# **SIEMENS**

### Data sheet

# 3VA1150-4EF36-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM240, ATAM, IN=50A OVERLOAD PROTECTION IR=35A ...50A 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		

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		
	tage	
Insulation voltage / Rated value V 800	sulation voltage / Rated value	V

#### Protection class

Protective function of the overcurrent release  LI  Switching capacity class of the circuit breaker  Similar of the community of the circuit breaker  Switching capacity class of the circuit breaker  Similar of the circuit of the circuit breaker  Similar of the circuit of the	Protection class IP		IP40			
Switching capacity  Switching capacity class of the circuit breaker  Dissination  Active power loss  • maximum  W 14.6  Electricity  Continuous current / Rated value / maximum  A 160  Continuous current / Rated value / maximum  • 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  • of the instantaneous short-circuit release / initial value  • of the instantaneous short-circuit release / initial value  • of the C / Rated value  • of DC / Rated value  • at 0° C / Rated value  • at 50° 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	Protective function of the overcurrent release		Ц			
Switching capacity class of the circuit breaker    Dissipation	Switching canacity					
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 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 40 °C / Rated value  • at 55 °C / Rated value  • at 65 °C / Rated value  • at 67 °C / Rated value  • at 67 °C / Rated value  • at 67 °C / Rated value  • at 68 °C / Rated value  • at 69 °C / Rated value  • at 70 °C / Rate						
Continuous current / Rated value / maximum  Continuous current / Rated value  A 50  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 or DC / Rated value  V 500  Operating current  at 40 °C / Rated value  A 50  at 55 °C / Rated value  A 49  at 60 °C / Rated value  A 48  at 65 °C / Rated value  A 46  at 65 °C / Rated value  A 46  at 67 °C / Rated value  A 45  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Osultability  Suitability for use  Adjustable parameters  Adjustable parameters  Adjustable response value current  of I-trip / Full-scale value  A 0  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• maximum	W	14.6			
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-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  of the instantaneous short-ci		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     v	Continuous current / Rated value	Α	50			
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 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 60 °C / Rated value  • at 70 °C / Rated value  A 46  • at 70 °C / Rated value  A 45  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitable parameters  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  Adjustable response value current / of the current-  Adjustable response value current / of the current-	Adjustable response value current					
Main circuit		Α	1			
Operating voltage		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 65 °C / Rated value     at 67 °C / Rated value     at 70 °C / Rated value     A 45  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  O  Suitability  Suitability  Suitable 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  Operating current      at 40 °C / Rated value     A 50     at 50 °C / Rated value     A 50     at 55 °C / Rated value     A 49     at 60 °C / Rated value     A 48     at 65 °C / Rated value     A 46     at 70 °C / Rated value     A 45  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-  Adjustable response value current / of the current-  Adjustable response value current / of the current-  A 0.7	Operating voltage					
Operating current  • at 40 °C / Rated value A 50 • at 50 °C / Rated value A 49 • at 55 °C / Rated value A 48 • at 60 °C / Rated value A 46 • at 70 °C / Rated value A 45  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  A 10 • 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-  A 0.7	• 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 65 °C / Rated value  at 65 °C / Rated value  at 65 °C / Rated value  at 70 °C / Rated value  A 46  at 70 °C / Rated value  A 45   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  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-	• 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 At 48  Auxiliary circuit  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 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 at 65 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value At 45  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 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	50			
at 60 °C / Rated value  at 65 °C / Rated value  at 70 °C / Rated value  A 46  at 70 °C / Rated value  A 45   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-  Adjustable response value current / of the current-  Adjustable response value current / of the current-	• at 50 °C / Rated value	Α	50			
at 65 °C / Rated value  at 70 °C / Rated value  A 45  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-  A 0.7	• at 55 °C / Rated value	Α	49			
at 70 °C / Rated value  A 45  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  0  Suitability  Suitability for use  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	48			
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-	• at 65 °C / Rated value	Α	46			
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	45			
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-			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-  Adjustable response value current / of the current-	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			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>	Adjustable parameters					
<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</li> <li>Adjustable response value current / of the current-</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			
	Adjustable response value current / of the current- dependent overload release / initial value	Α	0.7			
Product details	Product details					
Product component						

		N
Trip indicator		No 
• display		No
<ul> <li>Voltage trigger</li> </ul>		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
<ul> <li>other measurement function</li> </ul>		No
Accessories		
Manufacturer article number / of the supplied basic		3VA1150-4EF36-0AA0
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
Type of connectable conductor cross-section		

• of the round co	onductor terminal / stra	anded		1 x (1.5 - 70 mm²)	
Type of electrical co	nnection / for main cui	rrent 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	
<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>	/ maximum		°C	80	
Certificates					
Equipment marking					
<ul> <li>acc. to DIN EN</li> </ul>	61346-2			Q	
• acc. to DIN EN	81346-2			Q	
General Product Approval	EMC	Declaration Conformity		Shipping Approval	other
EHC	other	CE EG-Konf.		JÅ DNV	<u>other</u>

## 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/3VA11504EF360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11504EF360AA0/all

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

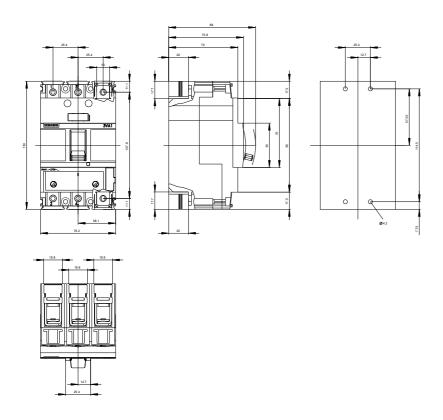
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11504EF360AA0

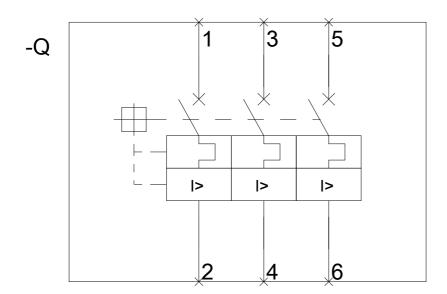
**CAx-Online-Generator** 

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015