## **SIEMENS**

## Data sheet

## 3VA1110-4GF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=100A OVERLOAD PROTECTION IR=70A ...100A SHORT CIRCUIT PROTECTION II=5...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		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         Vw         Electricity         Continuous current / Rated value / maximum         A         Continuous current / Rated value         A         Adjustable response value current         • of the current-dependent overload release / Full-scale value         • of the instantaneous short-circuit release / initial value	A 160 A 100 A 1					
Switching capacity class of the circuit breaker         Dissipation         Active power loss         • maximum         VW         Electricity         Continuous current / Rated value / maximum         A         Continuous current / Rated value         A         Justable response value current         • of the current-dependent overload release /         Full-scale value         • of the instantaneous short-circuit release / initial value	S V 25 A 160 A 100 A 1					
Switching capacity class of the circuit breaker         Dissipation         Active power loss         • maximum         W         Electricity         Continuous current / Rated value / maximum         A         Continuous current / Rated value         A         Adjustable response value current         • of the current-dependent overload release /         Full-scale value         • of the instantaneous short-circuit release / initial value	V 25 A 160 A 100 A 1					
Switching capacity class of the circuit breaker         Dissipation         Active power loss         • maximum         W         Electricity         Continuous current / Rated value / maximum         A         Continuous current / Rated value         A         Adjustable response value current         • of the current-dependent overload release /         Full-scale value         • of the instantaneous short-circuit release / initial value	V 25 A 160 A 100 A 1					
Dissipation         Active power loss         • maximum       W         Electricity         Continuous current / Rated value / maximum       A         Continuous current / Rated value       A         Adjustable response value current       A         • of the current-dependent overload release /       A         Full-scale value       • of the instantaneous short-circuit release / initial value       A	V 25 A 160 A 100 A 1					
Active power loss       • maximum       W         Electricity       W         Continuous current / Rated value / maximum       A         Continuous current / Rated value       A         Adjustable response value current       • of the current-dependent overload release / A         Full-scale value       • of the instantaneous short-circuit release / initial value	A 160 A 100 A 1					
maximum	A 160 A 100 A 1					
Electricity         Continuous current / Rated value / maximum       A         Continuous current / Rated value       A         Adjustable response value current       A         • of the current-dependent overload release / Full-scale value       A         • of the instantaneous short-circuit release / initial value       A	A 160 A 100 A 1					
Continuous current / Rated value / maximum       A         Continuous current / Rated value       A         Adjustable response value current       A         • of the current-dependent overload release / Full-scale value       A         • of the instantaneous short-circuit release / initial value       A	100 1					
Continuous current / Rated value       A         Adjustable response value current       • of the current-dependent overload release / A         Full-scale value       • of the instantaneous short-circuit release / initial value	100 1					
Adjustable response value current       Adjustable response value current         • of the current-dependent overload release /       A         Full-scale value       A         • of the instantaneous short-circuit release / initial value       A	<b>\</b> 1					
<ul> <li>of the current-dependent overload release / A</li> <li>Full-scale value</li> <li>of the instantaneous short-circuit release / initial value</li> </ul>						
<ul> <li>Full-scale value</li> <li>of the instantaneous short-circuit release / initial A value</li> </ul>						
value	5					
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	100					
• at 50 °C / Rated value A	100					
• at 55 °C / Rated value A	98					
• at 60 °C / Rated value A	96					
• at 65 °C / Rated value A	94					
• at 70 °C / Rated value A	91					
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 A	10					
• for N-conductor protection / initial value A	100					
• for N-conductor protection / Full-scale value A	100					
Adjustable response value current / of the current- dependent overload release / initial valueA	0.7					
Product details						
Product component						

• Trip indicator		No
• Trip indicator		
• 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		3VA1110-4GF46-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity (Ics)		
• at 240 V / Rated value	kA	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• 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	55
• at 415 V / Rated value	kA	36
• at 440 V / Rated value	kA	25
• at 500 V / Rated value	kA	16
• at 690 V / Rated value	kA	7
Short-circuit current making capacity (Icm)		
• at 240 V / Rated value	kA	121
• at 415 V / Rated value	kA	75.6
• at 690 V / Rated value	kA	7.5
Connections		
Arrangement of electrical connectors / for main		Front terminal

Type of connectable conductor cross-section

• of the round co	onductor terminal / str	randed		1 x (1.5 - 70 mm²)	
Type of electrical co	nnection / for main cu	urrent circuit		Box terminal	
Mechanical Design					
Height			mm	130	
Width			mm	101.6	
Depth			mm	70	
Mounting type				fixed mounting	
Environmental conc	litions				
Ambient temperature	e				
<ul> <li>during operation</li> </ul>	on / minimum		°C	-25	
<ul> <li>during operation</li> </ul>	on / maximum		°C	70	
<ul> <li>during storage</li> </ul>	/ minimum		°C	-40	
<ul> <li>during storage</li> </ul>	/ maximum		°C	80	
Certificates					
Equipment marking					
<ul> <li>acc. to DIN EN</li> </ul>	l 61346-2			Q	
<ul> <li>acc. to DIN EN</li> </ul>	V 81346-2			Q	
General Product Approval	EMC	Declaration Conformity		pping Approval	other
EHC	other	EG-Konf.			other

## Further information

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

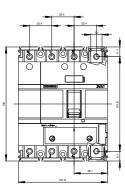
Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11104GF460AA0

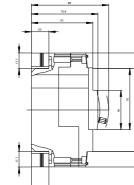
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11104GF460AA0/all

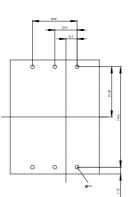
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11104GF460AA0

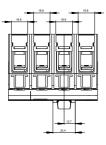
**CAx-Online-Generator** http://www.siemens.com/cax

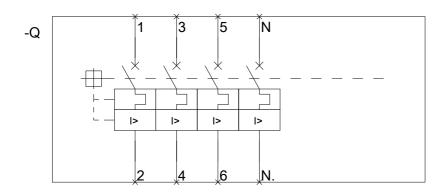
**Tender specifications** http://ausschreibungstexte.siemens.com/tiplv











last modified:

11.03.2015