## **SIEMENS**

## Data sheet

## 3VA1110-6FF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 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 50% 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	-	IP40			
Protective function of the overcurrent release	_	LI			
	_				
Switching capacity Switching capacity class of the circuit breaker	-	Н			
Dissipation					
Active power loss					
• maximum	W	25			
Electricity					
Continuous current / Rated value / maximum	А	160			
Continuous current / Rated value	А	100			
Adjustable response value current					
<ul> <li>of the current-dependent overload release / Full-scale value</li> </ul>	A	1			
• of the instantaneous short-circuit release / initial value	A	5			
Main circuit					
Operating voltage					
<ul> <li>with AC / at 50/60 Hz / Rated value</li> </ul>	V	690			
<ul> <li>for DC / Rated value</li> </ul>	V	600			
Operating current					
• at 40 °C / Rated value	А	100			
• at 50 °C / Rated value	А	100			
• at 55 °C / Rated value	А	98			
● at 60 °C / Rated value	А	96			
● at 65 °C / Rated value	А	94			
• at 70 °C / Rated value	А	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	А	10			
<ul> <li>for N-conductor protection / initial value</li> </ul>	А	0.5			
<ul> <li>for N-conductor protection / Full-scale value</li> </ul>	А	0.5			
Adjustable response value current / of the current-	А	0.7			
dependent overload release / initial value					
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		3VA1110-6FF46-0AA0
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

• 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>	• during storage / 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

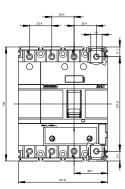
Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11106FF460AA0

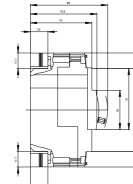
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11106FF460AA0/all

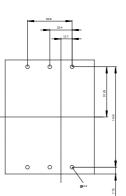
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11106FF460AA0

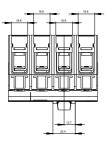
**CAx-Online-Generator** http://www.siemens.com/cax

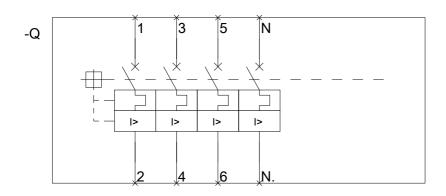
**Tender specifications** http://ausschreibungstexte.siemens.com/tiplv











last modified:

11.03.2015