120-6GF42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=20A OVERLOAD PROTECTION IR=14A ...20A 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
Protection class		

Protection class IP / on the front         Protective function of the overcurrent release         Switching capacity         Switching capacity class of the circuit breaker         Dissipation         Active power loss         • maximum         Electricity         Continuous current / Rated value / maximum         Continuous current / Rated value         Adjustable response value current	W A A A	IP40 LI H 12 160
Switching capacity         Switching capacity class of the circuit breaker         Dissipation         Active power loss         • maximum         Electricity         Continuous current / Rated value / maximum         Continuous current / Rated value	A	H 12
Switching capacity class of the circuit breaker         Dissipation         Active power loss         • maximum         Electricity         Continuous current / Rated value / maximum         Continuous current / Rated value	A	12
Switching capacity class of the circuit breaker         Dissipation         Active power loss         • maximum         Electricity         Continuous current / Rated value / maximum         Continuous current / Rated value	A	12
Dissipation         Active power loss         • maximum         Electricity         Continuous current / Rated value / maximum         Continuous current / Rated value	A	12
Active power loss  • maximum  Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value	A	
maximum  Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value	A	
Electricity Continuous current / Rated value / maximum Continuous current / Rated value	A	
Continuous current / Rated value / maximum Continuous current / Rated value		160
Continuous current / Rated value		160
	А	
Adjustable response value current		20
,		
<ul> <li>of the current-dependent overload release / Full-scale value</li> </ul>	A	1
<ul> <li>of the instantaneous short-circuit release / initial value</li> </ul>	A	5
Main circuit		
Operating voltage		
• with AC / at 50/60 Hz / Rated value	V	690
<ul> <li>for DC / Rated value</li> </ul>	V	600
Operating current		
• at 40 °C / Rated value	A	20
• at 50 °C / Rated value	А	20
● at 55 °C / Rated value	A	20
• at 60 °C / Rated value	A	19
● at 65 °C / Rated value	A	19
• at 70 °C / Rated value	А	19
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
Adjustable parameters		
Adjustable response value current		
<ul> <li>of I-trip / Full-scale value</li> </ul>	А	10
<ul> <li>for N-conductor protection / initial value</li> </ul>	A	100
<ul> <li>for N-conductor protection / Full-scale value</li> </ul>	A	100
Adjustable response value current / of the current- dependent overload release / initial value	A	0.7
Product details		
Product component		

Trip indicator		No
• display		No
Voltage trigger		No
<ul> <li>undervoltage release</li> </ul>		No
<ul> <li>undervoltage release with leading contact</li> </ul>		No
Product property		
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof</li> </ul>		No
Product expansion / optional / motor drive		Yes
Product function		
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>communication function</li> </ul>		No
<ul> <li>Phase failure detection</li> </ul>		No
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1120-6GF42-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
• at 240 V / Rated value	kA	100
• at 415 V / Rated value	kA	70
• at 440 V / Rated value	kA	36
• 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	100
• at 415 V / Rated value	kA	70
• at 440 V / Rated value	kA	36
• at 500 V / Rated value	kA	20
• at 690 V / Rated value	kA	10
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	220
• at 415 V / Rated value	kA	154
• at 690 V / Rated value	kA	17
Connections		
Arrangement of electrical connectors / for main		Front terminal
current circuit		

Type of connectable conductor cross-section

		EG-Konf.	DNV DNV GL
	other	Conformity	ĴÅ GI 🚳
General Product Approval EM	С	Declaration of	Shipping Approval
• acc. to DIN EN 81346-2		Q	
• acc. to DIN EN 61346-2		Q	
Equipment marking			
ertificates			
<ul> <li>during storage / maximum</li> </ul>	°C	80	
<ul> <li>during storage / minimum</li> </ul>	°C	-40	
<ul> <li>during operation / maximum</li> </ul>	°C	70	
<ul> <li>during operation / minimum</li> </ul>	°C	-25	
mbient temperature			
nvironmental conditions			
lounting type		fixed mount	ung
Depth	mm	70	·
Vidth	mm	101.6	
leight	mm	130	
echanical Design			
ype of electrical connection / for main current c	circuit	Lug termina	
• for flat-bar terminal connection / maximum		17 x 6.5	

#### 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/3VA11206GF420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11206GF420AA0/all

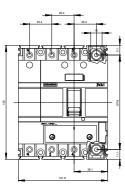
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11206GF420AA0

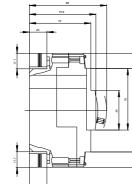
#### CAx-Online-Generator

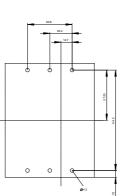
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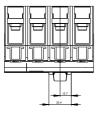
### **Tender specifications**

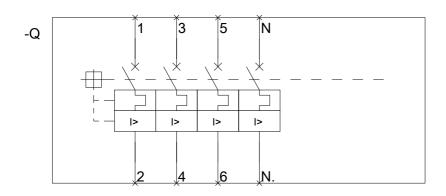
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