## **SIEMENS**

## Data sheet

## 3VA1112-4GD46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM210, FTFM, IN=125A OVERLOAD PROTECTION IR=125A FIXED SHORT CIRCUIT PROTECTION II=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		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	-	LI					
Switching capacity Switching capacity class of the circuit breaker	_	S					
Dissipation	_						
Active power loss	14/	00.0					
• maximum	W	23.2					
Electricity							
Continuous current / Rated value / maximum	A	160					
Continuous current / Rated value	А	125					
Adjustable response value current							
<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	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	А	125					
● at 50 °C / Rated value	А	125					
● at 55 °C / Rated value	А	122					
● at 60 °C / Rated value	А	120					
● at 65 °C / Rated value	А	117					
• at 70 °C / Rated value	А	114					
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>	A	100					
for N-conductor protection / Full-scale value	A	100					
Adjustable response value current / of the current-	A	1					
dependent overload release / initial value							
Product details							
Product component							

Trip indicator		No
● display		No
<ul> <li>Voltage trigger</li> </ul>		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		3VA1112-4GD46-0AA0
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
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	Depth		mm	70		
Mounting type				fixed mounting		
Environmental conc	litions					
Ambient temperature	e					
<ul> <li>during operation</li> </ul>	<ul> <li>during operation / minimum</li> </ul>		°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 / maximum</li> </ul>		°C	80			
Certificates						
Equipment marking						
• acc. to DIN EN 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

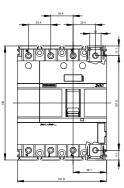
Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11124GD460AA0

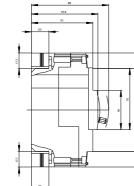
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11124GD460AA0/all

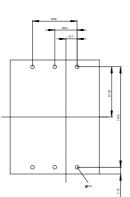
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11124GD460AA0

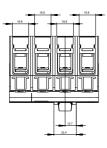
**CAx-Online-Generator** http://www.siemens.com/cax

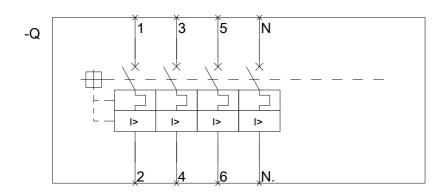
**Tender specifications** http://ausschreibungstexte.siemens.com/tiplv











last modified:

11.03.2015