# **SIEMENS**

## Data sheet

# 3VA1163-6EF36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 3-POLE, LINE PROTECTION TM240, ATAM, IN=63A OVERLOAD PROTECTION IR=44,1A ...63A 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 all missed slots	

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  LI  Switching capacity Switching capacity class of the circuit breaker    H	Protection class IP		IP40	
Switching capacity Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W 17.3  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  Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • of r PC / Rated value  Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated valu	Protection class IP / on the front		IP40	
Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W 17.3  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  • 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-dependent overload release / initial value  Froduct details	Protective function of the overcurrent release		LI	
Switching capacity class of the circuit breaker  Dissipation  Active power loss  • maximum  W 17.3  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  • 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-dependent overload release / initial value  Froduct details	Switching capacity			
Active power loss  • maximum    Maximum   Maxi			н	
Active power loss  • maximum    Maximum   Maxi	Dissipation			
Electricity  Continuous current / Rated value / maximum  Continuous current / Rated value  A 63  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 the OC / Rated value  of the OC / Rated value  at 50 °C / Rated value  at 50 °C / Rated value  at 60 °C / Rated value  at 70 °C / Rated	Active power loss			
Continuous current / Rated value / maximum Continuous current / Rated value A 63  Adjustable response value current • of the current-dependent overload release / A 1  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  Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 67 °C / Rated value • at 67 °C / Rated value • at 68 °C / Rated value • at 69 °C / Rated value • at 60 °C / Rat	• maximum	W	17.3	
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 open definitial value  of the instantaneous short-circuit release / initial value  A 50  Operating current  of the instantaneous short-circuit release / initial value  A 63  A 62  A 63  A 62  A 61  A 62  A 61  A 61  A 60  A 61  A 60  A 58   Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitability for use  System protection  Adjustable response value current  of I-trip / Full-scale value  A 10  A 10  Adjustable response value current / of the current-dependent overload release / initial value  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details	Electricity			
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  Product details	Continuous current / Rated value / maximum	А	160	
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     v     690     v     of the DC / Rated value     v     v     500  Operating current     at 40 °C / Rated value     at 50 °C / Rated value     at 55 °C / Rated value     at 65 °C / Rated value     at 67 °C / Rated value     at 65 °C / Rated value     at 67 °C / Rated value     at 67 °C / Rated value     at 68 °C / Rated value     at 69 °C / Rated value     at 69 °C / Rated value     at 60 °C / Rate	Continuous current / Rated value	Α	63	
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 50 °C / Rated value  • at 55 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 65 °C / Rated value  • at 60 °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 65 °C / Rated value  A 60  • at 70 °C / Rated value  A 58  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 / 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	1	
Operating voltage  • with AC / at 50/60 Hz / Rated value  • for DC / Rated value  V 500  Operating current  • at 40 °C / Rated value  A 63  • at 50 °C / Rated value  A 63  • at 50 °C / Rated value  A 63  • at 50 °C / Rated value  A 62  • at 60 °C / Rated value  A 61  • at 60 °C / Rated value  A 60  • at 60 °C / Rated value  A 60  • at 70 °C / Rated value  A 58  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 55 °C / Rated value     at 60 °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     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 60 °C / Rated value  • at 60 °C / Rated value  • at 65 °C / Rated value  • at 70 °C / Rated value  • at 70 °C / Rated value  A 60  • at 70 °C / Rated value  A 58  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  • 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 63  at 55 °C / Rated value A 62  at 60 °C / Rated value A 61  at 60 °C / Rated value A 60  at 65 °C / Rated value A 60  at 70 °C / Rated value A 58   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  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  A 63  A 63  A 62  A 61  A 60  A 58   A 10  A 10  A 0  A 0  A 0  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 65 °C / Rated value  A 60  at 70 °C / Rated value  A 58   Auxiliary circuit  Number of CO contacts / for auxiliary contacts   Suitability  Suitability  Suitability or use  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 A 61  at 65 °C / Rated value A 60 at 70 °C / Rated value A 58   Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Suitability  Suitability  Suitabile 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  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 40 °C / Rated value	Α	63	
at 60 °C / Rated value at 65 °C / Rated value A 60 at 70 °C / Rated value A 58  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 N-conductor protection / Full-scale value Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 50 °C / Rated value	Α	63	
at 65 °C / Rated value  at 65 °C / Rated value  A 58  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  of or N-conductor protection / Full-scale value  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 55 °C / Rated value	Α	62	
at 70 °C / Rated value  A 58  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  A 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details	• at 60 °C / Rated value	Α	61	
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	60	
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	58	
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  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  of 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  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  for N-conductor protection / Full-scale value  A  O  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  O  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 0  Adjustable response value current / of the current-dependent overload release / initial value  Product details				
◆ for N-conductor protection / Full-scale value     Adjustable response value current / of the current-dependent overload release / initial value  Product details  A 0  A 0.7	• of I-trip / Full-scale value	А	10	
Adjustable response value current / of the current- dependent overload release / initial value  Product details	• for N-conductor protection / initial value	А	0	
Product details	• for N-conductor protection / Full-scale value	Α	0	
	•	A	0.7	
	Product details			
Product component	Product component			

		N
• Trip indicator		No
• display		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		
		Yes
Intrinsic device protection		No
• communication function		
Phase failure detection		No
other measurement function		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1163-6EF36-0AA0
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 / stra	anded			1 x (1.5 - 70 mm²)	
Type of electrical co	ype of electrical connection / for main current circuit				Box terminal	
Mechanical Design						
Height			mm		130	
Width			mm		76.2	
Depth			mm		70	
Mounting type					fixed mounting	
Environmental cond	litions					
Ambient temperature	•					
<ul><li>during operation</li></ul>	on / minimum		°C		-25	
during operation / maximum		°C		70		
<ul><li>during storage</li></ul>	during storage / minimum		°C		-40	
<ul><li>during storage</li></ul>	/ maximum		°C		80	
Certificates	Certificates					
Equipment marking						
• acc. to DIN EN	61346-2				Q	
• acc. to DIN EN 81346-2				Q		
General	EMC	Declaration	n of	Ship	oping Approval	other
Product		Conformity	/			
Approval						
	other			2	Ŷ.	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/3VA11636EF360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11636EF360AA0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11636EF360AA0

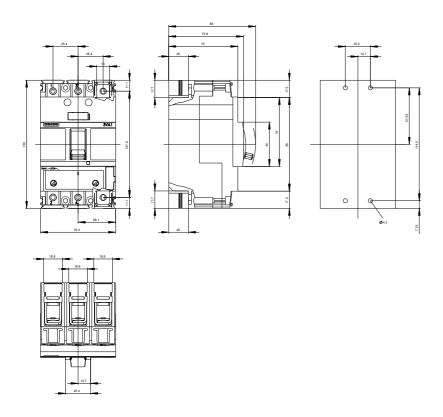
**CAx-Online-Generator** 

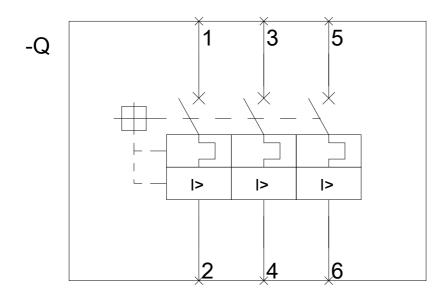
http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv

GL





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