# **SIEMENS**

## Data sheet

## 3VA1112-4EE36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM220, ATFM, IN=125A OVERLOAD PROTECTION IR=87,5A ...125A SHORT CIRCUIT PROTECTION II=10 X IN 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	TM220
General technical data	

General technical data			
Number of poles		3	
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

Protective function of the overcurrent release  LI  Switching capacity Switching capacity class of the circuit breaker  Simulating capacity class of the circuit breaker  Simulating capacity Switching capacity class of the circuit breaker  Simulating capacity class of the circuit breaker  Simulating capacity class of the circuit breaker  Simulating capacity Continuous current / Rated value / maximum  A 160 Continuous current / Rated value A 125  Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial A 10  value  of the instantaneous short-circuit release / initial A 10  Vision Credit  Operating voltage  with AC / at 50 floot Hz / Rated value  of to DC / Rated value  at 50 °C / Rated value  at 50 °C / Rated value  at 60 °C / Rated value  A 125  at 60 °C / Rated value  A 120  at 60 °C / Rated value  A 117  with a 120  at 60 °C / Rated value  A 117  at 70 °C / Rated value  A 117  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / Full-scale value  for N-conductor protection / Full-scale value  of N-conductor protection / Full-scale value  Adjustable response value current / of the current-dependent overload release / Initial value  of N-conductor protection / Full-scale value  Adjustable parameters / Adjustable response value current / of the current-dependent overload release / Initial value  of N-conductor protection / Full-scale value  A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Protection class IP		IP40
Switching capacity Switching capacity class of the circuit breaker    Dissipation	Protection class IP / on the front		IP40
Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W 23.2  Electricity  Continuous current / Rated value / maximum  A 160  Continuous current / Rated value  A 125  Adjustable response value current  • of the current-dependent overload release / Full-scale value  • of the instantaneous short-circuit release / initial value  • of t	Protective function of the overcurrent release		Ц
Switching capacity class of the circuit breaker    Dissipation   Active power loss   • maximum   W   23.2	Switching capacity		
Active power loss			S
Active power loss	Dissipation		
Electricity  Continuous current / Rated value / maximum  A 160  Continuous current / Rated value  Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  of the current-dependent overload release / A 10  of the current-of the current-dependent overload release / A 10  of the current-of the current-dependent overload release / A 11  of the current-of the current-dependent overload release / A 10  of the current-of the current-dependent overload release / A 11  of the current-of the current-dependent overload of the current-dependent overload overload of the current-dependent overload ove	Active power loss		
Continuous current / Rated value / maximum Continuous current / Rated value Adjustable response value current of the current-dependent overload release / Full-scale value of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage with AC / at 50/60 Hz / Rated value of or DC / Rated value  V 500  Operating current at 40 °C / Rated value A 125 at 50 °C / Rated value A 125 at 50 °C / Rated value A 122 at 60 °C / Rated value A 120 at 60 °C / Rated value A 120 At 70 °C / Rated value A 117 Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Osultability Suitability Suitabile parameters  Adjustable parameters  Adjustable response value current of the current- of or N-conductor protection / Full-scale value A 0.7	• maximum	W	23.2
Continuous current / Rated value  Adjustable response value current  • of the current-dependent overload release / Full-scale value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the current-of the cur	Electricity		
Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  with AC / at 50/60 Hz / Rated value  of tor DC / Rated value  of CP Rated value  at 40 °C / Rated value  at 50 °C / Rated value  at 60 °C / Rated value  at 70 °C / Rated value  A 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitabile parameters  Adjustable response value current  of It-trip / Full-scale value  af 10	Continuous current / Rated value / maximum	А	160
of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  with AC / at 50/60 Hz / Rated value  of or DC / Rated value  V 500  Operating current  at 40 °C / Rated value  A 125  at 55 °C / Rated value  A 125  at 65 °C / Rated value  A 120  at 65 °C / Rated value  A 120  at 65 °C / Rated value  A 117  at 70 °C / Rated value  A 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  A 10  Adjustable response value current / of the current-  Adjustable response value current / of the current-	Continuous current / Rated value	Α	125
Full-scale value  • of the instantaneous short-circuit release / initial value  Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  • tat 40 °C / Rated value  • at 40 °C / Rated value  • at 55 °C / Rated value  • at 55 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  • at 80 °C / Rated valu	Adjustable response value current		
Main circuit           Operating voltage           • with AC / at 50/60 Hz / Rated value         V         690           • for DC / Rated value         V         500           Operating current           • at 40 °C / Rated value         A         125           • at 50 °C / Rated value         A         122           • at 55 °C / Rated value         A         120           • at 65 °C / Rated value         A         117           • at 70 °C / Rated value         A         114           Auxiliary circuit           Number of CO contacts / for auxiliary contacts         0           Suitability           Suitability for use           Adjustable parameters           Adjustable response value current           • of I-trip / Full-scale value         A         10           • for N-conductor protection / initial value         A         0           • for N-conductor protection / Full-scale value         A         0           • Adjustable response value current / of the current-         A         0.7		Α	1
Operating voltage		Α	10
with AC / at 50/60 Hz / Rated value     for DC / Rated value     V 500  Operating current     at 40 °C / Rated value     A 125     at 50 °C / Rated value     A 125     at 55 °C / Rated value     A 122     at 60 °C / Rated value     A 120     at 60 °C / Rated value     A 117     at 70 °C / Rated value     A 117     at 70 °C / Rated value     A 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitabile parameters  Adjustable parameters  Adjustable parameters  Adjustable response value current     of I-trip / Full-scale value     for N-conductor protection / initial value     of or N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-  Adjustable response value current / of the current-	Main circuit		
for DC / Rated value         V 500  Operating current         at 40 °C / Rated value	Operating voltage		
Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 55 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  A 117  • at 70 °C / Rated value  A 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  • of I-trip / Full-scale value  • for N-conductor protection / initial value  • for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• with AC / at 50/60 Hz / Rated value	V	690
at 40 °C / Rated value  at 50 °C / Rated value  at 55 °C / Rated value  at 60 °C / Rated value  at 60 °C / Rated value  at 65 °C / Rated value  at 70 °C / Rated value  At 117  at 70 °C / Rated value  At 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• for DC / Rated value	V	500
at 50 °C / Rated value at 55 °C / Rated value A 122 at 60 °C / Rated value A 120 at 65 °C / Rated value A 117 at 65 °C / Rated value A 117 at 70 °C / Rated value A 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value A 10 of or N-conductor protection / initial value of or N-conductor protection / Full-scale value  Adjustable response value current of N-conductor protection / Full-scale value Adjustable response value current / of the current-  Adjustable response value current / of the current-  Adjustable response value current / of the current-	Operating current		
at 55 °C / Rated value at 60 °C / Rated value A 120 at 65 °C / Rated value A 117 at 70 °C / Rated value A 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current of I-trip / Full-scale value of or N-conductor protection / Initial value of or N-conductor protection / Full-scale value Adjustable response value current / of the current- Adjustable response value current / of the current-  Adjustable response value current / of the current-  A 0.7	• at 40 °C / Rated value	Α	125
at 60 °C / Rated value  at 65 °C / Rated value  A 117  at 70 °C / Rated value  A 114  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-  A 0.7	• at 50 °C / Rated value	Α	125
at 65 °C / Rated value  at 70 °C / Rated value  A 117  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  0  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  of or N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• at 55 °C / Rated value	Α	122
at 70 °C / Rated value  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• at 60 °C / Rated value	Α	120
Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value for N-conductor protection / initial value  for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• at 65 °C / Rated value	Α	117
Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  • of I-trip / Full-scale value  • for N-conductor protection / initial value  • for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• at 70 °C / Rated value	Α	114
Number of CO contacts / for auxiliary contacts  Suitability  Suitability for use  Adjustable parameters  Adjustable response value current  • of I-trip / Full-scale value  • for N-conductor protection / initial value  • for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-	Auxiliary circuit		
Suitability for use  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  Adjustable response value current / of the current-	Number of CO contacts / for auxiliary contacts		0
Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  A 0.7	Suitability		
Adjustable response value current  of I-trip / Full-scale value  for N-conductor protection / initial value  for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  A 0.7	Suitability for use		system protection
<ul> <li>of I-trip / Full-scale value</li> <li>for N-conductor protection / initial value</li> <li>for N-conductor protection / Full-scale value</li> <li>Adjustable response value current / of the current-</li> <li>A 0.7</li> </ul>			
<ul> <li>for N-conductor protection / initial value</li> <li>for N-conductor protection / Full-scale value</li> <li>Adjustable response value current / of the current-</li> <li>A 0.7</li> </ul>	Adjustable response value current		
• for N-conductor protection / Full-scale value  Adjustable response value current / of the current-  A 0.7	● of I-trip / Full-scale value	Α	10
Adjustable response value current / of the current- A 0.7	• for N-conductor protection / initial value	Α	0
	• for N-conductor protection / Full-scale value	Α	0
	•	А	0.7
Product details	Product details		
Product component			

		N
• Trip indicator		No
<ul><li>display</li></ul>		No
Voltage trigger		No
undervoltage release		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		
Intrinsic device protection		Yes
communication function		No
Phase failure detection		No
other measurement function		No
Accessories	_	
Manufacturer article number / of the supplied basic		3VA1112-4EE36-0AA0
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 (lcm)		
• 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 c	onductor terminal / str	anded			1 x (1.5 - 70 mm²)	
Type of electrical co	onnection / for main cu	irrent circuit			Box terminal	
Mechanical Design						
Height			mm		130	
Width			mm		76.2	
Depth			mm		70	
Mounting type					fixed mounting	
Environmental cond	ditions					
Ambient temperatur	е					
<ul> <li>during operation</li> </ul>	on / minimum		°C		-25	
during operation / maximum		°C		70		
during storage / minimum		°C		-40		
<ul><li>during storage</li></ul>	e / maximum		°C		80	
Certificates						
Equipment marking						
• acc. to DIN EN	N 61346-2				Q	
• acc. to DIN EN	N 81346-2				Q	
General	EMC	Declaration	n of	Ship	oping Approval	other
Product		Conformity	/			
Approval						
	other			2	£	other

## Further information

EAC

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/3VA11124EE360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11124EE360AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11124EE360AA0

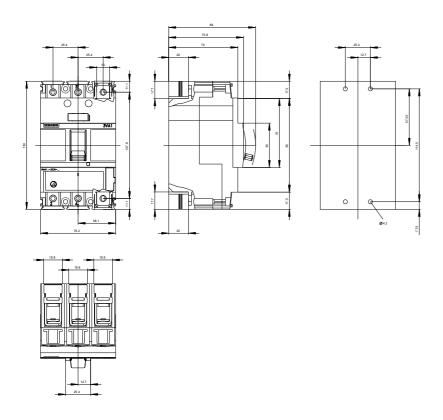
**CAx-Online-Generator** 

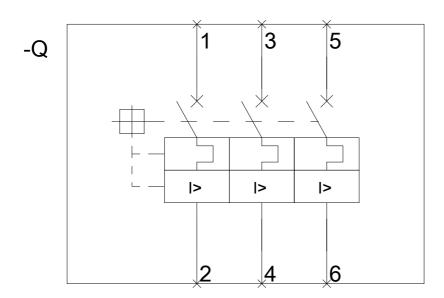
http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv

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