# **SIEMENS**

## Data sheet

# 3VA1120-3EF36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION TM240, ATAM, IN=20A OVERLOAD PROTECTION IR=14A ...20A SHORT CIRCUIT PROTECTION II=5...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	TM240			
Compared to abraical 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

Protection class IP / on the front Protective function of the overcurrent release  Switching capacity Switching capacity class of the circuit breaker  N  Dissipation  Active power loss • maximum  W  12  Electricity  Continuous current / Rated value / maximum Ocntinuous current / Rated value / maximum • 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  Main circuit  Operating current • at 00 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value •	Protection class IP		IP40		
Switching capacity Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W 12  Electricity Continuous current / Rated value / maximum  • 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 of Co contacts / for auxiliary contacts  O Suitability  Suitability or use  Adjustable parameters  Adjustable parameters  Adjustable parameters  Adjustable paraponse value current / of the current-dependent overload release / initial value  • Adjustable paraponse value current / of the current-dependent overload release / initial value  Product details	Protection class IP / on the front		IP40		
Switching capacity class of the circuit breaker  Dissipation Active power loss  • maximum  W 12  Electricity Continuous current / Rated value / maximum • of the current-dependent overload release / Full-scale value • 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  Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated	Protective function of the overcurrent release		LI		
Switching capacity class of the circuit breaker  Dissipation Active power loss  • maximum  W 12  Electricity Continuous current / Rated value / maximum • of the current-dependent overload release / Full-scale value • 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  Operating voltage • with AC / at 50/60 Hz / Rated value • for DC / Rated value • for DC / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated	Switching capacity				
Active power loss  • maximum    Maximum   Maxi			N		
Active power loss  • maximum    M	Dissipation				
Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value  A 20  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  Main circuit  Operating voltage  with AC / at 50/60 Hz / Rated value  of to DC / Rated value  of DC / Rated value  of C / Rated value  at 50 °C / Rated value  at 50 °C / Rated value  at 60 °C / Rated value  at 70 °C / Ra	·				
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 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 current of the current value of the current value of the current value of the current value value of the current of late value of the current	• maximum	W	12		
Continuous current / Rated value / maximum	Electricity				
Adjustable response value current  of the current-dependent overload release / Full-scale value  of the instantaneous short-circuit release / initial value  A 10  of the instantaneous short-circuit release / initial value  of the current of the c		Α	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     volue  of the DC / Rated value  volue  Operating current  at 40 °C / Rated value  of C/ Rated value  at 55 °C / Rated value  at 65 °C / Rated value  at 67 °C / Rated value  at 67 °C / Rated value  at 68 °C / Rated value  at 68 °C / Rated value  at 69 °C / Rated value  at 60 °C /	Continuous current / Rated value	Α	20		
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  • at 40 °C / Rated value  • at 55 °C / Rated value  • at 55 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value	Adjustable response value current				
Main circuit  Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  • at 40 °C / Rated value  • at 40 °C / Rated value  • at 55 °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 19  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitabile parameters  Adjustable parameters  Adjustable response value current  • of I-trip / Full-scale value  • for N-conductor protection / Full-scale value  A 10  Adjustable response value current / of the current-dependent overload release / initial value  Product details		Α	1		
Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  Operating current  • at 40 °C / Rated value  • at 50 °C / Rated value  • at 50 °C / Rated value  • at 55 °C / Rated value  • at 55 °C / Rated value  • at 60 °C / Rated value  • at 60 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  A 19  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability for use  system protection  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  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details		Α	5		
with AC / at 50/60 Hz / Rated value     for DC / Rated value     v 500  Operating current     at 40 °C / Rated value     at 50 °C / Rated value     at 50 °C / Rated value     at 50 °C / Rated value     at 60 °C / Rated value     at 60 °C / Rated value     at 60 °C / Rated value     at 65 °C / Rated value     at 65 °C / Rated value     at 70 °C / Rated value     at	Main circuit				
for DC / 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 70 °C / Rated value  • at 70 °C / Rated value  A 19  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitability for use  Adjustable parameters  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  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• with AC / at 50/60 Hz / Rated value	V	690		
at 40 °C / Rated value at 50 °C / Rated value A 20 at 55 °C / Rated value A 19 at 60 °C / Rated value A 19 at 60 °C / Rated value A 19 at 60 °C / Rated value A 19 at 70 °C / Rated value A 19  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-dependent overload release / initial value  Product details	• for DC / Rated value	V	500		
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 70 °C / Rated value  A 19  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability or 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-dependent overload release / initial value  Product details	Operating current				
at 55 °C / Rated value  at 60 °C / Rated value  at 65 °C / Rated value  at 65 °C / Rated value  at 70 °C / Rated value  A 19  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability  Suitability system protection  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-dependent overload release / initial value  Product details	• at 40 °C / Rated value	Α	20		
at 60 °C / Rated value at 65 °C / Rated value A 19  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  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 50 °C / Rated value	Α	20		
at 65 °C / Rated value  at 65 °C / Rated value  A 19  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  of or N-conductor protection / Full-scale value  Adjustable response value current / of the current  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 55 °C / Rated value	Α	20		
at 70 °C / Rated value  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  Adjustable response value current  of N-conductor protection / Full-scale value  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 60 °C / Rated value	Α	19		
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-dependent overload release / initial value  Product details	• at 65 °C / Rated value	Α	19		
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  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 70 °C / Rated value	Α	19		
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  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details	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  A 0  for N-conductor protection / Full-scale value  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details			0		
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  A 0  for N-conductor protection / Full-scale value  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details	Suitability				
Adjustable response value current  of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details			system protection		
Adjustable response value current  of I-trip / Full-scale value for N-conductor protection / initial value for N-conductor protection / Full-scale value  for N-conductor protection / Full-scale value  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details	Adjustable parameters				
• for N-conductor protection / initial value     • for N-conductor protection / Full-scale value     • for N-conductor protection / Full-scale value     • A  Adjustable response value current / of the current-dependent overload release / initial value  Product details  A  0  A  0.7					
◆ for N-conductor protection / Full-scale value  Adjustable response value current / of the current-dependent overload release / initial value  Product details  O  A  0.7	• of I-trip / Full-scale value	Α	10		
Adjustable response value current / of the current- dependent overload release / initial value  Product details	• for N-conductor protection / initial value	Α	0		
Product details	• for N-conductor protection / Full-scale value	Α	0		
	•	Α	0.7		
	Product details				
r route component	Product component				

Trip indicator		No
·		No
• display		No
Voltage trigger		No
undervoltage release		
undervoltage release with leading contact		No
Product property		No
<ul> <li>for neutral conductors / upgradeable/retrofittable / Short-circuit and</li> </ul>		NO .
overload proof		
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
Phase failure detection		No
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1120-3EF36-0AA0
switch		
Short circuit		
Operational short-circuit current breaking capacity		
(lcs)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
at 690 V / Rated value	kA	5
Maximum short-circuit current breaking capacity (Icu)		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
● at 500 V / Rated value	kA	8
● at 690 V / Rated value	kA	7
Short-circuit current making capacity (lcm)		
• at 240 V / Rated value	kA	75.6
<ul><li>at 240 V / Rated value</li><li>at 415 V / Rated value</li></ul>	kA kA	75.6 52.5
at 415 V / Rated value     at 690 V / Rated value  Connections	kA	52.5 7.5
at 415 V / Rated value     at 690 V / Rated value  Connections  Arrangement of electrical connectors / for main	kA	52.5
at 415 V / Rated value     at 690 V / Rated value  Connections	kA	52.5 7.5

	<ul> <li>of the round conductor terminal / stranded</li> </ul>					1 x (1.5 - 70 mm²)		
	Type of electrical connection / for main current circuit					Box terminal		
				_	_			
	lechanical Design							
	Height			mm		130		
1	Width			mm		76.2		
	Depth			mm		70		
	Mounting type					fixed mounting		
Е	Environmental conditions							
Ambient temperature								
	during operation / minimum			°C		-25		
	during operation / maximum			°C		70		
	during storage / minimum			°C		-40		
	during storage / maximum			°C		80		
С	Certificates							
	Equipment marking							
	• acc. to DIN EN 61346-2					Q		
	• acc. to DIN EN 81346-2					Q		
	General	EMC	Declaration	n of	Ship	pping Approval	other	
	Product Conformity							
	Approval							

## Further information

EHC

Information- and Downloadcenter (Catalogs, Brochures,...)

other

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11203EF360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11203EF360AA0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11203EF360AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

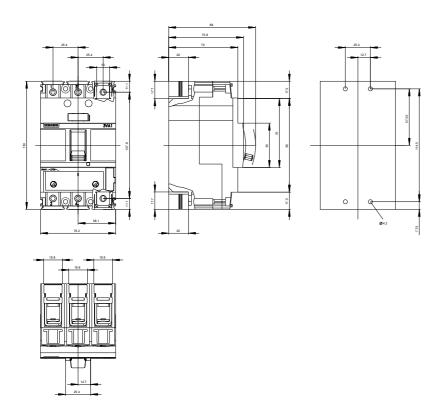
**Tender specifications** 

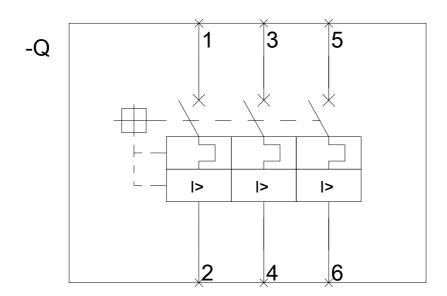
http://ausschreibungstexte.siemens.com/tiplv

other

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